COMPARATIVE STUDY OF WORK LOAD USING CALCULATION OF TIME ANALYSIS & ITS MANAGEMENT

Abstract Id: YUGP0211

Comparative Study Of Work Load Using Calculation Of Time Analysis & Its Management
Presenter - Mr. Gurvinder Singh Wadhawan
Co-author - Gurvinder Singh Wadhawan, Dr Munish, DR G Yadav

COMPARATIVE STUDY OF WORK LOAD USING CALCULATION OF TIME ANALYSIS & ITS MANAGEMENT

Rajiv Gandhi Cancer Institute & Research Centre, Delhi, India

Description
Radiation oncology department is a major part of cancer centre where exclusively this dreaded disease is being treated. We RTT (Radiation Therapy Technologist) the members of a multidisciplinary team comprising of radiation oncologist, medical physicist always struggle with complicated time taking treatment set-ups and huge patients load on daily basis. Purpose The aim of this study is to drive a radiotherapy work load using patient data related to treatment information on teletherapy treatment units at our institute. The patient care quality and quantity should be balanced in radiation oncology. We deliver treatment/radiation doses to about 1500-2000 RT NO cases per year using five LINACs. Material & Methods Clinac/ix RAPID ARC, TRUE BEAM, Synergy, Primus & Artiste Result All data collected on daily basis during the study. The fraction duration was calculated as the time when the patient enters the room until the time patient left the room. We collected data for the month of November-December-January 2017 on each teletherapy/Simulator unit as per annexure. Mixed beam takes on average 14 minutes for delivering radiation doses through four setup fields/single beam 9.6 minutes through three setup fields/single beam takes on average 20.5 minutes through more than four setup fields in IGRT cases/single beam on average 17 minutes for Technique Rapid-Arc, IGRT/IMRT 22 minutes for delivering radiation doses through more than four setup fields. Conclusion Management of Patient set-up and positioning errors, Quality of site specific target delineation during imaging and analysis of planned and delivered fraction are the major challenges faced by RTT using IGRT technique for consistency of iso-centricity and image fusion by KVCBCT/MVCBCT for periodic monitoring of target verification.

Abstract Id: YUGP0301

Head And Neck Squamous Cell Carcinoma: Factors Related To Lymph Node Metastases
Presenter - Dr. Ramkishan Gonuguntla
Co-author - Dr. Sanjay M Desai, Dr. Deepak Agrawal, Pradeep

Background: Head and Neck squamous cell carcinoma (HNSCC) are among the top 3 cancers in India and accounts for 30% of the country’s cancer burden. In this study, we will focus on the lymph nodal metastasis from Head and Neck cancers regarding facts, such as incidence; stage, histopathology and grade of primary tumor. Study design: All patients of head and cancer who were operated in a period of four years in the department of surgical oncology, Sri Aurobindo Medical College & Hospital, Madhya Pradesh, were included in the study. Data is gathered from in patient files, operative records and Histopathology records. Results: Buccal mucosa is the most common site of cancer (42.6%). Incidence is common in male population and male to female ratio is 1.2:1. Most patients presented in middle age and stage IV is the most common presentation. 86.4% of tumors are low grade. High grade tumors presented with advanced stage and more number of metastatic lymph nodes. There is direct correlation between lymphovascular invasion and lymph node metastases. Conclusion: Location of primary tumor pattern of invasion, histologic grade, disease stage, will influence the lymph node metastasis, and prognosis in HNSCC. Assessments of mentioned parameters are beneficial in selecting patients who need more aggressive treatment modalities.

Abstract Id: YUGP0319

Presenter - Dr. Rahul Arora
Co-author - Rahul D. Arora,

Gastrointestinal Malignancies: Non Colorectal Cancer Secondary Peritoneal Malignancy presenting clinically with signs of Malignant Bowel Obstruction without overt Radiological signs â€“ Defining a Novel Gastro intestinal Syndrome â€“ A Case Report

Author - Rahul Arora

Background: Malignant bowel obstruction is one of the most common complications of peritoneal malignancy. The symptoms present are typical of gastrointestinal obstruction. Despite the presence of obstructive symptoms, the cause of the obstruction in patients with peritoneal malignancy is usually malignant. It is conventionally accepted that the absence of radiological signs of obstruction excludes bowel obstruction. We report a case of secondary peritoneal malignancy presenting with symptoms of bowel obstruction without overt radiological signs of obstruction.

Case Report
A 45 year male patient presented with symptoms of malignant bowel obstruction without overt radiological signs of obstruction. He had a past history of chronic lymph node lymphoma treated with radiotherapy and chemotherapy. The patient had been found to have a progressive rise in lactate dehydrogenase (LDH) level and CT scan of the abdomen revealed peritoneal carcinomatosis. There was no evidence of a primary malignancy. The lack of radiological signs of bowel obstruction raised the possibility of a non obstructive cause of the symptoms. A nasogastric tube was inserted and no gas or fluid was aspirated. The patient was managed conservatively with IV fluids, analgesics, antiemetics and regular monitoring of his vital parameters. He responded to conservative management and was discharged after 1 week of admission. The patient was later administered chemotherapy and remained stable for 4 months before succumbing to the disease.

Discussion
The diagnosis of malignant bowel obstruction is usually straightforward with characteristic radiological signs and clinical correlation. However, in the presented case, the absence of radiological signs of obstruction raised the possibility of a non obstructive cause of the symptoms. Our case highlights the importance of considering the possibility of malignant bowel obstruction in patients with peritoneal malignancy even in the absence of radiological signs of obstruction. Further research is required to better understand the pathophysiology of malignant bowel obstruction and to develop more effective management strategies.

Conclusion
Malignant bowel obstruction is a common complication of peritoneal malignancy. However, the absence of radiological signs of obstruction does not rule out bowel obstruction. In these cases, a high index of suspicion and a careful clinical assessment are necessary to make an accurate diagnosis. The case presented in this report highlights the importance of considering the possibility of malignant bowel obstruction in patients with peritoneal malignancy even in the absence of radiological signs of obstruction. Further research is required to better understand the pathophysiology of malignant bowel obstruction and to develop more effective management strategies.

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as a case of Signet Ring Cell Carcinoma of the Stomach and had been taken up for an operative procedure where suboptimal debulking and Palliative Gastrojejunostomy was done in view of extensive secondary peritoneal metastasis. He had also received two cycles of Adjuvant Chemotherapy. A Nasojejunal tube had been inserted after considering a diagnosis of Gastric outlet obstruction following which a Nasogastric tube was inserted in view of intractable vomiting. A Clinical examination was suggestive of multiple nodular abdominal swellings, reduced to absent Bowel sounds along with dullness in both the flanks. An Abdominal Radiograph done subsequently was not suggestive of multiple air fluid levels. Fecal impaction was unlikely in the absence of clinical evidence and prescription of multiple prokinetic agents. He was started on Pharmacological management of Malignant Bowel obstruction following which there was an improvement in symptoms. A CT done subsequently was suggestive of massive subhepatic fluid collection with normal Bowel loops. 1100 ml of Haemorrhagic fluid was removed followed by 3 units of Fresh frozen plasma Infusion. Intravenous Albumin infusion was considered in view of Bilateral pitting edema, anasarca in the setting of hypoalbuminemia. Discussion - The choice of anti emetic in this setting needs to be scrutinised since the patient had been started on Inj Ondansetron along with Inj Octreotide which was subsequently changed to Inj Metoclopramide which was continued till a return of bowel sounds was noticed. Did the Gastrojejunostomy procedure mask the symptoms of Bowel obstruction. Are multiple air fluid levels seen in Bowel obstruction due to extrinsic compression. Is TPN indicated in the setting of starvation in advanced cancer as a respite measure. What is the incidence of Starvation ketoacidosis in advanced cancer and has it been shown to adversely affect prognosis. Conclusion - Pharmacological management of Malignant Bowel Obstruction may have to be instituted in the absence of Radiological signs. The dosage, duration and efficacy of Prokinetic agents and their predisposition to Perforation in the setting of MBO needs to be evaluated further. Keywords Bowel obstruction Secondary peritoneal metastasis absence of radiological signs.

Abstract Id: YUGP0321
Characterisation And Prognostication Of Pain â€“ A Single Centre, Observational Trial In Advanced Cancer
Presenter - Dr. Rahul Arora
Co-author - Rahul D. Arora ,

Title Characterisation and Prognostication of Pain â€“ A Single centre, Observational Trial in Advanced Cancer Author - Rahul D. Arora Research done during tenure as Junior Resident (Academic), Dept. of Palliative Medicine, Tata Memorial Centre, Tata Memorial Hospital, Mumbai. Background Pain has been shown to have a prevalence ranging between 39 to 66 percent in various phases of the trajectory of Cancer. The Edmonton Classification System for Cancer Pain (ECS-CP) which has been developed for the characterization of Pain has five sub-domains which are essential in describing the Patientâ€™s pain. Prognostication which has been measured as the number of days to achieve stable pain control traditionally needs to be re-defined with an added emphasis on the science of survival. Haematological indices have been proposed as a means of correlating Pain with survival. Methodology Baseline Pain was characterised at initial visit by ECS-CP. Acute exacerbation of Pain was characterized on the Alberta Breakthrough Pain Assessment Tool (Original version). Pain Education Booklet was issued for recording the Maximum Pain Intensity. Episodes of Exacerbation of Pain and symptoms of Opioid induced Adverse effects daily. Results 85 out of 96 Patients who underwent screening over a period of six months met the Inclusion Criteria of Moderate Pain and estimated survival of more than 6 weeks. Haematological Indices were available in 56, Opioid related Adverse Effects in 45 and Morphine Equivalent Daily Dosage in 42 patients at first visit. The median Morphine Equivalent Daily Dose was 45 mg. A significant weak Positive correlation was documented between Palliative Prognostic Index (PPI) and Age, PPI and Pain Intensity at first visit, Number of Positive factors for Poor Prognostication of Pain on ECS - CP and MEDD, Number of Days the Patient was on Opioids and Fatigue. There was a weak positive correlation between NLR, PLR and Pain Intensity. Lack of recruitment, Gatekeeping and Attrition were recognized as Key Challenges. Conclusion A Composite Tool which includes markers of Chronic Inflammation along with Biochemical Parameters needs to be formulated. ABPAT can be used successfully in the clinical (outpatient) setting. The utility of WHO Step iv for multimodality management of Pain needs to be recognized, discussed and debated further. Comparibility of Data gathered in a multitude of settings (Hospital, Home and Hospice) along with reliability of information collected Telephonically needs to be discussed. He the unique setting of advanced Cancer. Potential answers to the Complex Ethical and Logistical Dilemmas relevant to Research in advanced Cancer include - Detailed Informed Consent Form , Recognition of Patient and Caregiver willingness to participate in Research (overcome Gatekeeping), Recruitment in a multiplicity of settings (increase accrual), Novel Trial Designs (N of 1, Fast track), Statistical Methods (Imputational Analysis, Bootstrapping) along with a Structured Patient oriented Community Outreach Program (prevent attrition). CLINICAL TRIAL IDENTIFICATION CTRI ID REF /2015/12/010267

Abstract Id: YUGP0475
Association Of Cancer Stem Cell Marker Cd133 With Grade ,Stage And Smoking Index In Lung Carcinoma .
Presenter - Dr. Neema Tiwari
Co-author - A.N Srivastava*, Shailendra Yadav, Manoj Jain

Association of cancer stem cell marker CD133 with grade ,stage and smoking index in lung carcinoma . Neema Tiwari*, A.N Srivastava*, Shailendra Yadav**, Manoj Jain***, Suryakant**, Nishi Tandon* *Department of Pathology, Eras Lucknow Medical College and Hospital **Department of CTVS and Department of Pulmonary medicine,KGU ***Department of Pathology, SGPGI
INTRODUCTION Lung cancer is a very serious problem of the Indian subcontinent, especially in the lower socioeconomic subgroups. As per the ICMR [Indian Council Of Medical Research] registry of 2002 lung cancer is the 5th most common tumor overall and 2nd most common tumor in the males in India. It accounts for 6.9% of new cancer cases detected each year. CD133 is one of the best-characterized markers of CSCs in colorectal and pancreatic cancers however; its role in lung cancer needs further study. The tumorigenic cells in SCLC and NSCLC were first characterized as a rare population of undifferentiated cells expressing CD133, a marker of normal and CSC of the hematopoietic, neural, endothelial and epithelial lineages. [19] AIM- To study the association of cancer stem cell marker CD133 with tumor grade and stage as well as smoking index. In our patients, tissue diagnosis, to which she responded very well. Systemic therapy was considered and such patients could be managed with local therapy including radiation therapy or amputation.

Abstract Id: YUGP0485
Isolated Bony Metastasis To Upper Limb From Carcinoma Esophagus : Report Of Three Cases

Presenter- Dr. Joydeep Purkayasta
Co-author - Taposhi Roy Sarkar, Pallabika Mondal, Niju Pegu

Introduction: Carcinoma esophagus is one of the dreaded diseases occurring in the human population. The malignant process of esophageal cancer commonly involves the loco-regional areas. Distant metastasis occurs in approximately one third of cases specifically to lung, liver, bone and brain. Hematogenous metastasis to the upper limb bones is a very rare event. Case Reports: Case No.1 A 65 year old lady with carcinoma esophagus presented with a painful swelling in the right ring finger for a duration of 1 month. She was diagnosed as carcinoma of the upper thoracic esophagus for which she was treated with chemo-radiation. FNAC from the elbow swelling detected features of metastatic squamous cell carcinoma. X-ray of the left elbow revealed soft tissue swelling around elbow with lytic area in olecranon process suggestive of metastasis. There was evidence of any recurrent disease elsewhere on radiological investigation and endoscopy. She was taken up for Radiation therapy and received a total dose of 30 Gray in 10 daily doses. At 3 weeks post radiation the tumour in the elbow subsided completely. X-ray of the elbow showed resolution of the soft tissue swelling with healing of the lytic area in the bone. The patient has been kept under follow up and is keeping well at 18 months. Case No.3 A 70 year old patient had squamous cell carcinoma of esophagus at 25 cms for which she received radiation therapy to a total dose of 60 Gy. After a period of 3 months following completion of radiation she developed a swelling of the left index finger. The overlying skin was intact. X-ray examination revealed complete destruction of the distal phalanx of the left index finger with soft tissue swelling. There was no disease recurrence elsewhere on endoscopic and radiological examination. She underwent amputation of the distal finger. Histopathological examination revealed features of squamous cell carcinoma. She is doing well at a follow up period of 4 months. Discussion: Esophageal cancer is considered to be one of the dreaded diseases because of its adverse effects on swallowing and therefore the quality of life. In general, the prognosis is poor as most patient present with advanced disease. The 5 year survival rate with localised disease is about 38 % while with regional spread it is around 20 %. Patients with distant metastasis have less than 3 % five year survival. The disease spreads by local extension to adjacent organs and to lymph nodes in the mediastinum, neck or abdomen depending upon the location of the primary tumour. Distant metastasis has been found to occur in lung, liver, bone and brain. Metastasis to the upper limb bone is very unusual. There are a few case reports of metastasis to the phalanx from carcinoma of esophagus. The mode of spread is by the haematogenous route. It presents as a localised swelling and is at times misinterpreted as infective or inflammatory lesion. Palliative chemotherapy is the preferred treatment for metastatic carcinoma esophagus. Radiation therapy may be considered for control of isolated localised metastatic disease. Palliative amputation is a good option for metastasis to phalanx for relief of pain and discomfort. In our patients the primary disease in the esophagus was controlled by chemoradiation. They developed isolated metastasis to the upper limb bones after remaining disease free for a certain period. Moreover, there was no evidence of any local recurrence or any metastasis elsewhere. Hence, they were taken up for palliative treatment of the isolated localised disease. In the 2 patients with metastasis to the distal phalanx there was complete destruction of the bone that warranted minor amputation. Hence they were taken up for palliative surgery without FNAC or biopsy. In the patient with metastatic disease in the elbow, surgery would have required major limb amputation. Hence she was offered radiation therapy, after tissue diagnosis, to which she responded very well. Systemic therapy was not considered in view of the isolated recurrence, old age and compromised general condition and they were kept on close follow up. We conclude that if any patient with carcinoma esophagus presents with localised swelling of the limb, the possibility of metastatic disease should considered and such patients could be managed with local treatment including radiation therapy or amputation.

Abstract Id: YUGP0488
Â¢Ectopic Undescended Parathyroid Adenoma: A Case ReportÂ¢

Presenter- Dr. ALKA ASHMITA SINGHAL
Co-author - DR DEEPAK SARIN, DR SHAFI KUCHAY,

Review of literature: Ectopic parathyroid glands occur in 5% of people, occasionally located high in the neck under the jaw (called an un-descended parathyroid gland). These are often overlooked by inexperienced Radiologists and Surgeons, especially when these occur in uncommon or rare positions. Introduction: We Report here a case of Left Ectopic Undescended parathyroid adenoma located high in the neck, at the angle of jaw which was diagnosed primarily on ultrasound at our institution, followed by Sestamibi and CT-SPECT and Surgery. Clinical History: Patient is a middle aged female planned for hystrectomy. Her Preoperative investigations showed raised Serum Calcium (13.0mg/dL) Serum PTH914.6 pg/ml & 25(OH)D: 8.0 ng/ml Ultrasound Neck
showed a well-defined ovoid hypoechoic nodule measuring 34x15x12 mm, volume 3.0 cc, with characteristic eccentric vascularity, located just inferior and adjacent to the left submandibular gland suggestive of ectopic undescended left superior parathyroid nodule Sestamibi (Technetium MIBI) sugguested Left ectopic undescended parathyroid adenoma (below the pole of left submandibular gland), confirmed further on CT - SPECT Surgical Findings The patient was operated and a 30x23x10mm sized parathyroid adenoma was removed and confirmed on histopathology Conclusion High resolution colour Doppler ultrasound by a dedicated Radiologist has a great potential to detect and localise the parathyroid nodules in cases of hyperparathyroidism. Ultrasound also gives precise anatomical landmarks for surgery and characterises the nodule. Ultrasound diagnoses nodules in proven Sestamibi negative cases of hyperparathyroidism. KEY WORDS: Parathyroid adenoma, Hyperparathyroidism, Ectopic undescended, Ultrasound neck with colour Doppler.

Abstract Id: YUGP0490

Modulation Of The Sirt-1/P53 Axis By Butyrate Inhibits The Hepatitis B Virus Replication

Presenter - Mr. Kishor Pant
Co-author - Saman Pradhan, Senthil K, Venugopal,

Hepatitis B Virus is a ds-DNA Virus, responsible for hepatocellular carcinoma (HCC), liver cirrhosis, fibrosis and a large number of mortality worldwide. HBV modulates many cellular factors for its replication and survival in host cell. Reactive oxygen species (ROS) theatre produced in the host cells during HBV infection was considered to inhibit the cellular antioxidants and Sirt-1 expression. However, the exact molecular mechanisms involved in the ROS-induced HBV replication has not been known. HepG2.2.15 cells (Hep G2 cells expressing HBV genome stably) were treated with the NAC (20µM) and Sirt-1 inhibitor Butyrate (5mm) overnight. Western blotting was performed for the proteins Sirt-1, HBx, p-akt, akt, p-mTOR, mTOR, Beclin-1, LC-3, ATG5, and ?-actin using specific primary antibodies, followed by secondary antibodies and subsequent detection using ECL reagent. Analysis of ROS was performed using the H2-DCFDA in fluoresce microscopy. Autophagy assay was done using the Cyto-ID autophagy detection kit. Determination of the HBsAg was performed by ELISA and HBV-DNA was analysed using the Real-Time PCR method. Results: HBV infection increased the ROS production and formation of autophagic bodies were observed in the cells. Addition of the NAC (antioxidant) inhibited both the autophagy and ROS production in HepG2.2.15 cells via modulation of the Beclin-1, LC-3 and ATG-5 expression. HBV transfection also induced the Sirt-1 expression which was inhibited by the addition of the NAC and sirt-1 si-RNA. Inhibition of the Sirt-1 expression by NAC or si-RNA inhibits the viral replication and HBV-induced autophagy. Conclusion: In this present study we have shown that HBV infection Leads to the over-expression of Sirt-1, responsible for Autophagy and viral replication in host cells, which was be inhibited by NAC treatment. These data may provide a possibility of ROS inhibition and its therapeutic applications for HBV therapy.

Abstract Id: YUGP0494

Refl ecting At Palliative Care Through A Students Eye

Presenter - Dr. Faiza Rehman
Co-author - Faiza Rehman, MBBS MD, MBBS MD

Introduction: As a medical student, one may have had several encounters with terminally ill patients. However my very first encounter in my first year of medical school, was of an 8-year old family member, who was diagnosed with leukemia. Being in the healthcare field, I thought, it would help me face the situation better. However, I promptly felt the inadequacies to address these situations at my level. I spent my visiting hours quietly by the side of the grieving family. The helplessness I felt in those moments could probably be explained by my closeness to the patient and also my lack of being prepared. Hoping to get better prepared as my education advances, I continued to move forward. However, I felt no better prepared as the newly diagnosed breast cancer lady in the hospital bed was shocked. Another encounter with a close family member with advanced metastatic breast cancer, I continued to feel inadequately prepared to deal with these difficult situations. Methods: As a reflection on my ongoing medical education journey, a questionnaire for medical students was formulated- to rate their understanding of palliative care and to deal with conversations revolving around difficult situations. Participants were 50 medical students consisting of numeric rating scales of the questionnaires of (0-10). Results: The participants rated their knowledge of palliative care as low (average: 4.3) and most of the participants were concerned about the palliative care education given in the medical school (average: 3.05). The above data also correlated with their ability to deal confidently with a terminally ill patient with an average score of 4.85 out of 10. Most of the participants agreed on the inclusion of palliative care education in the medical curriculum (average: 8.1). Conclusion: Effective undergraduate education is required to enable graduating doctors to safely care for patients with palliative care and end-of-life needs. The status of palliative care teaching for international medical students is not well documented. The reflection highlights the importance of incorporating palliative care education in an era where the population is aging at a fast pace with increasing incidence of cancer. Inclusion of palliative care education in the medical curriculum at the undergraduate level may benefit the students to be better care providers in the generations to come.

Abstract Id: YUGP0492

Reactive Oxygen Species Produced By Hbv Help In Replication And Autophagy In Host Cells

Presenter - Mr. Kishor Pant
Co-author - Amit K. Mishra, PhD, MSc.

Background: Hepatitis B Virus (HBV) is responsible for liver cirrhosis, fibrosis and hepatocellular carcinoma (HCC) worldwide. HBV modulates many cellular and molecular factors in host cells for its replication and survival including, ROS is considered to inhibit the cellular antioxidants and SIRT-1 expression. However, the exact molecular mechanisms involved in the ROS-induced autophagy and HBV replication has not been known. Methods: HepG2.2.15 cells (Hep G2 cells expressing HBV genome stably) were treated with the NAC (20µM) overnight. Western blotting was performed for the proteins Sirt-1, HBx, p-akt, akt, p-mTOR, mTOR, Beclin-1, LC-3, ATG5, and ?-actin using specific primary antibodies, followed by secondary antibodies and subsequent detection using ECL reagent. Analysis of ROS was performed using the H2-DCFDA in fluoresce microscopy. Autophagy assay was done using the Cyto-ID autophagy detection kit. Determination of the HBsAg was performed by ELISA and HBV-DNA was analysed using the Real-Time PCR method. Results: HBV infection increased the ROS production and formation of autophagic bodies were observed in the cells. Addition of the NAC (antioxidant) inhibited both the autophagy and ROS production in HepG2.2.15 cells via modulation of the Beclin-1, LC-3 and ATG-5 expression. HBV transfection also induced the Sirt-1 expression which was inhibited by the addition of the NAC and sirt-1 si-RNA. Inhibition of the Sirt-1 expression by NAC or si-RNA inhibited the viral replication and HBV-induced autophagy. Furthermore, inhibition of Sirt-1 also lead to over-expression of the Actylated-P53, which in turn inhibited the cell proliferation in HBV-infected cells. In this present study we have shown that HBV infection Leads to the over-expression of Sirt-1, which was be inhibited by butyrate treatment. These data may provide a possibility for the use of butyrate in therapeutic applications.

Abstract Id: YUGP0496

Rationale Of Using Dynamic Imaging For Characterization Of Suspicious Lung Masses On Contrast Enhanced Multidetector Computed Tomography With Their Histopathological Correlation
OBJECTIVES: To assess the utility of dynamic imaging viz. wash-in and wash-out characteristics via Multi-detector CECT in differentiating benign and malignant pulmonary masses. MATERIALS AND METHODS: 73 patients who were suspected to have malignant pulmonary mass on the basis of clinical symptoms and chest radiograph were included in the study after ethical committee approval. All the patients underwent MDCT scanning and three series of images were obtained for each patient- non-contrast, early enhanced and 15 minutes delayed enhanced scans. CT findings were assessed in terms of wash-in, absolute and relative percentage washout of contrast. Biopsy of the mass was done and sent for histopathological evaluation. Sensitivity, specificity and area under curve for diagnosing malignancy in the lung masses were calculated by considering both the wash-in and washout characteristics at dynamic CT and plotting the Receiver operating curve after the final diagnosis which was obtained by histopathological evaluation. RESULTS: Receiver operating curve analysis was used to calculate the sensitivity, specificity and diagnostic accuracy of wash-in and wash-out (both absolute and relative percentage wash-out) values via dynamic contrast enhanced computed tomography. Threshold net enhancement (wash-in) value of >22.5 HU had sensitivity, specificity and diagnostic accuracy of 88.5% and 57.1% and 82% respectively in predicting malignancy. Threshold relative percentage wash-out of by a twin-applicator system. wIRA is independent of individual body contours. While thermal dosimetry for HT is generally performed with fiberoptic probes that sample only a small number at set locations, in the system applied real-time thermography is used which assesses large surface temperature distributions allowing for the observation of dynamic developments during HT sessions. Thermography also enables the instant and easily achievable protection of heat-sensitive tissue structures (e.g., scars) and can thus avoid hot spots and grade 2-4 skin toxicities. Because of low toxicity with this treatment schedule, wIRA-RT can be used for re-reRT-settings (e.g., in 17 patients in our study). Limitations for wIRA-HT: tumor lesions with depth extensions >20 mm. Outlook: Based on these experiences wIRA-HT/re-RT is not only an efficient treatment option for recurrent breast cancer, but could be evaluated in locally advanced primary breast cancer, e.g., cancer en cuirasse, as well as in other superficial cancer entities as e.g., angiosarcoma, malignant melanoma, vulva carcinoma, skin metastasis of different primary tumours. Reference: Notter et al. (2016), Int. J. Hyperthermia DOI: 10.1080/02656736.2016.123573
covered the resulting defect by using pectoralis major myocutaneous flap. Histopathology and immunohistochemical staining findings were consistent with the diagnosis of Dermatofibrosarcoma Protuberans. All the margin were free of tumor. Post operatively the patient was treated with radiotherapy. The patient was disease free at 36-month follow up.

Abstract Id: YUGP0523
Role Of Post Mastectomy Radiotherapy In T1,T2 Lesions With 1-3 Positive Axillary Lymph Nodes - A Retrospective Study Of 101 Cases.
Presenter- Dr. Nikhil Garg Co-author - Dr. Makarand B Bhole.

Title: ROLE OF POST MASTECTOMY RADIOTHERAPY IN T1, T2 LESIONS WITH 1-3 POSITIVE AXILLARY LYMPH NODES - A Retrospective study of 101 Cases. Name : Dr Nikhil Garg Gujarat Cancer and Research Institute , Ahmedabad, India Introduction: Post mastectomy radiotherapy (PMRT) reduces loco-regional recurrence (LRR) and improves overall survival. There is international consensus to recommend PMRT for patients with tumour size more than 5 cm (T3), tumour invasion of the skin, pectoral muscle or chest wall (T4) and patients with > 4 positive lymph nodes (LN). However, the role of PMRT for patients with T1, T2 disease with 1-3 positive LN is still controversial. The side effects of radiotherapy and its associated morbidity have to be considered in the risk benefit ratio, thus difficult to arrive at consensus in early breast cancer.

In a developing country like India, factors such as patient education, level of awareness, financial aspect, long term follow up, limitation of resources have to be balanced and tailored according to the indication and need of the patient. Objectives 1. Empirically explore whether it is advisable to carry out radiation when there are 1-3 nodes 2. Whether Perinodal extention in this subgroup is an important parameter to consider for radiotherapy. Material and Methods: We collected data after approval from our institutional board review committee and analysed case files of patients who presented and were treated at our governmental tertiary referral centre from a period between 2012-2015. Of the 691 patients who underwent mastectomy, we short listed 101 cases for our study who fulfilled our basic inclusion criteria of T1,2 N1 on final histopathology. The inclusion criteria for this analysis were: (1) Female patients with unilateral breast cancer and no distant metastasis at initial diagnosis who underwent mastectomy and axillary lymph node dissection; (2) postoperative pathology indicated T1a&2 and 1a&3 positive axillary lymph nodes (T1a&2N1M0) disease, at least 10 lymph nodes removed by axillary dissection; (3) complete surgical resection of the tumor and negative margins; (4) complete estrogen receptor (ER), progesterone receptor (PR) and human epithelial growth factor receptor family 2 (Her2) status; (5) No neoadjuvant chemotherapy was administered before surgery and endocrine therapy was performed based on the hormone receptor status. In order to study the research questions, we formulated hypotheses as follows. 1. Radiotherapy does not have any impact on recurrence post mastectomy.2. There is no influence of Peri nodal extent on recurrence. The above hypotheses were tested using chi-square test. Results: On applying chi square test we found out the observed and the expected value Radiotherapy was given in 60 patients and 41 were not given. Recurrences were obtained in 9 amongst patients who received radiotherapy and without radiotherapy in 16. When chi square was applied with 1 degree of freedom , the value was highly significant at 0.006 with 99% CI. Hence our hypothesis was rejected. Also in case of PNE with recurrence and radiotherapy, 8 had PNE with radiotherapy and recurrence and 27 had no recurrence, on computation degree of freedom was 3 and p value was 0.013% hence highly significant. Conclusions: Radiotherapy should be strongly considered in patients with 1-3 nodes post mastectomy as it decreases the chances of recurrence and also if PNE is present chances of recurrence are increased, hence radiotherapy be considered.
Abstract Id: YUGP0558
Impact Of Histological Subtypes On Treatment Outcomes In Post Nactr Locally Advanced Rectal Adenocarcinoma.
Presenter - Dr. RAJESH SHINDE
Co-author - Devayani Niyogi, Dr Avanish Saklani, Rahul Bhamre

Aims: Treatment Outcomes of locally advanced rectal cancer differ in different histologic types. But there is lack of robust evidence to support this assumption. In the era of NACTR as a standard of care, we intended to look for the impact of different histologic subtypes on treatment outcomes of locally advanced rectal cancer patients. Methods: Our study is a prospective analysis of a retrospectively maintained rectal cancer database from 1st January 2013 to 31st December 2014. 205 consecutive patients of locally advanced rectal cancer patients, who had received Long course NACTR, were grouped into 3 groups (Grp A-Signet, Grp B-Mucinous, Grp C-Non signet-non mucinous). All the 3 groups were analyzed with respect to demographic characteristics, Post NACTR response, Margin status, recurrence pattern, DFS & OS. Results: Total no of pts included in this study was 205. Grp A included 31; Grp B-35 & Grp C included 139 pts (15.1%, 17.1% & 67.8% respectively). Overall complete response rate in entire cohort was 18.5%. Amongst the different groups, CR rates were 22.6%, 28.6% & 15.1% in Grp A, B & C respectively. Disease progression during NACTR was seen in 22.6%, 2.9% & 6.4% in Grp A, B & C respectively. Additional systemic therapy (NACTR fb NACT) was required in Grp A-35.5%, Grp B- 20 % & Grp C- 17.2% patients. Recurrence rates were 19.35%, 28.5% & 23.7% in Grp A, B & C respectively. DFS was 21.7 mths in Grp A, 29.7 mths in Grp B & 34.5 mths in Grp C respectively (p<0.001). There was no significant difference in DFS between Grp B & Grp C. But there is Significant difference when Grp A is compared to Grp B / C separately. Similarly there was no significant difference in OS between Grp B & Grp C. But there is Significant difference when Grp A is compared to Grp B / C separately (Grp A- 25.4, Grp B- 37.6 & Grp C- 39.7 mths respectively, p<0.01). Conclusions: Outcomes with signet ring histology are poorer as compared to mucinous/ non signet-non-mucinous adenocarcinoma. Although post NACTR, CR rates are higher in Signet histology, this does not translate into survival benefit of these patients. Also signet ring histology cohort requires additional systemic therapy more often than the other histological subtypes. This may suggest a need of additional/ alternative treatment options (e.g. SCRT fb NACT) for these patients.

Abstract Id: YUGP0560
Does Histological Subtype Affects The Long-Term Outcomes In Patients With Complete Pathological Response To Nactr In Locally Advanced Ca Rectum? A Retrospective Analysis.

Abstract Id: YUGP0562
Does Histological Subtype Affects The Long-Term Outcomes In Patients With Complete Pathological Response To Nactr In Locally Advanced Ca Rectum? A Retrospective Analysis.

Abstract Id: YUGP0570
Urinary Toxicity In High Risk Prostate Cancer Patients Treated With Whole Pelvis Intensity Modulated Radiotherapy (WP-Imrt) With Cone Beam Ct (Cbct) For Image Guidance
Presenter - Dr. Simon Pavamani
Co-author - Ms. Aruna Muthukumar, Dr. Deepa Madathil, Dr.Antonisamy

Aim: In India, the incidence of prostate cancer is low and patients are usually diagnosed in an advanced stage of the disease. Patients with localized high risk prostate cancer usually undergo androgen deprivation therapy (ADT) and whole pelvic radiation. This study aimed to assess the impact of radiation on urinary toxicity in Indian men with prostate cancer undergoing WP-IMRT utilizing CBCT image guidance. Materials and methods: In 2010, our centre acquired a linear accelerator with CBCT. The cohort consisted of 44 patients with localized high risk prostate cancer, treated with ADT and WP-IMRT between 2010 and 2016. WP-IMRT (4680 cGy) was followed by an IMRT boost (2520 to 3200cGy) or moderate Hypofractionation (6625 cGy) based on the tolerance of organs at risk. Image guidance was done by daily CBCT prior to radiation. Urinary symptoms of the patients were assessed by recording the International Prostate Symptom Score (IPSS) prior to starting radiation (baseline) and during each follow up. The initial scores were analyzed and compared with the scores on follow up. The IPSS scores were categorized into three groups namely mild (0-7), moderate (8-19) and severe (>19).

Abstract Id: YUGP0637
An Analysis Of Impact Of Histological Subtype On Survival Of Patients With Locally Advanced Rectal Adenocarcinoma.
Presenter - Dr. RAJESH SHINDE
Co-author - Rahul Bhamre, Devayani Niyogi, Dr Avanish Saklani

Abstract: Complete pathological response (pCR) is an independent prognostic factor of favorable outcomes in locally advanced rectal cancers treated with neoadjuvant chemoradiotherapy (NACTRT). Various studies have reported pCR rates of approximately 15%–25%. Various predictive factors of pCR are described & these include tumor size, histological subtype, clinical stage at presentation, absence of circumferential involvement, different neoadjuvant regimens and interval between NACTR and surgery. We intended to assess the impact of histological subtype on long-term outcomes in patients with pCR. Methods: 73 consecutive patients of locally advanced rectal cancer, who had complete pathological response after long course NACTR during 2013 to 2015 were included in the analysis. Study population was grouped into 3 histological groups (Signet, Mucinous & Non signet-non-mucinous). These 3 groups were compared with respect to recurrence rate, recurrence pattern, DFS & OS. Results: Study cohort was divided into 3 groups-signet (16.4%), mucinous (24.6%) & non signet-non-mucinous adenocarcinoma (59%). Median age was 43 yrs & mean pre-treatment CEA level was 9.1 ng/ml. With median follow up time was 35 months, 3 yr overall survival (OS) & disease free survival (DFS) was found to be 92.5% &75.3% respectively. There was no difference in DFS/OS amongst the 3 groups. Conclusion: Histological subtype doesn’t appear to affect the long-term outcomes in patients with pathological complete response to NACTR.

Abstract Id: YUGP0628
Locally Advanced Ca Rectum? A Retrospective Analysis. In Patients With Complete Pathological Response To Nactr In Does Histological Subtype Affects The Long-Term Outcomes Post Nactr Locally Advanced Rectal Adenocarcinoma. Impact Of Histological Subtypes On Treatment Outcomes In Post Nactr Locally Advanced Rectal Adenocarcinoma. Aims: Treatment Outcomes of locally advanced rectal cancer differ in different histologic types. But there is lack of robust evidence to support this assumption. In the era of NACTR as a standard of care, we intended to look for the impact of different histologic subtypes on treatment outcomes of locally advanced rectal cancer patients. Methods: Our study is a prospective analysis of a retrospectively maintained rectal cancer database from 1st January 2013 to 31st December 2014. 205 consecutive patients of locally advanced rectal cancer patients, who had received Long course NACTR, were grouped into 3 groups (Grp A-Signet, Grp B-Mucinous, Grp C-Non signet-non mucinous). All the 3 groups were analyzed with respect to demographic characteristics, Post NACTR response, Margin status, recurrence pattern, DFS & OS. Results: Total no of pts included in this study was 205. Grp A included 31; Grp B-35 & Grp C included 139 pts (15.1%, 17.1% & 67.8% respectively). Overall complete response rate in entire cohort was 18.5%. Amongst the different groups, CR rates were 22.6%, 28.6% & 15.1% in Grp A, B & C respectively. Disease progression during NACTR was seen in 22.6%, 2.9% & 6.4% in Grp A, B & C respectively. Additional systemic therapy (NACTR fb NACT) was required in Grp A-35.5%, Grp B- 20 % & Grp C- 17.2% patients. Recurrence rates were 19.35%, 28.5% & 23.7% in Grp A, B & C respectively. DFS was 21.7 mths in Grp A, 29.7 mths in Grp B & 34.5 mths in Grp C respectively (p<0.001). There was no significant difference in DFS between Grp B & Grp C. But there is Significant difference when Grp A is compared to Grp B / C separately. Similarly there was no significant difference in OS between Grp B & Grp C. But there is Significant difference when Grp A is compared to Grp B / C separately (Grp A- 25.4, Grp B- 37.6 & Grp C- 39.7 mths respectively, p<0.01). Conclusions: Outcomes with signet ring histology are poorer as compared to mucinous/ non signet-non-mucinous adenocarcinoma. Although post NACTR, CR rates are higher in Signet histology, this does not translate into survival benefit of these patients. Also signet ring histology cohort requires additional systemic therapy more often than the other histological subtypes. This may suggest a need of additional/ alternative treatment options (e.g. SCRT fb NACT) for these patients.
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Study Design And Early Result Of Phase I Study To Evaluate Feasibility Of Stereotactic Ablative Radiotherapy For Early Stage Glottic Cancer
Presenter - Dr. Chan Woo Woo
Co-author - Tosol Yu, Noorie Choi, Hong-Gyun Wu

Background: Reducing overall treatment time in radiotherapy (RT) for early glottic cancer has advantages of improved patient convenience and local control. Recently, avoidance of organs at risk has become possible with advances in high-precision image-guided and volumetric-modulated arc therapy (VMAT) techniques. The purpose of this study was to evaluate the feasibility of stereotactic ablative RT for early glottic cancer. This report is a preliminary result analyzing participants of the first dose level. Methods/Design: Eligible patients were provided with informed consent received hypofractionated RT to the larynx with a simultaneous integrated boost to the gross tumor. The fraction size was to be increased stepwisely from 3.5 Gy (total dose 59.4 Gy) to 9 Gy (total dose 45 Gy). The protocol-specified dose-limiting toxicities were defined as grade 3 or higher toxicities. The voice outcome and quality of life (QoL) was assessed with electroglottography (EGG) and Head and Neck Cancer Inventory (HNICI), respectively, at post-RT 1 month and 6 months. Results: Seven patients received 59.5 Gy with 3.5-Gy per fraction as the first dose level. None of the patients developed grade 2 or higher toxicity throughout a median follow-up of 16.8 months. All 7 patients were disease-free at both locoregional and distant sites. Both 6-month and 1-year local control rates were 100%. Voice assessment by EGG didn’t change significantly at 6 months after RT compared to those at pre-treatment. The overall HNICI score difference between pre-treatment and post-treatment was not significant (p = 0.69). Conclusion: This study showed acceptable toxicity, good voice outcome and QoL in patients treated with hypofractionated VMAT of 3.5 Gy per fraction for early glottic cancer. This phase I study is currently ongoing with 55 Gy in 11 fractions and will be followed by 45 Gy in 5 fractions.

Abstract Id: YUGP0643
Studies On Hereditary Colorectal Cancers: Experience From A Rural Cancer Center- Kalish Cancer Hospital & Research Center In Western India
Presenter - Dr. Rakshit Shah
Co-author - Yogesh Mistry, Jisha elias, Coral Karunakaran

Background: Colorectal cancer (CRC) is the fourth most common cancer in men and third most common cancer in women worldwide, with higher incidence reported in western countries. Over the last decade a remarkable 2-4 fold increase in CRC incidence has been observed in Asian countries like India. Lower prevalence of sporadic CRC cases in India have been linked to lifestyle, with an emphasis on a vegetarian diet. However, the incidence of hereditary CRCs in India have not been well documented. In the west hereditary CRCs i.e. Familial adenomatous polyposis (FAP) and Lynch syndrome or the Hereditary Nonpolyposis Colon Cancer (HNPPC) are common and account for 1% and 2-5% of the CRCs reported, respectively. We report a similar trend at a rural cancer center in western India (KCHR, Goraj, Gujarat), where 70-75 CRC patients are seen annually. Methods: We have identified three families, one diagnosed with FAP and two with HNPPC. In order to identify the underlying germline mutation in each family, we sequenced the genomes of 3 families, one with FAP and two with reported HNPPC. Results: In the FAP family, we identified a novel heterozygous mutation in the APC (pSerPhe6fester) gene in 3 affected members, all aged above 45 years. The mutation was also found in younger unaffected members of this family who have been appropriately counselled. Both HNPPC families had unique mutations in the MLH1 gene, a frequently mutated gene in HNPPC with a role in DNA mismatch repair. Conclusions: Thus far we have identified mutations in genes frequently reported in the west in both FAP and HNPPC. In FAP the region of mutation is APC but the mutation is unique. Further larger number of patients require to evaluate and compare to western countries.

Abstract Id: YUGP0653
Comparison Of 3Dcrt,F-Imrt And I-Imrt In Early Breast Carcinoma
Presenter - Dr. Sasikala Prabaharan
Co-author - dr kumaraswamy, dr sanjiv sharma, SRIRAM

Comparison of 3DCRT, FORWARD- IMRT, INVERSE-IMRT in whole breast irradiation ABSTRACT Objective To analyse the advantage of F-IMRT compared to 3DCRT and I-IMRT in whole breast irradiation. Materials/methods 30 patients CT simulation scans were taken and all the three plans were generated for each patient in prowess panther TPS with 50 Gy/25# to the whole breast. For 3DCRT 2 opposing tangential wedge field, for F-IMRT 2 opposing tangential fields without wedge but with multiple beams manually created and for I-IMRT multiple ipsilateral tangential fields were used. In all the plans 95% PTV was receiving 100% of the dose. V110%,V105%,conformity and homogeneity index, monitor units, heart, lung and opposite breast dose were analysed by D Mann Whitney U test Results The mean Monitor units for 3DCRT,F-IMRT and I-IMRT is 384mu,263mu,298 mu respectively in which F-IMRT is better than I-IMRT and 3DCRT (p < 0.001).The mean homogeneity index for 3DCRT, F-IMRT and I-IMRT is 0.19, 0.15, 0.22 respectively in which F-IMRT is better than I-IMRT (p < 0.026) and3DCRT (P < 0.0001).The mean D5 heart dose with 3DCRT,F-IMRT and I-IMRT is 2605 Gy, 2070 Gy, 2419 Gy respectively in which F-IMRT is better than I-IMRT (P=0.231) and 3DCRT (P=0.329). Mean V20 ipsilateral lung dose for 3DCRT,F-IMRT and I-IMRT is 21%, 20.6%, 22.7% respectively in which F-IMRT is better than I-IMRT (P=0.102) and 3DCRT (P=0.525). Mean opposite breast dose for 3DCRT,F-IMRT and I-IMRT is 87cGy 93cGy, 155cGy respectively in which 3DCRT is better than F-IMRT( P=0.600) and I-IMRT P< 0.001) Conclusion Forward IMRT provided significantly less monitor units, better homogeneity index, less cardiac, and lung dose as compared to 3DCRT and Inverse IMRT for the same tumor coverage.However clinical implication of Forward IMRT and long term follow up for breast cosmosis and normal tissue toxicity are required to substantiate the current study. Key words-3DCRT,F-IMRT,I-IMRT, Breast carcinoma

Abstract Id: YUGP0655
Presenter - Ms. Vanita Shrikant Bhat
Co-author - Vanita Shrikant Bhat, Dr Basavaraj Madhusudhan,

Earlier studies investigating the relation of dietary flaxseed consumption to prevent breast cancer have produced conflicting results. We hypothesized that dietary flaxseed factors associated with breast cancer risk might differentially influence the HER-2 status of the breast cancer. It is evident from screening study that the increased levels of plasma cell-free nuclear DNA concentration of cancer patients has frequently shown HER-2 as indicative marker for breast cancer progression. The possibility of using plasma DNA level as the indicator of tumor stage in breast cancer was investigated in plasma samples obtained from 100 breast cancer patients and 100 healthy women who were included as controls. Four dietary patterns had been identified previously by dietary flaxseed factors analysis: (1) high consumption of cooked vegetables and regular cereals with flaxseed, (2), high consumption of cooked vegetables and regular cereals without flaxseed, (3). prudent consumption of cooked vegetables, poultry, fish, meat, eggs, with flaxseed, and (4). prudent consumption of cooked vegetables, poultry, fish, meat, eggs, without flaxseed. In the study, relative risks (RRs) of developing HER-2-positive and HER-2-negative breast cancers by consumption dietary flaxseed factor scores were assessed by multinomial logistic
regression. Circulatory plasma free DNA was extracted from plasma samples and quantified by fluorimeter and Nano drop. The median concentration of plasma DNA in the plasma samples from breast cancer patients classified by TNM staging system as stage I, II, III, IV and breast surgical patients were showed increasing trend as 1.0, 323, 531, 1,344 and 1.0 ng/ml , respectively for the occurrence of breast cancer and which was measured using Nano-drop. The level of plasma DNA in the stage II- IV group was significantly higher in breast cancer patients than those in the surgical group with breast cancer and control group (P value \( \leq 0.001 \)). The plasma DNA concentration in stage II, III and IV of breast cancer were significantly higher in breast cancer patients in comparison with healthy women group. The tumor size, TNM stage and metastasis were significantly correlated with plasma DNA breast cancer patients in comparison with healthy women group. From results, high consumption of cooked vegetables and regular cereals with flaxseed dietary pattern had a protective effect against HER-2-positive cancers for the highest tertile and much stronger than for HER-2-negative breast cancer. This important finding that the cooked vegetables and regular cereals with flaxseed dietary pattern protects mainly against a specific breast cancer subtype indicates that future studies on flaxseed dietary risk factors such as polyphenolics should explicitly take account of the heterogeneity of breast cancer phenotypes. Multinomial logistic regression analysis was used to develop statistical model and to obtain estimates of the relative risk of breast cancer and relative risk of death according to the plasma DNA concentration. A cut-off point of anything between 80 and120 ng/ml with increasing the number of biopsies results in the increased detection of localized breast cancer that warranted the early screening and treatment follow up breast cancer will be discussed. Key words: breast cancer; plasma DNA; flaxseed, dietary pattern; HER-2; Cut point Screening

**Abstract Id: YUGP0661**

**The Possible Role Of Diabetes In The Etiology Of Laryngeal Cancer**

**Presenter:** *Prof. Roberto Menicagli*

**Co-author - bolla gianni, menicagli laura, esseridou anastassia*

Background: Laryngeal cancer and oral cancer are not always correlated with genetic mutations, HPV infection, smoking, and alcohol abuse. In the absence of these risk factors, there is an increase on these cancers with a parallel increase of diabetes. The aim of this study is to verify if diabetes could be a risk factor for the laryngeal cancer. Methods: A questionnaire was given to a group of ninety laryngectomees to verify if these patients have presented diabetes and xerostomia before surgery. In two groups, diabetics and healthy persons, the values of the salivary mucins and the pH were evaluated. The results were statistically analysed using Fisher Exact Test and Chi square Test Results: Diabetes is a risk factor: \( p= 0.0445 \) for laryngectomees male vs control group. Xerostomia in laryngectomees male is a risk factor: \( p= 0.050 \). The values of mucins and pH in diabetic group show significant difference: \( p=0.05 \) vs control group Discussion: In all autoimmune diseases, a decrease in the value of pH and salivary flow consequently decreases the value of spinnbarkeit which measures the capacity of the mucous layer to adhere to the epithelium and alter the protective oral mucin layer. We find that diabetes is epidemiologically correlated with laryngeal cancer. In fact, only diabetes increases the concentration of salivary mucins with a formation of mucin layer even more reduced, and so completely ineffective in protecting the mucosa. Conclusions: The increase of mucin secretion in diabetes alters much the protective layer allowing the risk factors to promote cancer growth.

**Abstract Id: YUGP0671**

**Safety, Efficacy, And Survival Rate Comparison Of Apceden® Dendritic Cell Immunotherapy With Best Supportive Care In Patients With Refractory Solid Malignancies**

**Presenter:** *Mr. Chaitanya Kumar*

**Co-author - . . .*

Background.APCEDEN® is an autologous (self) monocyte derived Dendritic Cell immunotherapy which augments the immune system against cancerous cells in the body. DC immunotherapy(APCEDEN®) is safe and can induce antitumor immunity even in patients with advanced disease as evident from the trial reports. A retrospective survival benefit analysis of APCEDEN for management of refractory solid malignancies, was performed in comparison with appropriate control group subjects on the advice of Indian Council of Medical Research (ICMR) and Central Drug Standard Control Organisation (CDSCO). Methods:Subjects (Retrospective data) selected for the analysis matched with the treatment group on parameters like survival data, geographical region, age, gender, ECOG performance status, and stage of the disease.APCEDEN® treatment survival data were adapted from the study by Bapsy et al. Survival benefit was assessed using Kaplan Meier analysis for survival rate, median survival days, and hazard ratio estimation. The APCEDEN®treatment group was divided into two cohorts based on the first evaluation response of the subjects. Results. The investigation suggests a substantial survival benefit of 199 days for the APCEDEN® administered group over the control population (356 days versus 157 days). The event free survival time of APCEDEN® therapy was 439 days in patients who demonstrated an objective response at first evaluation as per the immune related Response Criteria (iRRC). The hazard ratio of APCEDEN® treatment was estimated to be 0.35. Conclusions. APCEDEN® demonstrated highly conclusive survival benefits in comparison to analogous control group patients with advanced solid malignancies receiving no active systemic treatment. Furthermore, the safety and efficacy profile of APCEDEN® therapy was favourable, validating earlier published data.

**Abstract Id: YUGP0673**

**Nanomedicines Mediated Targeting Of Cancer Stem Cells**

**Presenter:** *Ms. Deepika Singh*

**Co-author - . . .*

Nanomedicines mediated targeting of Cancer Stem Cells Deepika Singh* and Sanjeeb Kumar Sahoo Institute of Life Sciences, Bhubaneswar, India (deepika89singh@yahoo.com) Various studies have delineated subpopulations of cells within tumors that differ in terms of their self-renewal capacity, long-term proliferation potential, capacity to seed new tumors when implanted in an appropriate host, and cancer recurrence potential; such cells are known as Cancer Stem Cells (CSCs). With advances in new technologies, several features of CSCs have been revealed, including their recurrence, metastasis, multidrug resistance, dormancy, and survival under hypoxic conditions. As a result of their tumor-initiating ability and resistance to conventional chemotheraphy and radiotherapy, CSCs have emerged as targets for cancer therapy in recent years. Conventional treatment with chemotherapy and radiotherapy can kill bulk tumor cells but fail to result in long-lasting clinical outcomes, because they are ineffective against CSCs. Thus, following conventional treatment, the presence of CSCs leads to tumor relapse. Studies have revealed that CSCs display plasticity via their reversible transition between the stem and non-stem cell states. Therefore, depletion of CSCs alone might not be sufficient for complete tumor regression because it is likely that the differentiated tumor cells are capable of becoming CSCs and, thus, sustaining tumor growth. Hence, approaches targeting both CSCs and non-CSCs are crucial. It is found that the Epithelial-to-Mesenchymal Transition (EMT) and Mesenchymal-to-Epithelial Transition (MET) are crucial events for CSCs metastasis. EMT is a phenomenon whereby epithelial cells acquire fibroblast-like properties, lose their cell-cell adhesion, and increase their motility, facilitating the escape of tumor cells from primary tumors. Thus, the EMT is relevant to the maintenance and acquisition of stem cell-like characteristics and is sufficient to endow stem cell properties to differentiated normal and
cancer cells. At the site of metastasis, the disseminated mesenchymal tumor cells undergo the reverse transition, the MET. This link between EMT, MET, and CSCs presents attractive opportunities for drug development via agents targeting specifically more mesenchymal carcinoma cells, rather than their epithelial counterparts, to eliminate CSCs. In recent years, the nanotechnology-based delivery of different therapeutics (i.e., nanomedicines) has shown potential for the treatment of CSCs by overcoming some of the limitations of the conventional therapeutics, such as poor water solubility, poor pharmacokinetics, and non-specific toxicity; these improvements enhance the penetration of the drugs into the CSC niche, leading to reduced chances of tumor relapse. Over the past few years, researchers have focused on designing nanof ormulation that carries dual drugs (one specific against CSCs and the other one against bulk tumor cells) for delivery to the target site via active or passive targeting. Here, we highlight the use of nanomedicine-mediated dual drug delivery to target CSCs and bulk cancer cells simultaneously where one drug is specific for inducing forced differentiation and another conventional drug for targeting bulk tumor cells.

Abstract Id: YUGP0690
Omission Of Postoperative Radiotherapy Following Breast Conserving Surgery For Ductal Carcinoma In Situ Of The Breast: A Multicenter, Retrospective Study In Korea (Krog 16-02)
Presenter - Prof. Kyung Hwan Shin
Co-author - Kyubo Kim, So-Youn Jung, Won Park

Background: To evaluate the loco-regional recurrence (LRR) rate after breast conserving surgery without postoperative radiotherapy (RT) for ductal carcinoma in situ (DCIS) of the breast. Materials and Methods: Between 2000 and 2010, 311 DCIS patients from 9 institutions were analyzed retrospectively. The median age was 47 (range, 20-82). The median tumor size was 7mm (range, 0.01-76). Margin width was 50 yrs and any margin width status (n=64), (2) 1.2% in age ≥50 yrs and margin width >1cm (n=93), (5) 13.1% in age ≥50 yrs and margin width ≤1cm.

Abstract Id: YUGP0694
Complications And Outcomes Of Groin Dissections Using Modified Skin Bridge Technique: Experience From A Tertiary Care Cancer Centre In North India
Presenter - Dr. Ashish Jakhetiya
Co-author - Ashutosh Mishra, Pankaj Kumar Garg, MD Ray

Introduction Historically groin dissections are associated with high morbidity and various modifications have been described in the literature with contradictory outcomes. Here we report initial long-term outcomes of 105 groin dissections performed by modified skin bridge technique. Methods A retrospective analysis of the computerized cancer database was performed to retrieve details of all the cancer patients who had undergone groin dissections during January 2012 to September 2016. Data pertaining to clinical profile including demographics, clinical and histopathological details, treatment profile, procedure related morbidity and relapse patterns were extracted and analyzed Results A total of 75 patients included in the present study with 105 groin dissections. Mean age was 49.62 (SD 13.72) years with male: female ratio of 53:22. Median tumor size was 7mm (range, 0.01-76). Margin width was 50 yrs and any margin width status (n=64), (2) 1.2% in age ≥50 yrs and margin width ≤1cm (n=93), (5) 13.1% in age ≥50 yrs and margin width ≤1cm.

Abstract Id: YUGP0706
To Compare And Determine The Diagnostic Accuracy Of Fdg Pet Scan In Predicting Pathological Response In Operated Carcinoma Esophagus Patients After Initial Neoadjuvant Chemoradiation And Neoadjuvant Chemotherapy
Presenter - Dr. Neelam Sharma
Co-author - Abhishek Purkya, Dr S Vishwanath, Dr Pradeep Jaiswal

Purpose: The objective of this study was to determine whether [18F]-fluorodeoxyglucose-positron emission tomography (FDG-PET) scan could predict the pathological response in esophageal carcinoma after surgery in patients receiving neoadjuvant chemoradiation (NACRT) and neoadjuvant chemotherapy (NACT). Methods This randomized prospective study has been carried out in 30 consecutive patients; 15 in each arm including both males and females of carcinoma esophagus middle and lower 1/3rdof both histologically proven squamous and adenocarcinoma from March 2014 to October 2016 at Department of Radiation Oncology of our institute after obtaining a written informed consent from the patients. All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. The sample size was calculated keeping in view at
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the most 5% risk, with minimum 80% power and 5% significance level (significant at 95% confidence level). However, consideration of the past data, which gives idea of variation in the variables, played an important role in calculating the sample size. The sample size estimation was done by calculating intake of locally advanced esophageal cancer, satisfying all inclusion criteria at our center from previous yearâ€™s hospital records. Eligibility Criteria: For the patients included in the study, the length and width of the tumor was not exceeded 8 cm and 5 cm, respectively. Only patients with tumors of clinical stage T1N1 or T2-3N0-1 with no clinical evidence of metastatic spread (MO), according to the International Union against Cancer (UICC) TNM classification of malignant tumors. The patients were eligible for NACCRT or NACT, or both, if they had stage I to III disease. They had a Karnofsky performance status of 60-100. Patients with T1N1 or T2-3N0-1, according to the International Union against Cancer (UICC) tumor–node–metastasis (TNM) classification, were enrolled. Eligible patients were 18 to 75 years of age, had a World Health Organization (WHO) performance status score of 0 or lower, and had lost 10% or less of body weight. Patients also had to have adequate hematologic, renal, hepatic, and pulmonary function, as well as no history of other cancer or previous radiotherapy or chemotherapy. Randomization and treatment: Patients were randomized into two groups using a piece of paper method. The terms NACCRT NACT were written separately on each piece of paper and patients were asked to pick up a random piece of paper at the registration counter in the presence of a blind observer. Patients were assigned to a particular group according to the respective piece of paper picked up by them. In both the groups patients were evaluated with [18F] FDG-PET CT scan in addition to upper gastrointestinal endoscopy (UIGIE) and biopsy. After initial work up patients in NACCRT arm received five cycles of weekly chemoradiotherapy intravenous inj carboplatin targeted at an area under the curve of 2 mg/ml/min (AUC 2) and inj paclitaxel 50 mg/m2 of body surface area (BSA) for 28 days with concurrent radiotherapy 41.85 Gy, given in 23 fractions of 1.85 Gy on 5 days per week followed by surgery. In NACt arm, the patients received 2 cycles of 3 weekly chemotherapy with inj paclitaxel 175 mg/m2 and inj carboplatin targeted at an area under the curve of 5 mg/ml/min (AUC 5). Post neoadjuvant therapy evaluation: In both the groups a repeat work up involving UIGIE and FDG PET-CT was performed to assess the response to NAT after 5 weeks of NACCRT and NACT before patients were taken up for surgery. Whole body FDG PET-CT scan spanning base of skull to mid-thigh was done 45 minutes after intravenous injection of 370 MBq (Millibequerel) of 18-F-fluoro-deoxy Glucose (18-FDG) using a whole body full ring dedicated LSO PET-CT scanner. Computed tomography images were obtained using 130 KV and 90mA (mean) without administration of IV or Oral contrast. Standardized uptake values (SUV) were determined with a small fixed-dimension region of interest (ROI), 8 mm in diameter; and the value was determined using the highest activity inside this area. SUV values were calculated after correction of radioactive decay according to the following formula: SUV = ROI activity (MBq/ml)/injected dose (MBq/body weight g). ROIs were drawn at every level where tumor tissue was detectable, and maximal SUV was the highest detectable value inside the tumor. SUV of the primary tumor was determined at baseline and after therapy. Maximal SUV of the pretreatment scan was labeled as SUV1, and the post-treatment scan SUV2. Change percentage (SUV%) was expressed as [(SUV1-SUV2)/SUV1]*100. Surgery and histological analysis: Patients in both NACCRT and NACT arms underwent surgery preferably within 5-6 weeks of neoadjuvant treatment. A video assisted thoracoscopic surgical (VATS) esophagectomy approach was adopted for tumors involving middle and lower 1/3rd. For tumors involving the lower 1/3rd where VATS was not possible a transhiatal resection was performed. As per Mandard classification with or without regressive changes, while the regressive changes included the stromal changes and cytological alterations.[11] Basing on these changes the tumor regression was classified into five histological TRGs, based on vital tumor tissue at the ratio of fibrosis: TRG 1 was defined as complete regression fibrosis without detectable tissue of tumor; TRG 2 as fibrosis with scattered tumor cells; TRG 3 was fibrosis and tumor cells with preponderance of fibrosis; TRG 4 was fibrosis and tumor cells with preponderance of tumor cells; TRG 5 was tissue of tumor without changes of regression. Patient with TRG 1-2 were considered responders while 3-5 were considered non responders. Statistical analysis All analysis was performed with SPSS version 17.0. All quantitative data were expressed as medians (ranges). The diagnostic accuracy of [18F]-FDG-PET-CT was calculated by the Receiver operating characteristics curve (ROC) test. The area under the ROC curve (AUC) provides a measure for the accuracy of a diagnostic test. It ranges from 0.5 to 1.0. The optimum cut off value for differentiation of responding and non-responding tumors was defined by the point of ROC curve with minimum distance from the 0% false positive rate and 100% true positive rate. The correlation between the SUV% and TRG was compared between NACCRT and NACT group using a paired T-test. Results The median age was 58 years, there was a male preponderance. 27/30 (90%) patients had Squamous histopathology with involvement of middle 1/3rd of esophagus. Most patients had stage III disease. Change in SUV values post neoadjuvant treatment in responders and non-responders: In 33.3% responders in NACCRT group the SUV fell from 12.58±1.68 to 2.36±0.52 (P value < 0.0001). In 20% responders in NACT group SUV fell from 9.7±0.85 to 2.3±0.4 respectively (P value < 0.001). Though there was a statistically significant reduction in SUV value in both the groups after neoadjuvant treatment but a comparison between the NACCRT and NACT arm lead to a mean SUV value of 57.80±22.40 and 45.92±19.23 with a nonsignificant P value of 0.13. This leads to a conclusion that both the treatments result in a significant metabolic response however one does not outperforms the other in a statistically significant manner. TRG 1-2 versus TRG 3-5 in NACCRT and NACT group: In NACCRT group of the 15 patients 7 (46.6%) had achieved a complete or near complete response (TRG 1-2) while 8 of 15 patients (53.4%) had less or no response (TRG 3-5). While in NACT group 6 out of 15 (40%) patients had TRG 1-2 while 9/15 (60%) patients had TRG 3-5. In NACCRT group TRG had a mean value of 2.53±1.25 while in NACT group TRG had a mean value of 2.93±1.28 with a non significant P value of 0.393. This leads to a conclusion that there is no statistically significant difference between the NACCRT and NACT groups as far as TRG grade is concerned. Correlation between SUV% reduction and TRG: In our study we found a significant correlation between the [% SUV max] reduction and TRG after analyzing the data of all 30 patients in both NACCRT and NACT group with a significance value of 0.002 where correlation is significant at a value of 0.01 level (2-tailed) ROC Curve Analysis: ROC curve analysis for an AUC of 0.693 (Figure-7) and sensitivity and specificity of 18F-FDG PET scan of 80% and 46.7% respectively. Conclusion In our study we found that there was a statistically significant reduction in SUV value in both the groups after NAT but a comparison between the NACCRT and NACT arm lead to a mean SUV value of 57.80±22.40 and 45.92±19.23 with a non significant P value of 0.13. This leads to a conclusion that both the treatments result in a significant metabolic response however one does not outperforms the other in a statistically significant manner. An early marker of response offers the greatest potential clinical advantage, particularly if those not benefiting from treatment could be identified and offered alternative approaches, and this was the hypothesis evaluated in this study. However the major drawback of this study was a small sample size. Despite that we could conclude by this study that [18F]FDG-PET-CT is a good diagnostic modality for response assessment after NAT in locally advanced carcinoma esophagus patients and helps in differentiating between responders and non-responders significantly. TABLE SHOWING (SUV%) AND TRG IN BOTH GROUPS SERIAL NO SUV(Max) UPTAKE BEFORE NACCRT SUV(Max) UPTAKE AFTER NACCRT (SUV?) TUMOR REGRESSION GRADE (Mandard) 1. 12.4 2.1 83.06% 3 2. 19.5 12.4 45.92±19.23 0.693 3 3. 16.5 10.3 37.57% 3 30.8 43.42% 3 2 19.5 12.4 45.92±19.23 46.7% 2 1. 17.6 8.3 52.84% 3 14. 15.1 2.4 84.10% T0 15. 13.2 3.2 75.75% 1 SERIAL NO SUV(Max) UPTAKE BEFORE NAT SUV(Max) UPTAKE AFTER NAT (SUV?) TUMOR REGRESSION
TITLE To establish the Role and Accuracy of Ultrasound measurements of parathyroid nodules, in operated cases of Hyperparathyroidism, as correlated with surgical findings: Retrospective Study done at a single Institution in India.

AUTHORS ALKA ASHMITA SINGHAL, S S Bajal, Ambrish Mithal, Sunil K Mishra, Deepak Sarin, Sowrabh Arora, Radiology and Nuclear Medicine, Endocrinology, Head and Neck Surgery, Medanta the Medicity Gurgaon Haryana India INSTITUTE AND HOSPITAL Medanta the Medicity Gurgaon Haryana New Delhi NCR India PRINCIPAL AUTHOR CV Dr Alka Ashmita Singhal Senior Consultant â€œRadiology at Medanta Division of Radiology and Nuclear Medicine for the past 5 years. She has a previous work experience from Sydney, Australia of 10 years and Toronto, Canada for 2 years. She is dedicated to quality, accuracy and patient satisfaction. She did Medical Ultrasound from ASUM, Sydney and Doppler and MSK USG Certification from ARDMS USA.

ABSTRACT AIMs: To establish the Role and Accuracy of Ultrasound measurements of parathyroid nodules, to help guide the surgeon at the time of surgery and to set up standards of diagnostic ultrasound of neck in cases of hyperparathyroidism. METHODS: This was a retrospective study conducted at a single institution in India. Patients diagnosed with Hyperparathyroidism and Operated from year 2013 to 2017 were included. Biochemical and radiological parameters were evaluated and analyzed. Biochemical (Serum Calcium, PTH, and Vit D Phosphates) and radiological parameters (MIBI, USG, and Methionine PET) were evaluated to establish clinical and Radiological diagnosis. SAMPLE SIZE: A total of 200 Patients operated for parathyroid nodules were studied retrospectively. ULTRASOUND EQUIPMENT AND TECHNIQUE: High resolution linear USG on Siemens 2000 AND Siemens X700. Identification of a parathyroid nodule was done as per ultrasound criteria. After precise localization of the parathyroid nodule, three dimensions of the nodule were measured on a split screen format as length x width x transverse measurement. (Example 18 mm x 9 mm x 6 mm, volume = 0.4 cc)

The volume measurement was calculated by the software of USG machine. POST OPERATIVE SURGICAL NODULE DIMENSIONS: The FROZEN SPECIMEN GROSS REPORT was obtained from the Histopathology. Three Measurements in three orthogonal planes and the specimen weight were compared with pre-operative parathyroid nodule measurements. The weight of the Gross Specimen was compared with the volume of the nodule obtained at ultrasound. Data was then analysed for correlation and accuracy. SCIENTIFIC VALUE The study helps in guiding the surgeon by better planning and saving operating time and patient morbidity. Also retrospectively it helps in establishing diagnostic standards of ultrasound examination and measurements. RESULTS: USG SIZE VERSUS SURGICAL SIZE: Among them â€œ170 patients (85%) had the sizes of the ultrasound nodules lying between 90-110 % of the size of nodules as measured at surgery. â€œ15 patients (7.5 %) had nodules sizes between 85-115 % range of the surgically measured nodules. â€œ6 patients (3%) had nodule size between 80-120 % of the surgical measurements. â€œ And 3 Patients (4.5 %) had additional nodules at surgery. (Bilobed parathyroid) ANALYSIS: The size correlation between good ultrasound measurements and surgical measurements was as follows (Accurate and Good Correlation) In 85 % cases, the range was only minus 10% to plus 10% In 7.5% cases, the range was minus 15% to plus 15% In 3 % cases, the range was minus 20% to plus 20% In remaining 4.5 % cases there were additional nodules (bilobed and others) CONCLUSION 1 Precise measurements of a well localized parathyroid nodule gives confidence and reassurance to the operating surgeon at the time of removal. It can obviate the need for further exploration. 2 The surgeon at the time of surgery correlating all the three dimensions of the removed nodule with the corresponding sizes mentioned in the diagnostic ultrasound report. (Intraoperative PTH Drop is however utilized for further confirmation). 3 Overall, the study showed 95.5 % of operated parathyroid nodules within plus or minus 20 % of the sizes measured at diagnostic ultrasound. It helps in pre-operative surgical planning, counselling and management of the patient. 5 Retrospective analysis helps in setting up diagnostic ultrasound standards. ADDITIONAL BENEFITS: Apart from Accurate size of the nodule (s) USG gives precise localization of nodule and its depth level and anatomical relationship with the important landmarks in the neck. Helps in localization of superior versus inferior parathyroid nodule in equivocal cases at mid thyroid level. (Important as to avoid injury to recurrent laryngeal nerve) Ultrasound finds parathyroid nodules in Sestamibi negative or equivocal cases of hyperparathyroidism. Ultrasound finds additional nodules in cases where sestamibi showed only one nodule. USG evaluates the localized nodules for their cystic and solid component, and for any suspicious features if any. USG localizes Ectopic parathyroid nodules in the neck. USG evaluates the parathyroid nodules which do not take up radioactive tracer even at surgery. Ultrasound evaluates the thyroid for any nodules or associated pathology Neck is evaluated for associated lymphadenopathy and its characterization KEYWORDS: Hyperparathyroidism, Sestamibi, Ultrasound neck for parathyroid nodules, Parathyroid adenoma, Parathyroid nodule size and measurements, Parathyroid surgery, Head and Neck surgery.

Abstract Id: YUGP0720

Primary Leiomyosarcoma Of Cervix: Now It Counts!

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Primary Leiomyosarcoma Of Cervix: Now It Counts!
Abstracts

Presenter - Dr. Nancy Lal
Co-author - Dr. V. YOGI, Dr. O. P. SINGH, NANCY LAL

Background: Primary carcinoma of the vagina is a rare malignancy of female genital tract which constitutes 2% of all gynecological malignancies. The peak incidence is in the sixth and seventh decades of life. Approximately 50% of vaginal cancers arises on the posterior wall of the upper one third of the vagina. The majority of primary vaginal malignancies are squamous cell carcinoma constitutes 80 to 90 % and the remaining are adenocarcinoma about 5 to 10 %. Histological patterns of adenocarcinoma include clear cell carcinoma, adenosquamous, papillary & undifferentiated. Other types are melanomas, sarcomas and unspecified types. Case report-We report a case of primary vaginal papillary adenocarcinoma in a 65 years old woman presented to our department with symptoms of persistent and profuse clear vaginal discharge since 7 months, vaginal bleeding since 2 months and pain in lower abdominal region since 1 month and USG showed ill defined soft tissue mass seen in upper vagina. CT scan suggestive of large ill defined mass approximately 3.3X1.8 cm seen in upper vagina and few subcentrimetric pericaecal and mesenteric lymph nodes seen largest measuring 9mm in short axis, hepatomegaly with grade I fatty changes and multiple cholelithiasis. Immunohistochemistry showed CK20, DUPAN 2 positive and CA 125, CK7, serum CEA negative. Conclusion- This case reported here for its rare presentation in all gynecological malignancies. Keywords- Primary vaginal carcinoma, Papillary adenocarcinoma

Abstract Id: YUGP0734

Long Term Hypocalcaemia À€¬ Prediction (Lthp) in Thyroidectomy
Presenter- Dr. Nebu George
Co-author - deepak janardhanan,

INTRODUCTION Hypocalcaemia is a common sequelae of total thyroidectomy and is usually transient (30%).Only few develop permanent hypoparathyroidism. Till date, no effective risk stratification score is available to predict post-operative hypocalcaemia . Development of such a score would help to initiate calcium supplementation as early as possible and thus avoid prolonged hospital stay and unwarranted prolonged calcium supplementation in some patients who might not need it . AIM À€¬ To predict long term hypocalcaemia in patients undergoing thyroidectomy based on preoperative and 6hrs post-operative parathormone value. À€¬ To device a weighted score to predict long term hypocalcaemia, after analyzing various clinical and intraoperative variables. MATERIALS &METHODS All patients who underwent total or completion thyroidectomy from April 2015 to May 2016 at our institution for malignancy with preoperative parathormone value within the normal range were included in the study after ethical committee clearance. Patients with abnormal serum albumin and serum calcium values preoperatively were excluded from the study . Biochemical value less than 7.5 on first or second post operative day or presence of signs or symptoms were considered as positive for hypocalcaemia. Post thyroidectomy Long term hypocalcaemia was defined as, when calcium supplementation had to be continued for more than three months after thyroidectomy. Post op 6th hour PTH level fall was noted in all patients and cut off point for prediction of long-term hypocalcaemia was determined statistically using paired t test . Factors like PTH level fall, Calcium level fall, histology, central compartment neck dissection, age of patient, Intraoperative parathyroid identification, intraoperative extra capsular spread/extra thyroidal spread, pre op calcium level and extent of surgery were analysed for statistical significance in predicting hypocalcaemia. these clinical and biochemical parameters were also used to devise a weighted score to predict patients who might go in for long term hypocalcaemia RESULTS A total of 105 patients were included in the study of which 77 were females 19 patients were less than 20yrs of age, t . Post operatively, calcium supplementation was initiated for 52%. In the majority the calcium supplementation could be tapered and stopped by 2nd month following surgery. 5.7% had normal calcium in the 1st post-operative day but developed hypocalcaemia after 4th post-operative day requiring re-hospitalization. All these patients who developed delayed hypocalcaemia with initial normal calcium levels had fall in parathormone to more than 45% of initial value. A PTH fall of 45% or more was found to be significant in predicting hypocalcaemia that required calcium supplementation for upto 2 months(p-value < 0.001 using Chi-square test). Patients in the less than 20 yr age group were more prone to develop hypocalcaemia with 66% developing hypocalcaemia in the post-operative period. In individuals below 20 years, a PTH fall of 56% or more ,was attributed to calcium supplementation with a sensitivity of 83.3% In 7.6 % of patients, calcium supplementation could not be tapered even after 3 months and all of these patients had fall in parathormone to more than 80% of preoperative value.

Abstract Id: YUGP0740

The Occupational Stress And Mental Health In Cardiac And Non Cardiac Patients
Presenter- *Ms. B PRASILA LEELAVATHY PAPPTHY
Co-author - Dr.Ramachandran Narayanan,

Introduction: Much of research studies in global level have shown that occupational stress is one of the strong detemt factors of coronary heart diseases among people in general and causes ischemic heart diseases in particular. However, exploring the extent to which the type or nature of ailments and its subsequent risk factors have an effect on the onset of mental health will help evolve suitable preventive measures. The present study attempts to explore the status of mental health and occupational stress with respect to two categories of patients: Those who are suffering from cardiac problems and those suffering from non cardiac health problems. Means and Methodology adopted: The occupational stress Questionnaire and Mental Health Questionnaire were administered to both cardiac and non cardiac patients. The cardiac group consisted of 40 patients who were being treated at the cardioiology department of a reputed government hospital, and non cardiac group 40 patients consisted of our patients of the same hospital being treated for non cardiac problems like knee pain, headache, etc. Responses to these self-reported questionnaires were subjected to statistical analysis to find out the difference between cardiac and non-cardiac groups. Results: The results revealed that cardiac patients tend to have lower levels of mental health than no cardiac patients. Similarly, cardiac patients were reported to have higher levels of stress due to role ambiguity, powerlessness, intrinsic impoverishment and unprofitability. Conclusions: The implications of the study were implementation of interventions to improve the internal strength of cardiac patients to overcome various aspects of occupational stress.

Abstract Id: YUGP0750

High Dose Rate Endobronchial Brachytherapy: Our Institutional Experience As An Effective Palliative Treatment Modality In Bronchial Carcinoma
Presenter - *Dr. Jigna Bhattacharya
Co-author - Dr R K Vyas, Dr Saheli Saha,

Background: Treatment of inoperable carcinoma lung poses a challenge both due to the magnitude and local symptoms with resultant worsening of performance status of the patients. Endobronchial brachytherapy is an established modality for palliation of symptoms, namely dyspnoea, haemoptysis and cough that result from disease infiltration of the airways. This study was aimed at evaluating the role of HDR endobronchial brachytherapy with external radiotherapy for symptomatic improvement and compliance for such patients at our institution. Method: 50 patients of inoperable Ca Lung with significant bronchial component, including non-small cell and small cell, were assessed. Patients were evaluated with fibre optic bronchoscopy.
Assessing Enamel Mineralization During X-Ray Photon mass. Contact: Mobile: 9426024694 Email: jignabhattacharya@important palliative modality to relieve the obstructive symptoms like while it was found to be insignificant in patients with change of voice.

statistically significant for dyspnoea, chest pain, cough, haemoptysis both the arms were compared using t-test. The pre- and post-treatment expansion of atelectasis was seen in 100% patients (n=29). Values in showed less improvement after endobronchial brachytherapy. Re-

response to dyspnoea (n=46). Symptoms like chest pain and cough achieved in 98% of patients (n=14), 80% patients showed complete in arm B. In short follow up, complete response for haemoptysis was achieved in 98% of patients (n=14), 80% patients showed complete response to dyspnoea (n=46). Symptoms like chest pain and cough showed less improvement after endobronchial brachytherapy. Re-

expansion of atelectasis was seen in 100% patients (n=29). Values in both the arms were compared using t-test. The pre- and post-treatment symptomatic differences were comparable in both the arms and statistically significant for dyspnoea, chest pain, cough, haemoptysis while it was found to be insignificant in patients with change of voice. Conclusion: Endobronchial brachytherapy, as documented, is an important palliative modality to relieve the obstructive symptoms like dyspnoea and haemoptysis, in patients with intrabronchial malignant mass. Contact: Mobile: 9426024694 Email: jignabhattacharya@gmail.com

Abstract Id: YUGP0756
Assessing Enamel Mineralization During X-Ray Photon Radiotherapy For Head And Neck Cancers.
Presenter - Mr. Jagadish Kudkuli
Co-author - Riaz Abdulla, Manzoor AP, Sneha Dhar

Background: Radiotherapy is an important treatment modality for combating malignant tumors especially in cases of head and neck cancers. Radiation-induced caries occurs as a synonymous clinical condition due to side effects of radiotherapy along with trismus, severe dentition breakdown, xerostomia, associated loss of masticatory function etc. Several interventional studies have shown a direct effect of radiation on tribology, ultrastructure and chemical composition of teeth. Linear accelerator (LINAC) based X-ray photon radiotherapy is routinely incorporated into Treatment Planning System (TPS) to improve Tumour Control Probability (TCP) and to curb Normal tissue complicating probability (NTCP) to a maximum extent possible. As of yet, there are no studies focussing on microhardness of teeth under x-ray photon radiation intervention. Purpose: To evaluate the percentage mineral content in teeth enamel exposed to LINAC X-ray irradiation, using microhardness technique Materials and Methods: The study was approved by Institutional Ethics Committee, Yenepoya University, India (YUEC//2015/259). A total of 23 human permanent teeth samples were collected from extractions done during the surgical procedure in Department of Oral Surgery, Yenepoya Dental College, Mangalore. Bucco-lingual sections were prepared using a diamond plated dental micro motor. Buccal enamel surfaces were exposed to different treatment doses of x-ray photon ionizing radiation viz. 20 Gy, 40 Gy, 60 Gy and 80 Gy. Before and after irradiation, Indents were made using Vickers diamond micro-indenter at the rate of 100 gf for 15 seconds. Hardness numbers and percentage mineral content of buccal enamel slices were calculated using Vickers and Knoop microhardness inter-conversion indices and the difference obtained in pre and post-irradiated samples were expressed as percentage mineral loss of buccal enamel surface. Results: Gradual decrease in mineral percentage was observed in radiation exposed samples from 20-80 Gray. While there was not much difference with 20 Gray samples compared to controls, greater loss of percentage mineralization was noted with an increase in radiation dose from 40 to 80 Gray. Results indicate a clear impact of LINAC X-ray photon radiation on teeth enamel surface. Conclusion: Decrease in mineral percentage values of buccal enamel surface indicates loss of mineralization under radiation intervention. Several ultrastructural and elemental characterization studies have suggested tampering of the crystal lattice; hydroxyapatite, which forms a major part of enamel ultrastructure. X-ray powder diffraction (XRD), Fourier Transform Infra-Red (FTIR) spectroscopy and Scanning Electron Microscopy (SEM) data from previous studies support our observation that radiation exposure could induce teeth enamel demineralisation. Loss of enamel and teeth major structure might be major contributing factors for incidence of radiation caries in head and patients prescribed to radiotherapy. In conclusion, a dose above 40 Gy from linear accelerator X-ray source can cause serious loss in mineral density of teeth.

Abstract Id: YUGP0758
Presenter - Mr. Irfan Lone
Co-author - Dr Swarupa Mitra,

Introduction Radiation therapy is one of the important modalities of cancer treatment yielding promising clinical outcomes. However it also poses many challenges on emotional and physical parameters and many patients experience emotional distress prior to the initiation of radiotherapy, during the course of treatment and even its completion, thus resulting in detrimental implications on their quality of life. Objective The current study explores the psychosocial issues and along with the level of distress among cancer patients receiving pelvic Radiation Therapy. Methodology Using Distress thermometer by NCCN, the level of distress was assessed and an in-depth semi structured interview schedule was constructed to explore psychosocial concerns of the patients. Statistical analysis was done using SPSS 21. Results: Fifty nine patients receiving External Beam Radiation Therapy for pelvic area were included, and 35.5% of them were in fourth decade of life, followed by 29% and 25% in fifth and sixth decades respectively. Almost all of them had not received any previous radiation therapy and majority (81%) came from middle social economic families. Almost half of them were aware of their diagnosis and only 12% had awareness of the prognosis. Conclusion: Majority of Indian patients experience extreme level of distress before, during and after radiation therapy, with women experiencing it more than their male counterparts. Irrespective of gender, moderate to extreme level of distress is experienced before and during RT by majority of patients, and moderate level of distress still persists in most of the patients after 3 to 5 weeks of completing RT. Also associated with it are many psychosocial concerns that are of significant relevance, while they receive Radiation Therapy. Future research should explore more physical and psychological parameters associated with radiation therapy so that appropriate psychological therapies and intervention are designed help patients cope with treatment. Also irrespective of the awareness of their disease diagnosis and prognosis, patients should be counseled about treatment modalities, their expected side effects and ways to cope, which can lead to their better Quality of Life.

Abstract Id: YUGP0764
Factors Influencing Survival In Advanced Stage Gastric Cancer
Presenter - Dr. GANGOTHRI SELVARAJAN
Co-author - Dr.Kalaiacheli Kannan, Dr. Suresh kumar S, Dr. Raja Gopal

Background As per GLOBOCAN 2012 Gastric cancer is one of the most common cancers worldwide and third most common cause for cancer related mortality. The prognosis remains poor for this
cancer inspite of multimodality approach. Objective To analyze the relationship between survival and covariates and find the factors influencing the survival in locally advanced and advanced stages in tertiary care centre in South India. Methodology A retrospective study was done using data of patients treated from the period of January 2012 to November 2016. 518 patients with an advanced disease were found. Age, personal habits, stage of the disease, site of metastasis, histology and the treatment given were analyzed. Statistical analysis was done to find out the relationship between survival and the mentioned covariates using Kaplan-Meier and Cox regression. Results 343 patients received chemotherapy or surgery or both. 175 patients did not receive any treatment except palliative bypass procedures. Median survival in those who underwent definitive surgery with chemotherapy is 29 versus 8 months in those who underwent palliative bypass procedures. Also significant survival difference was seen with those received <2 versus >2 cycles of chemotherapy (20months versus 10months).Stage IIIA and IIIB showed significant survival benefit compared to Stage IV (29,13 Vs 9 months respectively). Cox regression multivariate analysis showed significant hazard results for surgery, >2 cycles of chemotherapy and stage of the disease. Conclusions in advanced gastric cancer survival is influenced by factors like surgery, >2 cycles of chemotherapy and stage of the disease but factors like age, smoking, alcohol, site of metastasis and histology do not influence it. KEY WORDS: Gastric cancer, survival, surgery, chemotherapy, stage

Abstract Id: YUGP0766

Detection And Classification Of Tumor In Mammograms Using Discrete Wavelet Transform And Support Vector Machine Presenter- Mr. Abhishek Sehrawat
Co-author - Abhishek Sehrawat, Deepthi Sehrawat,

The breast cancer is common causes among women. It is detectable. The detection of the tumor method follows pre-processing, feature extraction, and classification. In pre-processing the noises is removed by Gaussian filters from the original images and elaborate the image. The wavelet features are used for the classification to get the tumor classification. The support vector machine is used for classification. Pre-processing - The pre-processing is used to identify the tumor. It is significantly increasing the reliability, robustness of the image. It is used to remove the noise and elaborate the image using Gaussian filter. To reduce the work area only to the relevant region that exactly contains the breast. It acquires the image from the database as the input image. Gaussian Filter - The noise is removed from the image by Gaussian filter and its impulse response is Gaussian function. It is a class of linear smoothing filters with the weight chosen according to the shape of Gaussian function. For smoothing purpose Gaussian kernel is mainly used. It is used to remove noise from the normal distribution. The filter window is symmetric in center so it makes Gaussian filter as unrealized. But it is not limitation for application if the bandwidth is much larger than the signal. Five properties make Gaussian functions useful. These properties of Gaussian filter smoothing filters are effective low-pass filters from the view of both the spatial and frequency domains are efficient. Segmentation - The next step is segmentation after image acquisition. Segmentation is the process of classifying the image into several regions [30]. The proposed segmentation of intensity images such as mammograms is based on thresholding technique (Ostu method).Involves the separation of background from the breast tissues in the thresholding in mammogram images. Based on the threshold value the pixels that are less than the threshold are considered as background and the remaining pixels are considered as breast. Classification - Support vector machine (SVM) is used to classify the tumor as normal, benign; malignant it helps to predict the feature of the extracted image will be input to the classification system. Classification process is dividing into training phase and testing phase. In the training phase known data are given and the classifier is trained, and in the testing phase unknown data are given and the classification is performed by using trained classifier. According to the pattern presented in the form of a feature vector. Support Vector Machine The Support Vector Machine (SVM) is a supervised device with associated learning algorithm that analyzes data and recognize pattern. It searches for a separating hyper plane to separates positive and negative from each other with maximum margin. So, the distance between the decisions surface. SVM classifier is designed to solve a binary classification problem finding the class boundary, the hyper plane maximizing the margin in the given training. RESULTS AND DISCUSSION The proposed method is tested by using the mini-MIAS database of mammograms. All images are digitized at the resolution of 1024 × 1024 pixels and 8- bit accuracy (gray level). The proposed algorithm was implemented in a MATLAB environment. Simulation results show that the proposed algorithms yield significantly superior image quality when it is compared to the Global thresholding method and window based adaptive thresholding method. CONCLUSION Here, wavelet based adaptive windowing method is presented for the segmentation of bright targets in an image. To propose Coarse segmentation the wavelet based histogram thresholding is used where, the threshold value is chosen by performing 1-D wavelet based analysis of PDFs of wavelet transformed images at different channels. Window wing method is used to obtain Final segmented result. And by choosing threshold the simulation results show that the proposed method is effective to segment the tumors in mammograms and it can also be used in other segmentation applications. Simulation results show that the proposed algorithms yield significantly superior image quality when it is compared to the Global thresholding method and window based adaptive thresholding method.

Abstract Id: YUGP0768

Activated Salivary Mmp-2 in Diagnosis And Prognosis Of Breast Cancer

Presenter- Prof. Amitava Chatterjee
Co-author - Dr Md Nasim ali, Dr Ramanuj Mukherjee, R G Kar Med Col, Dr Anjan Adhikari, R G Kar Med Col

Title- Activated Salivary MMP-2-In Diagnosis and Prognosis of Breast Cancer Suvajit Mondal*, Md Nasim Ali***, Ramanuj Mukherjee**, Anjan Adhikari*** and Amitava Chatterjee**, Ramakrishna Mission Vivekananda University, Narendrapur, R G Kar Medical College**, Kolkata and BCKV, Nadia***. Correspondence : Amitava Chatterjee at amitavachatterjee24@gmail.com

Introduction- Matrixmetalloproteinase-2 (MMP-2) has been reported to be involved in the pathogenesis of cancer. The over expression of MMP-2 is associated with the progression of malignancy of several types of carcinoma. Human saliva is a biological fluid with several advantages for non-invasive diagnosis and prognosis of diseases. The aim of this study was to detect expression and activity of MMP-2 in biological fluids (saliva, urine etc) derived from breast cancer patients using non invasive method before and after surgery of the same breast cancer patients. Methods- Substrate gel electrophoresis (Zymography) was done to study the activity of MMPs at stages of breast cancer. ELISA was done to study the presence and difference of MMP-2, TIMP-2 and VEGF before and after surgery of the same breast cancer patients. Immuno Blot and immunoprecipitation of salivary proteins was performed to confirm the presence of activated MMP-2. Results-Comparative zymography shows the increase in MMP-2 activity along with the increase in stages of the disease. ELISA shows the presence and difference of MMP-2, TIMP-2 and VEGF in saliva of same patients before and after surgery. The comparative zymogram shows the MMP activity of the same breast cancer patients at different time point after surgery (follow up). Conclusion- Our results showed that the activity of MMP-2 was higher at the time before surgery than the after in saliva collected from the same patients. The comparative zymogram at different time point after surgery of the same patient strongly indicate the use of MMP activity in prognosis. Therefore we suggested active form of salivary MMP-2 could be used as a novel potential biomarker for diagnosis and prognosis of breast cancer using non invasive method.
Abstracts

Abstract Id: YUGP0776
Children With Acute Lymphoblastic Leukemia And Families: Focus Group Study Of Their Unmet Needs
Presenter- Ms. Tanuja Kaushal
Co-author - Dr. Sujata Sapathy, Prof. Rakesh Chadda, Prof. Sameer Bakshi

Background: The impact of pediatric oncology is psychosocially and physically profound. Children and their families have problems coping with the stresses of treatment, surgery, chemotherapy, and radiation. However, qualitative research incorporating the phenomenological experiences of children and their caregivers and professionals dealing with such cases in explaining the fabrics of trauma they handle especially in Indian socio-cultural set up is needed.

Purpose: To study the needs and challenges faced by children with cancer and their families and professionals using Focused Group discussions (FGD) approach.

Methods: A total of 64 participants participated across eight FGDs. 4 FGDs with parents of children with ALL (n=31); 1 FGD with professionals working in the field of cancer (n=10) and 3 FGDs with children with ALL (n=23).

Results: Three major categories of information emerged during analyses: (1) Needs and challenges faced by the participants; (2) Factors moderating influence of challenges; (3) Technical suggestions by experts highlighting ways to address challenges. 5 Domains of challenges emerged namely: Lack of awareness, Cognitive problems, psychosocial issues, physical problems and socio-emotional & behavioral problems.

Discussion on the emerged themes and sub-themes has been done in the light of global literature, existing theoretical frameworks, and cultural scenario of India.

Conclusion: No longer considered an inevitably fatal disease, childhood cancer nonetheless presents many challenges for children and families. An effective and culturally sensitive psychosocial support for patients and their families during and post-treatment, in addition to medical therapy, is strongly recommended.

Key Words: childhood cancer, families, professionals, focused group discussion, challenges

Conflict of interest: Nil Copyright of the abstract: ICC-2017

Abstract Id: YUGP0781
Analysis On The Pattern Of Care And Survival Of Patient With Nasopharyngeal Cancer In Saint Lukeâ€™s Medical Center Global City
Presenter- Dr. Poly BUNPA
Co-author - Dr. Angela P. Camacho ,

Objective/Purpose Nasopharyngeal cancer is one of the most common cancers in Asia. The high incidence might relate to South East Asian diet rich in salted vegetable, meat and fish. The overall survival of locally advanced Nasopharyngeal cancer was improved from 47% to 78% with additional of concurrent chemotherapy to radiotherapy. The purpose of this study is to report on loco-regional and survival rate of patients treated at our institution.

Methods and patient Characteristic From January 2014 to December 2016, there were 37 patients, diagnosed with nasopharyngeal cancer stage I to stage IV, treated in Saint Lukeâ€™s Medical Center Global City. Of 37, four were excluded from the analysis due to the following reasons: two patients did not start radiation therapy, one patient has no available data and one patient has no follow up. This rendered only 33 patients eligible to be in the study. The age range of population was from 26 to 72 years of age, with a mean age of 46 among the subjects. Twenty-three were male and ten were Female. Sixteen patients had histology WHO type 2 and seventeen had WHO type III. Fourteen patients received concurrent weekly low dose cisplatine and 13 patients received high dose chemotherapy. Mean treatment duration time was 50.9 days. Results After completion of radiotherapy, twenty-six patients had complete response, 4 patients had partial response and 2 patients had stable disease of the nasopharyngeal mass, four patients had stable disease for the neck nodes and one patient had nodal progression after the treatment. The median follow up for overall survival was 18 months. A total of four patients were dead. One patient had both local and distance failure, one had local and nodal recurrence, one had distance failure and one had local failure only. The distance recurrence sites are lung, liver, bone and intra abdominal lymph nodes. The 3 years overall survival and progression free survival were both 87.8%. There were no severe late complications observed in the study. Conclusion Our finding demonstrates high disease free survival and overall survival rate in nasopharyngeal cancer treated in our center, however, longer follow up is needed.

Abstract Id: YUGP0789
Prednisolone Therapy As An Intervention In Terminal Cancer Patients, A Prospective Randomized Double Blind Cross Over Study
Presenter- Dr. Vishnu Harilal
Co-author - DR H.S KUMAR, DR S.BENIWAL,

PREDNISOLONE THERAPY AS AN INTERVENTION IN TERMINAL CANCER PATIENTS, A PROSPECTIVE RANDOMIZED DOUBLE BLIND CROSS OVER STUDY ABSTRACT OF THE STUDY
OBJECTIVES This study was designed to assess the efficacy of prednisolone therapy in relation to improving the quality of life in terminal cancer patients.

MATERIALS AND METHODS A randomized, prospective, double-blind, cross-over, placebo-controlled, clinical trial where patients were randomized to receive prednisolone 40mg or matching placebo for 14 consecutive days. Study medication was provided in blinded packages which contained packets of either placebo or prednisolone as specified by a computer-generated randomization scheme. After the 14-day, double-blind phase was completed, all patients were given prednisolone for 20 days. The end points of the study were pain, psychiatric status, appetite, nutritional status, daily activity, and performance and were evaluated using FACT-G , FAACT , FACIT F , BECKS depression questionnaire and VAS.

RESULTS On completion of double blind phase it was observed that There was significant improvement in overall quality of life of the study group compared to controls (F=3077.5) ;p

Abstract Id: YUGP0793
Prospective Study Of Comparison Of Clinical [ Bed Side ] Examination Versus Examination Under Anesthesia In Staging Of Carcinoma Cervix At Vims,Bellary
Presenter- Dr. SHIVA KUMAR
Co-author - Chandrashekar K ,

OBJECTIVE 1. To compare the bedside staging method and EUA staging methods for staging cervical cancer. 2. To identify factors that may limit bedside staging method for cervical cancer.

METHODOLOGY The patients suspected of cervical cancer and scheduled for EUA, biopsy and staging on the theatre list were subjected to bedside staging method on the ward on day 1. On day 2 same patient subjected for EUA staging method. Clinicians performing the staging as EUA were blinded from the results of the bedside staging method. Findings of bedside are compared with EUA.

STUDY PERIOD : 1st February 2016 to 31st October 2017

RESULTS The study will find the correlation for the speculum, bimanual and per rectal examination assessment processes respectively during bedside method as compared to the EUA.

The sensitivity and accuracy of the speculum examination during bedside staging will be found. Sensitivity and accuracy of bimanual examination will be found for bed side and EUA examination.

The bedside staging method to assign the accurate stage of the cervical cancer and its correlation with EUA will be done. CONCLUSION At end of study it will be recommend to abandoning theEU A staging method for bedside staging method or not.

Abstract Id: YUGP0797

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The Improvement Of Relative And Relative Conditional Survival In Head And Neck Squamous Cell Carcinoma: A Population-Based Analysis Using The Seer Program (1973â€“2014)
Presenter - Dr. Yijun Kim
Co-author - Jin Ho Kim ,

PURPOSE: to evaluate the changes of relative survival (RS) and relative conditional survival (RCS) in patients with head and neck squamous cell carcinoma (HNSCC) between two periods of 1973â€“1998 and 1999â€“2014. PATIENTS AND METHODS: Using the Surveillance, Epidemiology, and End Results (SEER) program data, a total of 87,923 patients of HNSCC were enrolled and dichotomized into group 1(1973â€“1998) and group 2(1999â€“2014) according to time period of diagnosis. The RS and 5-year RCS (RCSS) according to tumor extent, age, and subsites were also compared. Z test was performed to compare the RS and 95% confidential intervals using log-log transformation were calculated for the RS and RCS. RESULTS: The RC and RCSS between two time periods increased significantly. The 10-year RS improved from 38% to 52% (z=32.401, p65 years. In tongue and tonsil cancer, 10-year RS increased more than 20% (z=29.226, p90% of RCSS at 5 years after diagnosis in the group 2, while larynx revealed only 3% improvements of the RS (z=2.191, p=0.029). CONCLUSION: The RS and RCSS in HNSCC increased over time. The improvements of the RS and RCSS was dominant in the regional and distant diseases. However, the RCSS in regional and distant diseases did not reach plateaus until 10 years after diagnosis and several subsites including larynx showed minimal improvements of the RS and RCS, suggesting that further development of more effective treatments in advanced HNSCC is necessary.

Abstract Id: YUGP0801
Primitive Neuroectodermal Tumor (Pnet) Of Thyroid : A Rare Presentation
Presenter - Dr. Shrvan Shetty
Co-author - Dr.DhairyaSheel Savant, Dr. Akanksha Chichra,

Extraskeletal Ewing’s sarcoma (EES) is rare.EES commonly arises in the soft tissues of trunc or extremities,EES is rare in the head and neck region;most of those have been documented in nasal cavity, paranasal sinuses and neck. Head and neck PNETs have an intermediate prognosis. We report the case of a 12 year old boy who presented with primitive neuroectodermal tumor of the thyroid and was treated with multimodal treatment including surgery, chemotherapy and radiotherapy. The patient is alive and fit with a functional larynx.

Abstract Id: YUGP0807
The Initial Experience With 68Gallium-Dota-Exendin-4 Pet/Ct Scan For Localisation Of Insulinoma
Presenter - Dr. Pallavi U N
Co-author - Dr Ishita B Sen, Dr Vineet Pant, Dr Sugandha Dureja

Introduction: Insulinoma is the most common cause of endogenous hyperinsulinemic hypoglycaemia. The management of insulinoma is challenging and requires several investigations for identification and exact localization of the tumor. In this retrospective study, we present our initial experience with 68Gallium-DOTA-exendin-4 PET/CT scan in detection and localisation of insulinoma. Methods: 68Gallium-DOTA-exendin-4 PET/CT scan was performed in eight patients with endogenous hyperinsulinemic hypoglycaemia. The scan findings were compared with histopathological findings in the patients. Results: Out of 8 patients, 3 patients showed intense 68Gallium-DOTA-exendin-4 uptake with peak and mean SUVs in positive lesions to be 22 Â± 3 and 25 Â± 1 respectively. Three patients with positive 68Gallium-DOTA-exendin-4 PET/CT scan and two patients symptomatic but negative 68Gallium-DOTA-exendin-4 PET/CT scan underwent surgery. The histopathological examination confirmed the diagnosis of insulinoma in all the three patients with positive scan and in one patient with negative scan. The histology of other patient with negative 68Gallium-DOTA-exendin-4 PET/CT scan proved nesidioblastosis. The rest of the three patients did not undergo surgery. Hypoglycaemic episodes in three of them were subsequently diagnosed to be due to a prediabetic condition, antibodies to insulin and non-insulinoma pancreatogenous hypoglycaemia syndrome respectively. The sensitivity and specificity of 68Gallium-DOTA-exendin-4 PET/CT scan in localizing and detecting insulinoma was found to be 75% and 100% respectively. Conclusion: The initial experience with 68Gallium-DOTA-Exendin-4 PET/CT scan suggests that it is highly sensitive and specific for identification and exact localization of insulinoma, which can be guide for better surgical exploration.

Abstract Id: YUGP0809
Emotional Health Care Of Cancer Survivors- Challenges And Opportunities
Presenter - Prof. SRINIVASA MURTHY
Co-author - ,

Cancer becomes a life changing experiences for all people diagnosed with cancer and their families. In India, cancer care is focused on the â€œmedicalâ€™( surgery, chemotherapy and radiotherapy). Most of the care is cross-sectional and the availability of life long support and care is mostly missing from the treating centres. Emotional health care as an integral part of cancer care is in the initial stages of development. Research in India relating to mental health/ emotional health has focused on identifying the psychiatric syndromes and quality of life. Interventional studies to evaluate the impact and effectiveness of psychosocial interventions is limited. As the persons with a diagnosis of cancer reach the treatment facilities early in the illness, the treatments get better, there will be greater numbers of persons who are cancer survivors. Cancer survivors experience a number of psycho-social challenges. The most prominent is the â€œfear of recurrenceâ€™. Other needs are the need to reorganize their personal, family, professional and social lives. A growing recognition in this survivor status is for spiritual support. There is growing evidence of positive benefits of emotional health care on the quality of life, decrease in distress and better clinical outcomes. However, at present, the medical facilities are not geared to provide these needs in a longitudinal manner. The challenges are the lack of knowledge about survivorship in the Indian context (among differing social and economic groups); the limited numbers of mental health professionals, and the stigma attached to seeking emotional support. There is an opportunity to fill this â€œgapâ€œ by self-care measures. The proven measures to promote mental health of survivors like physical activity, listening to music, writing narratives, sharing of feelings, problem-solving, yoga, meditation, spiritual practices etc are eminently suitable for empowerment of survivors. The availability of mobile phones and internet makes reaching these skills practicable. There is an urgent need to implement â€œself-careâ€œ emotional mental health care programmes and evaluate their impact.

Abstract Id: YUGP0811
Treatment And Cosmetic Results In Indonesian Woman With T1-2N0 Breast Cancer Treated With Breast-Conserving Treatment
Presenter - Mr. Rafiq Sulistyono Nugroho
Co-author - RatnaWati Soediro, Nurjati Chairani Siregar, Zubairi Djoerban
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Background: To obtain the breast conserving treatment (BCT) outcomes compare to mastectomy for Indonesian women with T1-2N0 breast cancer and evaluate its cosmetic result. Methods: This study retrospectively reviewed T1-2N0 breast cancer patients who received treatment between January 2001 and December 2010 at Department of Radiotherapy Cipto Mangunkusumo Hospital and Jakarta Breast Center. The endpoints of this study were overall survival (OS), local recurrence (LR), contra-lateral breast cancer (CBC), distant metastasis (DM), disease-free survival (DFS) and cosmetic outcome according to harvard Score. Results: Among the 262 eligible patients, 200 (76.3%) patients underwent BCT while 62 (23.7%) patients underwent mastectomy. There were no differences between BCT and mastectomy groups in 5-Y OS (88.2% vs 86.7%, p = 0.743), LR (7.4% vs 2.7%, p = 0.85), CBC (3.4% vs 5.3%, p = 0.906), DM (17.7% vs 37.7%, p = 0.212), and DFS (78.5% vs 60.7%, p = 0.163). In multivariate analysis, grade 3 was associated with worse OS (HR 0.37; 95% CI 0.17 – 0.80) and DFS (HR 0.38; 95% CI 0.19 – 0.78). Premenopausal women were associated with decreased risk of DM (HR 0.37; 95% CI 0.17 – 0.80) and DFS (HR 0.38; 95% CI 0.19 – 0.78). Among a hundred and three patients who had performed cosmetic evaluation, 59 (57.3%) patients had excellent â€œ good, 9 (8.7%) patients had fair and 35 (34%) patients had poor cosmetic outcome. Conclusion: BCT and mastectomy showed similar outcomes in terms of OS, LR, CBC, DM, and DFS. Almost 60 percent of patients treated with BCT had favorable cosmetic result. Keywords: Breast-conserving treatment, mastectomy, cosmetic, result

Abstract Id: YUGP0818

The Spectrum Of Lymph Node Involvement After Extended Cholecystectomy And Its Correlation With Pt Stage In Carcinoma Gall Bladder Patients.

Presenter- Dr. B MADHU NARAYANA
Co-author – PROF Thakur .Deen Yadav, PROF VIKAS GUPTA, PROF RAJESH GUPTA

AIM: - To determine the spectrum of lymph node involvement after extended cholecystectomy and its correlation with pt Stage in carcinoma gall bladder patients. METHODS: - A total of 57 patients who were suspected/diagnosed to have Carcinoma gall bladder were studied prospectively. They had undergone extended cholecystectomy with systematic lymphadenectomy over a period of January 2014 to December 2015 in Dept. of General Surgery, PGIMER, Chandigarh. If Aortocaval lymph node frozen was reported as negative then extended cholecystectomy along with cystic, pericholedochal, peripancreatic, periportal, coeliac artery, Common Hepatic Artery, Left Hepatic Artery, Right Hepatic Artery, Hepato-duodenal lymph nodes were sent separately for evaluation. RESULTS: - Out of 57 patients, 8 were excluded (5 were reported as xanthogranulomatous cholestolithiasis 2 as chronic cholecystitis, 1 as IgG4 related disease). In remaining 49 patients, 6 were incidental carcinoma gall bladder. A total of 555 lymph nodes were examined in 49 patients with range of 0 to 26 and median of 11. 79 lymph nodes were positive in 19 patients (38.7%). Overall most common lymph nodes involved were peripancreatic (n=39/49; 18.4%), common hepatic artery (n=37/49; 14.3%), periporal (n=7/49; 14.3%), hepato-duodenal 5/49(10.2%), pericholedochal (n=4/49;8.2%), cystic (n=3/49;6.1%), coeliac (n=2/49;4.1%), LHA nodes (1/49;2%) and RHA lymph nodes (1/49;2%). pT1 stage (n=5/49; 10.2%) had periporal lymph nodes involved (n=1/5 20%). pT2 stage tumors (n=12/49;24.5%) had involved pericholedochal (n=3/12;25%), cystic (n=2/12;16.6%), peripancreatic (n=2/12;16.6%), Common HepaticArtery nodes (n=1/12;8.3%), periporal (n=1/12; 8.3%) hepato-duodenal nodes (n=1/12;8.3%) .pT3 stage tumors (n=32/49;65.3%) had involved peri-pancreatic (n=7/32;21.9%), Common Hepatic Artery (n=6/32;18.7%), periporal (n=5/32;15.6%), hepato-duodenal (n=4/32;12.5%) , coeliac (n = 2/32 6.25%), pericholedochal (n=1/32;3.1%), LHA nodes (n=1/32;3.1%), RHA nodes (n=1/32;3.1%), cystic lymph nodes (n=1/32;3.1%) with p>0.05. CONCLUSION: -Peripancreatic lymph node were the most common involved irrespective of â€œpT â™€ stage. Extended cholecystectomy with lymphadenectomy plays critical role for R0 resection irrespective of â€œpT â™€ stage.

Abstract Id: YUGP0834

Estimate The Impact Of Chemotherapy In The Patients With Osteosarcoma The Existence Of Chromosomal Instability For Prognosis And Variability Of Response.

Presenter- Dr. Iqboljon Shermatov
Co-author - D.Sh.Polatova, M.S.Geldiva, Kh.G. Abdikarimov

Most of the bone sarcomas characterized with extremely malignancy and high resistance to chemotherapy and radiotherapy. This tumor process could be a metastatic survival consisted of 18 and defense mechanisms of organism. Growing the tumor may bring to forming endogenic toxic substances, which cause mutagenic effect in lymphocyte of peripheral blood. In this way, registration level of chromosomal aberation of lymphocyte in peripheral blood of patients with osteosarcoma can help to estimate the effectiveness of treatment. The study was held with the aim of estimate the effect of chemotherapy in patients of osteosarcoma with the existence of chromosomal instability for prognosis and variability of response. Studying the index of survival was held by the method of Kaplan-Mayer (1958), comparing the gradation between the signs of osteosarcoma used the method of Student-Fisher (p2 0.05) and observed analysis of cytogenetic changes of lymphocytes in peripheral blood of patients with osteosarcoma till the clinical examination and treatment showed that cytogenetic characteristics of lymphocytes of peripheral blood could be one of the criteria to estimate the treatment and prognosis of this disease. Received results of analysis showed that general survival 3 and 5 yearly patients with osteosarcoma in chromosomal aberation higher discrimination (more then 5%) consisted of 82.4±0.9% and 5.9±0.5% and in lower rate of 5% 92.5±0.2% and 36.2±3.1%. In chromosomal aberration higher discrimination level (5%) and 5 yearly without metastatic survival consisted of 18 and 6%. In the level of chromosomal aberration lower 5% survival was 60 and 40%. Cumulative survival in lower rate chromosomal aberration consisted of 60 and 40%. Without recurrent 3 and 5 yearly survival consisted of 18 and 4% in higher rate chromosomal aberration, and in lower rate 60-36%. In such situation, the analysis showed that lack of the treatment effect in patients with chromosomal aberration higher than in healthy people with clinical effects. Consequently, identifying the level of chromosomal aberration of lymphocyte in peripheral blood of patients with osteosarcoma till the beginning of treatment, can give us the chance to predict the effect of treatment.

Abstract Id: YUGP0846

The Prevalence Of Chronic Kidney Disease Among Patients Diagnosed With Solid Malignancies At Teaching Hospital Anuradhapura And The Impact On Treatment Decisions

Presenter- Dr. Rasitha Mahalil Atappatu Wijekoon
Co-author - R M A Wijekoon, N A M Perera, H M S P K Herath

Aim: This study was conducted to assess the prevalence of chronic and sub clinical renal impairment in patients with non-haematological cancers of Teaching Hospital â€œ Anuradhapura and the impact of renal function on Oncological decisions. The Anuradhapura Teaching Hospital was selected as the North Central Province (NCP), where the hospital is located is affected by a chronic kidney disease of unproven aetiology. Materials & methods: Two hundred and two patients registered in the oncology unit B of Teaching Hospital Anuradhapura, between 1st April 2016 and 31st October 2016 were included in the study. Patient demographic data, cancer sub site, renal function, proposed first intervention and the treatment modifications based on renal impairment were recorded. Results: Serum creatinine level was available for 80% of patients with a trimmed mean and median of 94.5 mmol/l and 86.5 mmol/l respectively. Fifty one patients
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Below 20 Years Of Age Presenting At A Tertiary Cancer Hospital

(a) (31%) had elevated creatinine level above the lab reference level. In male patients, 41% had raised creatinine level compared to 21% in females. The mean calculated estimated Glomerular Filtration Rate (eGFR) was 54ml/min and over 65% of patients had eGFR of less than 60ml/min. Patients with Breast cancer had highest mean eGFR of 76 ml/min and lowest means were recorded for upper Gl, Genito-urinary and Head & Neck cancers with values of 37 ml/min, 38 ml/min and 43 ml/min. Out of all patients 21% had their treatment modified due to inadequate renal function and 51% of Head & Neck cancer patients and 33% of lung cancer patients received modified treatment. Conclusion: The study demonstrated that higher proportion of cancer patients of North Central Province are having clinically relevant renal impairment. Proportion of patients with low eGFR was much higher than the proportion with raised measured serum creatinine level. This renal impairment is severe enough to modify treatment decision of high proportion of patients, especially patients diagnosed with Head and Neck cancer. Key words: Renal impairment, North Central Province, Head and Neck cancer, Estimated Glomerular Filtration Rate, Serum creatinine level

Abstract Id: YUGP0850
Incidence Of Prostate Cancer At A Single Tertiary Care Center In North Karnataka
Presenter - Mr. Shridhar Ghagane
Co-author - Shridhar C. Ghagane, R. B. Nerli, M. B. Hiremath
CONTEXT: Prostate cancer (PC) remains one of the most common cancers affecting men today. Thus, understanding the prevalence, disease characteristics, and changing demographics of Indian PC patients has emerged as an important aspect of study. AIMS: We aimed to present the case series of PC patients from single tertiary care center in North Karnataka. SETTINGs AND DESIGN: The study designed over a period of 8 years from 2007 to 2015 was conducted in the Department of Urology, KLES Dr. Prabhakar Kore Hospital, Belagavi, Karnataka. MATERIALS AND METHODS: A total of 471 newly diagnosed patients with PC from 2007 to 2015 were included in the study. Sociodemographic, clinical characteristics, radiological and histopathological findings of all patients were collected and analyzed for the risk of PC. STATISTICAL ANALYSIS USED: The statistical analysis used in this study was IBM SPSS Statistics software Inc., version 20.0. RESULTS: A total of 471 patients were diagnosed with PC, the mean age at presentation was 70 years, and mean prostate-specific antigen (PSA) level was 37.71 ng/mL. Digital rectal examination (DRE) was abnormal in 87.5% of 471 cases. Significant correlation was observed between PSA level and DRE (P = 0.0005), correlation of PSA and Gleasonâ€™s score was P = 0.0006, and histopathological results showed high risk in patients (P = 0.0001). CONCLUSIONS: This is the first hospital-based study of PC incidence with clinical and histopathological features. PC remains an important public health problem with increasing incidence and significant burden on health-care resources in India.

Abstract Id: YUGP0854
A Retrospective Study Of 94 Cases Of Ovarian Malignancies Below 20 Years Of Age Presenting At A Tertiary Cancer Hospital In Kolkata From 1996 To 2015
Presenter - Dr. NIDHU MONDAL
Co-author - PROF BIMAN CHAKRABORTY, DR TAMMOY CHATTERJEE, DR RAHUL ROY CHOWDHURY

Aims and Objectives Retrospective Observational study of childhood and adolescent ovarian malignancies. Materials and Methods Data from software and bed head tickets of patients in the hospital between 01 January 1996 to 31 December 2015 were analysed. Results 94 cases of ovarian malignancies were analysed from bed head tickets. Fifty three percent cases already had major surgery before registration. Majority of the patients had dyspeptic symptoms and presented with a pelvi-abdominal mass with or without ascites. Almost 50% cases were histopathologically diagnosed as Dysgerminoma. Most of the patients were treated with adjuvant chemotherapy. Majority of patients were lost to follow-up. Discussion Childhood and adolescent ovarian malignancies are different biologically, pathologically and clinically from the adult counterpart. Psychological factor for the parents must be taken into consideration. Because of late diagnosis, the overall prognosis was poor. Conclusion Early diagnosis and vigilant follow up is needed to determine the long term prognosis and overall survival.

Abstract Id: YUGP0856
Dosimetric Comparison Between Impt And Photon-Based Imrt Or Vmat As A Boost In Carcinoma Of Cervix
Presenter - Dr. Manoj Sharma
Co-author - Dr Eugene Hug, Manindra Bhushan, Dennis Mah

Purpose: Brachytherapy is essential for local treatment in carcinoma cervix, but some patients are not suitable for it. Now a day, in these patients, we normally prefer boost by Intensity Modulated Radiotherapy (IMRT). We are evaluating dosimetric comparison of proton vs IMRT and Volumetric Modulated Arc Therapy (VMAT) as a boost to know whether protons can replace photons. Methods and Materials: Five patients were taken who received external beam radiotherapy to pelvis by IMRT. Three different plans were made for intensity Modulated Proton Therapy (IMPT), IMRT and VMAT. The prescription to Planning Target Volume (PTV) was 20 Gy in 4 fractions. Dose to 95% PTV (D95%), Conformity Index (CI) and Homogeneity Index (HI) was evaluated for PTV as well as Dmax, D2cc, Dmean were evaluated for OARs along with Integral Dose (ID) of normal tissue and OARs. Results: PTV coverage was optimal and homogeneous with modulated protons as well as photons. For IMPT, coverage D95% was 20.01 Â± 0.02 Gy (IMRT: 20.08 Â± 0.06 Gy and VMAT: 20.1 Â± 0.04 Gy). With regard to the organs at risk, Dmax of bladder for IMPT was 21.05 Â± 0.05 Gy (IMRT: 20.8 Â± 0.21 Gy and VMAT: 21.65 Â± 0.41 Gy) while for rectum, Dmax for IMPT was 21.04 Â± 0.03 Gy (IMRT: 20.81 Â± 0.12 Gy and VMAT: 21.66 Â± 0.38 Gy). Integral dose (ID) to normal tissue in IMPT was 14.17 Â± 2.65 Gy (IMRT: 25.29 Â± 6.35 Gy and VMAT: 25.24 Â± 6.24 Gy). Conclusions: Our results indicate that modulated protons when compared with photons, provides comparable conformal plans. However, IMPT reduces the integral dose to critical structures significantly, compared to IMRT and VMAT. Although IMPT is better alternative for such cases, further research is required to substantiate such findings.

Abstract Id: YUGP0860
Prospective Study To Compare Concurrent Chemo-Radiotherapy With Radiotherapy Alone In Management Of Oesophageal Carcinoma Pradeep Kn, A.K.Arya, Ashwini.L, K.C.Laxmaiah Sn Medical College,Agra
Presenter - Dr Pradeep Kumar K N
Co-author - Pradeep kumar k n, A. K. Arya, Ashwini L

PROSPECTIVE STUDY TO COMPARE CONCURRENT CHEMO-RADIOThERAPY WITH RADIOTHERAPY ALONE IN MANAGEMENT OF OESOPHAGEAL CARCINOMA PRADEEP KN, A.K.Arya, Ashwini.L, K.C.Laxmaiah SN MEDICAL COLLEGE,agra ABSTRACT Background Carcinoma esophagus mostly presents in advance stage. Surgery is considered to be prime modality of treatment, though radiation therapy is also an important therapeutic modality. Concurrent chemo radiotherapy has been accepted as the standard of care in patients who are deemed unfit for surgery. but the outcomes are controversial. Our goals were to compare the therapeutic effects of concurrent chemo radiotherapy and radiotherapy alone in locally advanced esophageal cancer using meta-analysis. Materials and methods The study carried out between December 2014 to July 2016. 31locally advanced esophagealcancer were evaluable. Following a written informed consent , patients with
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Previously untreated, documented as squamous cell carcinoma of esophagus were inducted into this study if they satisfied KPS>50, Hb>10, normal liver and kidney function. Endoscopic and radiological evaluation was done. Patients were randomized into two groups. Group B - control received only radiotherapy. Group B received concurrent chemo-radiotherapy. Cisplatin 35 mg/m²(max–50 mg) given weekly. The treatment outcome was assessed in terms of response, dysphagia free interval and toxicities. Result: Out of 31 pt, 19 were male. Male to female ratio was 3:2. The median age at diagnosis was 52 yr. and median follow up was 6.5 months. Majority patients (77.4%) got complete response at the end of treatment. 18 pts. were enrolled in Arm A and 13 in Arm B. 2 local recurrence and 3 distant metastasis were reported in Arm A whereas it was zero in Arm B. Mean dysphagia free survival in Arm A and B (DYFS) were 2.5 and 6.5 months respectively. DFS were 1 and 7 months whereas OS 9 and 15 months in Arm A&B respectively. Acute toxicities were more in Arm A&B. 24 patients alive, 5 patients died, 2 patients were lost. Follow up Conclusion Concurrent chemo radiotherapy significantly improve overall survival, Dysphagia free survival, reduced the risk of persistent and recurrence with increase toxicity.

Abstract Id: YUGP0862

Prognostic Factors And Survival Of Carcinoma Of Breast In Women Aged 35 Years Or Less â€“ A Tertiary Health Center Study

Presenter - Dr. Ankithbhai Shah
Co-author - Dr. B. B. Pandey, Dr Preeti Jain.

Abstract Title â€“ Prognostic factors and survival of carcinoma of breast in women aged 35 years or less â€“ A tertiary health center study Authors â€“ Dr. Ankithbhai A Shah1, Prof. Dr. B. B. Pandey2, Dr. Preeti Jain3 Author information â€“ 1 - DBN trainee, Mahavir cancer sansthan, Phulwarisharif, Patna, Bihar. 2 â€“ Professor and Head of department, Department of Surgical Oncology, Mahavir cancer sansthan, Phulwarisharif, Patna, Bihar. 3 â€“ Consultant, Department of Surgical Oncology, Mahavir cancer sansthan, Phulwarisharif, Patna, Bihar. Author information: First Author Name â€“ Dr Ankithbhai Atulbhai Shah Qualification â€“ DNb Trainee in Surgical Oncology Institution â€“ Mahavir Cancer Sansthan, Phulwarisharif, Patna, Bihar. Address â€“ B/306, Vrajbhumai flates, near Lotus school, behind falgun tenement, Jodhpur village road, satellite, Ahmedabad â€“ 380015. E mail id â€“ ankldr86@gmail.com Abstract Body

Abstract Title â€“ Prognostic factors and survival of carcinoma of breast in women aged 35 years or less â€“ A tertiary health center study Introduction Breast cancer is less common in younger women. Prognosis and survival of these patients, when compared with older patients, is still evolving. Material and Methods Women with age up to 35 years and diagnosed breast cancer primarily in our institute by core needle biopsy from January 2014 to June 2016 were included in the study (N=100). Disease Free Survival (DFS) and Overall Survival (OS) were the outcomes of interest in the prognosis analyses. Survival rates were estimated using the Kaplan-Meier product limit method. Differences between survival curves were tested using the log rank test. Statistical analyses were performed using statistical software. Results Majority of patients presented late with lump in the breast being the most common presentation (100%) and with higher tumour stage (70% in stage III). 37% of patients were presented with high grade. Axillary lymph node metastases were seen in 63% of patients. Lymphovascular invasion were seen in 34% and extra nodal extension were seen in 31%. Lower hormonal positivity (38%), higher HER2/neu positivity (27%) and higher triple negative (39%) patients were observed. Sixteen month DFS and OS were 70% and 81% respectively. By using multivariate Cox-regression analysis, the independent predictors of lower disease free survival were extra nodal extension, HER2/neu positive subset and Defaulter for adjuvant treatment whereas the independent predictor of lower overall survival was extra nodal extension only. Conclusion Breast carcinoma in the age group 35 years or below is a distinct identity and having different behaviour which needs special attention and approach for proper management and outcome.

Abstract Id: YUGP0866

Deep Inspiration Breath Hold (DIBH) Treatment Benefits For Left-Sided Breast Cancer

Presenter - Mr. MOHD KHAIRUL MOHD ZAMBR
Co-author -

Mohd Khairel Bin Mohd Zambri1 1 Bachelor of Medical Radiation Sciences (Radiation Therapy), Department of Radiation Therapy and Nuclear Medicine, Sunway Medical Centre, Selangor, Malaysia. Email address: mkmzn1@hotmail.com. Abstract: This presentation is aimed to create awareness among radiation therapists and radiologists on the benefits of using Deep Inspiration Breath Hold (DIBH) technique for left-sided breast cancer patients. DIBH is a technique that is used for left-sided breast cancer patients undergoing radiotherapy. As the heart located behind and slightly left of the breastbone, it is possible it will receive some dose and potentially cause late side effects in the future. The volume of the heart that will receive the radiation dose depends on factors such as the shape of the lungs, positioning of the heart and the location of the primary tumor. This presentation also includes the cause, risk factors, and prevalence of breast cancer in Malaysia and evidence of the relationship between breast cancer treatment with lung and heart problems. Highlighted will be the importance of the DIBH technique for left-sided breast patients in reducing the complications to the heart and lung and will also explore the issues involved while using this technique and how to overcome them. It is proven that the benefits of DIBH treatment of early staged, left-sided breast cancer patients help in reducing and/or avoiding lung and heart issues in the long term side effects from a few studies. The issues in treating patients using DIBH include the inability to perform breath-hold for requested amount of time (20-30 seconds), patient compliance and treatment verification for DIBH techniques. However, this presentation will explore the advantages and disadvantages of reducing the radiation dose for the heart and lung. Lastly, there will be a slight introduction to the future developments of the DIBH treatment conjoined with surface guided radiation therapy.

Abstract Id: YUGP0880

Spectral Analysis To Evaluate The Effect Of Treatment On Autonomic Nervous System In Pulmonary Metastasis

Presenter - Ms. Reema Shukla
Co-author - Dr Yogender Aggarwal,

Power spectral density (PSD) analysis was obtained from tachogram (Kubiost 2.0, Finland) of five minutes lead II Electrocardiogram (ECG) recording using Acknowledge 4.0 (Biopac Systems Inc., USA). 24 pulmonary metastasis and 30 control volunteers participated in this study. Power contents of low frequency (LF) (0.04 to 0.15 Hz) and high frequency (HF) (0.15 to 0.4 Hz) were the frequency bands obtained from PSD and LF/HF ratio was calculated. The correlation of frequency bands with treatment given or without treatment and autonomic nervous system (ANS) was established to understand ANS dysfunction in pulmonary metastases. It was found that with the treatment (chemotherapy or radiotherapy), LF and LF/HF decreased and HF increased in eastern cooperative oncology group (ECOG) 4 staling parasympathetic dominance. Artificial neural network represents a classification accuracy of 68.66%. Thus, there exists sympathetic dominance with disease but after treatment parasympathetic dominance occurs.

Abstract Id: YUGP0882

Evaluation Of In Vitro Antioxidant And Anticancer Activity Of Simarouba Glaucu Leaf Extracts On T-24 Bladder Cancer Cell Line

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Presenter - *Ms. Sridevi Puranik
Co-author - Sridevi Puranik, Murigendra B. Hiremath, Shridhar C. Ghagane

The use of medicinal plants has been practiced to treat cancer ailments across the world. We aim to evaluate in vitro antioxidant and in vitro anticancer activities of Simarouba glaucua leaf extracts on T-24 Bladder cancer cell line. Herbal extraction was carried out by Soxhlet extraction method using chloroform, ethylacetate, methanol, ethanol, aqueous and hydroalcohol. Phytochemical analysis was done using biochemical tests. Total phenolic content was estimated by FCR method. Antioxidant potential of leaf extracts was analyzed by FRAP assay, PM assay and DPPH assay. In vitro anticancer activity on T-24 bladder cancer cell line was assessed by MTT assay. Phytochemical analysis revealed the presence of rich secondary metabolite present in all the solvent extracts. Hydroalcoholic extract showed highest presence of phenolic content (92.38±0.29 mg/g) GAE. Ethanol and methanol extract showed highest antioxidant capacity in DPPH, FRAP and PM assay as compared to the other extracts based on the test performed. The results confirmed that ethanol extract significantly (p<0.03) reduces the cell viability in T-24 bladder cancer cell line.

Abstract Id: YUGP0886

Clinico Pathological Profile Of Male Breast Cancer Treated In A Regional Cancer Centre Of Eastern India
Presenter - Dr. PRAFULLA KUMAR DAS
Co-author - Dr Niharika Panda, Dr Siba Sankar Mahapatra, Dr Sagarika Samantaray

ABSTRACT Male Breast Cancer is known to be an uncommon malignancy. Due to less number of cases available the research in the field is very few. The present study is aimed at finding the incidence, the age profile and the histological types and receptor status of male breast cancer cases treated in a Regional Cancer Centre in eastern India. Twenty seven cases of male breast cancer patients were registered in a regional cancer centre. The age wise incidence was observed. The clinicopathological profile like the histopathological pattern, the Tumour Node Metastasis (TNM) staging and the receptor status were analysed from case records. The median age of presentation in our study was found to be 61years. Out of the 27 cases 14 (51.85%) were found to be in advanced stage i.e stage III followed by 9(33.33%) cases in stage II. Apart from the common invasive duct carcinoma few uncommon variants like papillary, metaplastic, mucinous and invasive lobular were also found. In twelve numbers of cases (44.44%) the receptor status was ER +ve, PR +ve and HER-2 neu +ve followed by ER +ve, PR +ve and HER-2 neu +ve. Though maximum number of cases (45%) were found at age of 61-70 still a good number of cases (26%) are also registered at age of 51-60 and followed by 22% in 41-50 indicating that occurrence of male breast cancer is shifting towards younger age groups. Public awareness, early screening and detection shall be a must to have a better treatment response and quality of life. Keywords-male breast cancer, clinico pathological profile.

Abstract Id: YUGP0888

Molecular Biomarker Microrna-296 May Prognosticate And Help Direct Future Therapies For Squamous Cell Carcinoma Oesophagus
Presenter - Dr. Vinay Gaikwad
Co-author - Anuj Jain, Robin Thambudorai, Nalini Carlton

Introduction Squamous cell carcinoma (SCC) oesophagus is one of the most common and fatal cancers in India. The prognosis of affected patients remains unsatisfactory despite the advances in therapeutic options such as surgery, chemotherapy and radiation therapy. Consequently, there is a great need for molecular biomarkers to allow a tailored multimodal approach with increased efficacy. MicroRNAs are involved in biological and pathological processes. More specifically, microRNA-296 expression has been demonstrated in SCC oesophagus tissue samples and may be linked to the prognosis based on the level of expression. Materials and Methods Paraffin-embedded biopsy blocks of patients diagnosed with SCC oesophagus from 1st November 2008 to 31st October 2011 were procured from the department of pathology, Christian Medical College and Hospital, Ludhiana. Following appropriate sample processing, the miScript SYBR Green PCR kit (Qiagen) was used for the first strand synthesis with PCR primers. This was followed by microRNA expression profiling using a real-time PCR machine (Rotor-Gene Q, Qiagen). Two variants of microRNA-296 expression were calculated: miR296-3p and miR296-5p.

There were a total of 30 patients included in the study, out of which 29 were cases and one was control. Treatment modalities included surgery, chemoradiation, chemotherapy, and palliative care. The mean follow up period was 8.3 months. The majority of patients died within one year of diagnosis with a mean survival of 9.3 months. The patients with high expression of the miR296-5p marker experienced longer survival. In Stage IV disease, miR296-5p expression was low. On applying log rank test, the p value was 0.03, which was statistically significant. The results derived from the Kaplan-Meier survival curve of miR296-3p were not statistically significant.

Conclusion MicroRNA-296 may be a useful biomarker to prognosticate patients with SCC oesophagus. It can be postulated that by its downregulation, microRNA-296 shows promise as a potential target for intervention in this malignancy.

Abstract Id: YUGP0889

Radio-Guided And Endoscopic Assisted Organ Preservation Surgery For A Cirrhotic Patient With Multiple Duodenal Neuroendocrine Tumors
Presenter - Dr. Vinay Gaikwad
Co-author - Jyoti Bhat, Noaline Sinha

Introduction Major abdominal surgery in patients with cirrhosis carries a significant risk of hepatic decompensation. In relatively indolent conditions such as low-grade neuroendocrine tumors, organ preservation is often sufficient to afford cure. Intraoperative assistance using nuclear medicine and endoscopy can assure complete tumour removal while avoiding major debilitating surgery. We describe a case scenario where these techniques have been utilized effectively. Materials and Methods A 56-year-old lady with Child A cirrhosis presented with symptoms of acidity and flushing. An upper endoscopy reported multiple lesions from D1 till the distal D2 (around 15 lesions), which were confirmed on histopathology to be grade 1 neuroendocrine tumors. A 68Ga-PET did not reveal extrapudenal disease. She had a history of decompenensation and the risk of a Whipple procedure was unacceptably high. Results We performed radio-guided surgery using a hand held gamma probe, which detected an additional pancreatic head deposit. Intraoperative endoscopy was used to mark the proximal and distal extend of the duodenal lesions. A duodenotomy was then performed and each lesion was excised and repaired. Regional lymphadenectomy was also performed. The patient recovered smoothly and is disease-free for 21 months. Conclusion Intraoperative techniques such as radio-guided and endoscopic localization can assist in organ preservation, while ensuring complete tumour removal in selected patients with suitable results.

Abstract Id: YUGP0892

Safety And Antitumor Activity Of Arsenic Trioxide (Ato) Plus Infusional 5-Fu, Leucovorin And Irinotecan (Folfiri) As Second-Line Treatment For Refractory Metastatic Colorectal Cancer: Preliminary Results From A Pilot Study
Presenter - Dr. Tamojit Chaudhuri
Co-author - K G Lakshmaniah, K Govind Babu, Lokanatha Dasappa

Introduction Arsenic trioxide (Arsenic trioxide, ATO) and infusional 5-fluorouracil (infusional 5-FU), leucovorin, and irinotecan (FOLFIRI) have demonstrated clinical activity in patients with advanced colorectal cancer. The safety and antitumor activity of these agents in combination is currently unknown.
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Background: After failing oxaliplatin-based first-line chemotherapy (CT), about 4-21% of patients with metastatic colorectal cancer (mCRC) respond to irinotecan-based second-line treatment. Prolonged exposure of colon cancer cells to 5-FU induces resistance, due to increased synthesis of thymidylate synthase (TS). Earlier studies have demonstrated that ATO can significantly re-sensitize resistant colon cancer cells to 5-FU by down regulating TS. Moreover, ATO can also act as a vascular disrupting agent and has synergistic effect with irinotecan on tumor growth delay. We hypothesized that a combination of ATO with FOLFIRI regimen in mCRC patients refractory to first-line FOLFÖX, could further improve the outcome of second-line CT. Methods: The inclusion criteria were: age 718 years; pathologically proven mCRC; ECOG PS 2; refractory to first-line FOLFÖX; not affording for biologic agents due to economic constraint; adequate organ functions and measurable disease according to RECIST 1.1. Major exclusion criteria were: ?2 lines of previous CT for metastatic disease; congestive cardiac failure and evidence of brain metastases. Patients were administered ATO 0.15 mg/kg/day on days 1 to 2, along with FOLFIRI regimen at standard doses every 2 weeks, until disease progression, unacceptable toxicity or patients' refusal. Responses to CT were reported according to RECIST 1.1. Adverse events were classified based on CTCAE v 4.0. Results: Between October 2016 and May 2017, 13 patients with refractory mCRC were treated with this investigational combination. The median age was 47 years (range, 32-65); 10 males and 3 females; ECOG PS 0-1/2, 12/1; site of primary tumor rectum/ colon, 8/5. Median baseline serum CEA was 78 ng/ml (range, 18-836). The most common site of metastases was liver (n=7) followed by peritoneum (n=5), lungs (n=3) and non-regional lymph-nodes (n=3); number of involved metastatic sites 1-273, 5/6. After 5 cycles of CT, overall response rate and disease control rate was 23% and 84.6% respectively (CR=0, PR=3 pts, SD=8 pts); approximately 69% of patients experienced a 150% decline in serum CEA level. At a median follow-up of 5.5 months (range, 4-8), 7 patients had disease progression and kept on best supportive care; 6 patients were still on study drugs; and all 13 patients were alive. Median progression-free survival was 4.5 months (95%CI 3.8-5.2), from the initiation of ATO plus FOLFIRI. The toxicities were as follows: Grade 1/2 toxicity: fatigue (4 pts.), constipation (1), nausea and vomiting (1). Grade 3 toxicity: fatigue (3), neutropenia (2), diarrhea (2), QTc prolongation (1). No patient experienced grade 4 toxicities. Conclusions: The addition of ATO 0.15 mg/kg/day on days 1 to 2, to standard FOLFIRI regimen as second-line CT in patients with refractory mCRC offers an encouraging anti-tumor effect at the cost of manageable toxicity. Keywords: Refractory metastatic colorectal cancer, thymidylate synthase, ATO, FOLFIRI regimen

Abstract Id: YUGP09094
Parameter Dosimetric Analysis Of Breast Irradiation Between Conformal Techniques, Field-In-Field, And Simultaneous Integrated Boost
Presenter: Dr. Suherman Hadisaputro
Co-author - Soehartati Gondhowirjo,

Breast cancer is second most common cancer in the world in 2008. In Indonesia, breast cancer is the most common cancer. Radiotherapy has an important role in breast cancer therapy but gives significant toxicity mainly heart, lung and can lead secondary contralateral breast cancer. Many techniques are performed to reduce the toxicity. The techniques include 3D conformal technique, field-in-field, and simultaneous integrated boost. These techniques already available in Cipto Mangunkusumo Hospital but the dosimetric comparison among these techniques is not available yet. This study is an retrospective study aimed to compare the dosimetric parameters of conformal technique, field-in-field, and simultaneous integrated boost. The study was performed in RSUPN Cipto Mangunkusumo, Jakarta in three months (2010, November until 2011, January). Target population was early stage breast cancer patients (stage I-II) who already had CT planning. Total sample was 10 patients. We compare the dosimetric parameters of patient irradiation therapy using these three techniques. No difference in terms of dose coverage of PTV V95% tumor on the left breast among the three techniques (969.73 cc vs 944.84 vs 914.24 cc, p = 0.0953). There is a statistically significant difference in terms of Conformity Index (1.001 vs 1.006 vs 1.010, p

Abstract Id: YUGP09096
Management Of Thyroid Nodules With Atypical Cytology On Fine-Needle Aspiration With Ultrasonogram
Presenter - Ms. Aljit Kushwaha
Co-author - ajit kumar kushwaha, GSN raju, subhransu jena

ABSTRACT : Objective: Atypia of undetermined significance/follicular lesion of undetermined significance (AUS/FLUS) are indeterminate lesions with malignancy incidence of 5-15%. We evaluate the role of thyroid ultrasound in predicting malignancy in Bethesda type III nodules, and thus suggest management guidelines in these nodules. Method: Patient with Bethesda type III nodules were subjected to high resolution ultrasonography of neck. The features analyzed while performing US examination are size, site, echogenicity (solid, cystic), margins (circumscribed, micro lobular, irregular), calcification (micro, macro or egg shell) and shape of the lesion. On the basis of ultrasound these nodules were categorized into probably benign or suspicious of malignancy. All these patient were subjected to surgery and final histopathological report were compared with ultrasonographic features. Results: The positive predictive value of ultrasonogram in predicting malignancy in Bethesda type-III nodules is 84.2%, while specificity of ultrasonogram is 90.9% and sensitivity in predicting malignancy is 80%. Conclusion : When the USG features are suggestive of benign lesion then a repeat USG guided FNAC may be considered and when the USG features are suggestive of malignant lesion then a repeat FNA is unnecessary and a definitive surgery should be considered.

Abstract Id: YUGP09010
A Bioequivalence Study Of Proposed Bevacizumab Biosimilar Myl-14020 (A) Vs Eu-Avastin (B) And Us-Avastin (C)
Presenter - Ms. Lisa Medlen
Co-author - Matthew Hummel, Tjerk Bosje, Andrew Shaw

Background: MyL-14020 is a proposed bevacizumab biosimilar. The similarity of MYL-14020 to Avastin has been demonstrated in physicochemical analyses and nonclinical studies. Methods: This single-center, randomized, double-blind, 3-arm, parallel-group study was conducted in healthy adult male volunteers. The primary objective of this study was to establish pharmacokinetic (PK) similarity of MYL-14020 (A) to EU-Avastin (B) and US-Avastin (C), and B to C. Subjects were randomized to receive either A, B, or C 1 mg/kg over 90 minutes as an intravenous infusion. Dose was selected based on the lower dose in the linear range of PK and acceptable safety in healthy volunteers. Bioequivalence was to be concluded if the 90% CIs of the ratios (A/B, A/C, and B/C) of least squares means of the natural log-transformed AUCo-t, Cmax, tmax, kel, and t½ were assessed as secondary PK parameters. Results: A total of 111 subjects (37/treatment) were enrolled and 110 (37 [A], 36 [B], 37[C]) were included in the analysis. Bioequivalence was demonstrated between A and B, A and C, and between B and C. Least squares mean ratios of AUCo-t were close to 1, and 90% CIs were within 80% to 125% for all comparisons (A/B, 89.23%-98.96%; B/C, 98.20%-108.93%; A/C, 92.32%-102.33%). The secondary PK parameters were also comparable, with the 90% CIs for ratios of AUCo-t and Cmax within 80% to 125%. A total of 313 treatment-emergent adverse events (TEAEs) were reported, 116 by 33 (89%) subjects who received A, 99 by 29 (78%) subjects who received B, and 98 by 28 (76%) subjects who received C. Most TEAEs were consistent with the clinical data for bevacizumab
Abstract Id: YUGP0918

Induction Chemotherapy In Locally Advanced T4B And Technically Unresectable T4A Oral Cavity Squamous Cell Cancers: Does It Improve Treatment Outcomes?

Presenter- * Dr. Tamojit Chaudhuri
Co-author- K C Lakshmaiah, K Govind Babu, Lokanatha Dasappa

Background: Surgical excision is the mainstay of treatment for oral cavity squamous cell cancers (OCCSCs). The median survival of locally advanced unresectable OCCSCs (T4b and technically unresectable T4a) with various non-surgical treatment modalities is only 26±12 months. We hypothesized that induction chemotherapy (IC) in this subgroup of patients could improve the overall treatment outcome by reducing the tumor bulk and allowing definitive surgery.

Methods: Patients diagnosed with locally advanced unresectable OCCSCs (T4b and technically unresectable T4a) from January 2013 and May 2017 at our center, who received 2-3 cycles of IC and then reassessed for resectability, were reviewed retrospectively. After IC, patients were reassessed clinicoradiologically and planned for either definitive surgery with adjuvant CTRT or non-surgical treatment including definitive CTRT, palliative RT or best supportive care (BSC). The inclusion criteria were: age ≥18 years, pathologically proven OCCSC, ECOG PS ≤2, and adequate organ functions. Major exclusion criteria were: previous therapy for OCCSC, congestive cardiac failure and evidence of metastatic disease. Patients received either TP (paclitaxel 175 mg/m2 on day 1, and cisplatin 75 mg/m2 on day 1) or TPF (paclitaxel 175 mg/m2 dacetaxel 75 mg/m2 on day 1, cisplatin 75 mg/m2 on day 1, and 5FU 750 mg/m2 on days 1 to 5) as IC. Responses to IC were as follows: partial response in 31 (15%) patients, stable disease in 35 (17%) patients, complete response in 180 (70%) patients, and disease progression in 26 (13%) patients. All grade 3-4 toxicities were higher with TPF than TP treatment.

Results: Total 206 patients received either TP (n=180) or TPF (n=26) as IC. The median age was 44 years (range, 35-62); 78.2% were males; ECOG PS 0?1/2, 100%/0%; site of primary tumor buccal mucosa/gingivo-buccal complex/oral tongue, 73.8%/21.4%/4.8%; primary tumor grade I/II/III, 53.4%/38.8%/7.8%. Responses to IC were as follows: partial response in 31 (15%) patients, complete response in 180 (70%) patients, and disease progression in 26 (13%) patients. All grade 3-4 toxicities were higher with TPF than TP regimen: neutropenia (30.8% vs. 12.2%), febrile neutropenia (19.2% vs. 4.4%), mucositis (15.4% vs. 6.1%) and diarrhea (11.5% vs. 2.8%). Post-IC, resectability was achieved in 35 (17%) patients (7 in TPF arm and 28 in TP arm); but 9 of them did not undergo surgery due to logistic reasons. The median survival of patients who underwent definitive surgery followed by adjuvant CTRT (n=26, 12.6%) was 19.4 months (95% CI: 16.4-22.3) and for those treated with non-surgical local therapy (n=180) was 7.6 months (95% CI: 6.2-8.8) (log-rank p = 0.000). Conclusions: This study suggests that IC is effective in converting locally advanced unresectable OCCSCs to operable disease in a significant proportion of patients and has the potential to improve survival outcomes in that patient population, in comparison to non-surgical treatment. Key-words: Induction chemotherapy, oral cavity squamous cell cancers, resectability

Abstract Id: YUGP0921

No serious or unexpected TEAEs were reported. The TEAEs were grade 1 or 2 in severity. Percentage of subjects positive for antidrug antibodies at each time point (predose and days 15, 43, 71, and 99) was comparable across the 3 treatments. Conclusions: These results confirm bioequivalence of MYL-1402O vs EU-Avastin and US-Avastin. All treatments were well tolerated and no significant safety issues emerged. Clinical trial information: NCT02469987

Abstract Id: YUGP0924

Use Of Thought Diary, Imagery Technique And Thought Distraction To Reduce The Anxiety And Negative Automatic Thought In A Cancer Patient With Multiple Organ Problems.

Presenter- * Mr. SHAMEEM VARIKKODAN
Co-author- Dr. S. Ganapathy Ramanan, ,

Mr. P.S 47 year old male hailing from a middle class family of Thiruvullur district of Tamil Nadu, was apparently normal until 04th October, 2014 and was admitted to Kumaran Hospital, Chennai on 04th October, 2014 with chief complaints of breathlessness and general weakness. On 06th October, 2014 morning patient developed respiratory problems and shifted to ICU for further care and later a Tracheotomy was done to ease the breathing and to safe guard life of the patient. Later during the ICU stay, the ICU in-charge doctors and nurses found some changes in the behavior of the patient and the patient referred to Psychiatrist and Psycho-oncologist, psychiatrist diagnosed the problem as acute confusion stage with low Potassium and Sodium level. After two days of medical management psycho-oncologist met the patient and the patient reported high levels of anxiety and negative automatic thought associated with uncertainty in diagnosis, returning to normal speech and life, death anxiety, about family’s future. During this time level of anxiety on HADS was 19. At this stage psycho-oncologist started thought distraction and imagery in the beginning and a week later thought diary also started to deal with anxiety associated with uncertainty about the diagnosis of the disease and negative automatic thought. After 3 weeks of continues and vigorous training the patient reported that the intensity and rate of negative automatic thought was decreased significantly and the score (TOTAL SCORE = 12) in HADS showed that there is a significant reduction in the level of anxiety.

Abstract Id: YUGP0928

Tetanus From A Synchronous Sarcoma Occurring With A Synchronous Malignancy- Extragonadal Germ Cell Tumor: A Case Report

Presenter- * Dr. Christian Cesplana
Co-author - Graciex Fernando, ,

Abstract Id: YUGP09020

Tetanus From A Synchronous Sarcoma Occurring With A Synchronous Malignancy- Extragonadal Germ Cell Tumor: A Case Report

Presenter- * Dr. Christian Cesplana
Co-author - Graciex Fernando, ,

BACKGROUND: Tetanus in a cancer patient is uncommon. Primary Extragonadal teratoma and synovial sarcoma are uncommon malignancies and both occurring simultaneously is extremely rare. We report a case of tetanus in a patient with a synchronous double primary malignancy. CASE PRESENTATION: We report a 21-year old Filipino man presenting with trismus, opisthotonus, difficulty in breathing and seizures. On physical examination, a fungating mass on the 1st distal phalanx of his left foot and an enlarged left thigh mass was noted. Due to persistent desaturation, he was intubated, placed on mechanical ventilatory support and subsequently underwent tracheostomy. He was given tetanus immunoglobulin, tetanus toxoid, penicillin G, metronidazole and diazepam. He underwent ray amputation of left big toe with wide excision of the tumor and biopsy of the thigh mass which revealed synovial sarcoma and immature teratoma, respectively. CT Imaging of the chest, abdomen and bone scan was unremarkable. MRI of the left thigh showed a large thigh mass measuring 9.4x8.3x 5.5cm with aggressive features, unremarkable regional lymph nodes and osseous structures. Two weeks post biopsy, the thigh mass progressively enlarged, became necrotic associated with a foul smelling discharge and moderate to severe pain. He underwent wide excision of the thigh mass. Histopathology revealed an extragonadal immature teratoma with lymphovascular space invasion supported by immunohistochemistry. After nutritional up-building, the patient underwent and completed 4 cycles of chemotherapy with Etoposide-Cisplatin regimen. There was no recurrence of mass lesions. CONCLUSION: Tetanus in the setting of a malignancy is treatable with prompt medical, surgical and supportive management. In the setting of a known primary malignancy, a thorough and comprehensive history, physical examination and metastatic work-up should always be performed for the diagnosis of a synchronous malignancy. In the setting of a non-metastatic disease, treatment should be individualized for both malignancies with the aim of cure.
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Low Grade, Multiple, Ta Non-Muscle Invasive Bladder Tumors: Tumor Recurrence And Worsening Progression
Presenter- 'Dr. Rajendra Nerli
Co-author - Rajendra Nerli, Shridhar C. Ghagane, Shankar K

Introduction: Nearly half of newly diagnosed cases of bladder cancer are low grade, noninvasive and papillary tumors. The standard treatment for non-muscle invasive bladder cancer (NMIBC) has been transurethral resection of the bladder tumor (TUR-BT) with or without adjuvant intravesical instillation (IVI) of chemotherapy or Bacillus Calmette-Guerin (BCG) therapy. NMIBC is known to be associated with high rates of recurrence and risk of progression. In this study we have retrospectively analyzed the clinical outcome of initially diagnosed multiple low grade Ta tumors, with a special focus on tumor recurrence and worsening progression (WP) pattern.

Materials & Methods: We retrospectively reviewed 42 patients with primary, multiple, low grade Ta bladder cancer. We defined WP as confirmed high grade Ta, all T1 or Tis/concomitant CIS of bladder recurrence, upper urinary tract recurrence (UTR), or progression to equal or more than T2. The associations between clinico-pathological factors and tumor recurrence as well as WP pattern were analyzed. Results: Tumor recurrence and WP occurred in 23 (54.76%) and 8 (19.04%) patients during follow-up (median follow-up: 57.38 months), respectively. WP to high grade/stage was seen in 8 patients. Multivariate analysis demonstrated that use of tobacco (p = 0.0001) and absence of IVI (p < 0.0001) were significant risk factors for tumor recurrence. The 5-year recurrence free survival rate for non-tobacco users (74.0%) was significantly higher than that for tobacco users (42.5%, p = 0.0001), and also higher for patients receiving intravesical instillation (84.2% vs. 30.0% without IVI, p = 0.0001) Conclusions: Recurrence is common, in patients with low grade, Ta bladder cancer, especially in the setting of multiplicity. Recurrences occurred in 54.76% of patients and WP occurred in 19.04% of patients. Use of tobacco and non-use of IVI was strongly associated with high recurrence rate.

Abstract Id: YUGP0934
The Use Of Human Epididymis Protein 4 And Risk Of Ovarian Malignancy Algorithm For Prediction Of Ovarian Carcinoma In Women With Ovarian Tumors
Presenter- 'Dr. Kanwarneet Singh
Co-author - Prof G.Suryanarayana Raju,

Objective: The purpose of this study was to evaluate the diagnostic performance of human epidymis protein 4 (HE4), CA125 and the Risk of Ovarian Malignancy Algorithm (ROMA) for distinguishing between benign and malignant ovarian masses in women presenting with ovarian tumors. Material and Methods: This was a prospective study done at Nizamâ€™s institute of Medical sciences from September 2015 to March 2017; 92 patients who had an ovarian mass on imaging and were scheduled to undergo surgery were included in the study. Serum CA125 and HE4 were measured on preoperative samples. ROMA was calculated for each sample. Results: A total of 92 women with an ovarian mass were evaluated, of which 30 had ovarian cancer, 5 had borderline tumors and 57 had benign tumors. Compared to CA125, HE4 had improved specificity (98.4% vs 63.1%) but similar sensitivity for differentiating between benign ovarian mass and ovarian carcinoma. ROMA had similar sensitivity (91.4% vs 85.57%) as CA125, but showed improved specificity (82.4% vs 63.1%). ROMA accurately predicted 82.4% of benign cases as low risk, and 90% of all ovarian cancers as high risk. Median serum CA125 and HE4 levels were higher in patients with ovarian carcinoma compared to subjects with benign disease. HE4 was within the reference range in all 6 patients of endometriosis while CA125 was elevated in 5 of these patients. CA125 was raised in 37% of benign cases while HE4 was raised in 10% of benign cases. A normal HE4 level was strongly suggestive of benign disease regardless of the CA-125 result and ruled out ovarian Carcinoma in nearly 90% of premenopausal women with elevated CA125. Conclusions: HE4 and ROMA index is of help in the triage of ovarian masses into benign and malignant groups with performance better than CA125.

Abstract Id: YUGP0942
Effects Of Laterality And Grade On Cognition In Patients With Glioma Prior To Surgery
Presenter- 'Dr. Sandhya Cherkił
Co-author - Liza Mary Cherian, Dilip Panikar, Deepak Kuttikattu Soman

Background: Tumor site, laterality, and tumor grade are some of the tumor variables which determines the extent and severity of the cognitive deficits. This study aims to understand the effects of laterality and grade on cognitive functions in patients with glioma who are to undergo surgery for the tumor Method: The study included 108 consecutively referred patients to the neuropsychologist. Mean age of the patient group was 47.1 years. There were 35 patients with low grade glioma and 73 patients with high grade tumor. Out of the sample, 58 of them had tumor on the left, 36 of them had right sided tumor and 12 of them had tumors in the deep structures of the brain. Each of the patient was assessed with the neurocognitive assessment tools. The cognitive functions assessed were visuospatial function, logical memory, auditory verbal memory, rate of learning, executive functions, information processing speed, auditory attention span and working memory. Chi Square was used to find the association between laterality and grade of the tumor with cognitive variables. Significance was assumed at p

Abstract Id: YUGP0944
Laterality And Gender: Psychological Morbidities In Pre Op Patients With Glioma
Presenter- 'Ms. Liza Cherian
Co-author - Sandhya Cherkił, Dilip Panikar, Deepak Kuttikattu Soman

Background: Brain tumors often have psychological co morbidities of anxiety and depression, caused by the tumor itself and the treatment regimens, as well as the financial and psychological demands made on the patient. The study examines the anxiety and depression levels in the patients diagnosed with glioma, who are to undergo surgery. Method: The study included 96 consecutively referred patients to the neuropsychologist. Mean age of the patient group was 47.1 years. There were 35 patients with low grade glioma and 73 patients with high grade tumor. Out of the 96 patients, 58 of them had tumor on the left, and 38 of them had right sided tumor. In depth assessment of the life stressors and personality of the patients were done in the intake interview. Anxiety and depression were assessed and scored using Hospital Anxiety and Depression Scale. Chi Square was used to find the association between laterality and gender of the tumor with anxiety and depression. Significance was assumed at p

Abstract Id: YUGP0948
Postoperative Complications And Outcome In Patients Undergoing Minimal Invasive Esophagectomy For Esophageal Cancer.
Presenter- 'Dr. Nikhil Dharmadhikari
Co-author - Dr Amit Patil, Dr Nikhil Gulavani, Dr Rajesh Mistry

Postoperative Complications and Outcome in Patients undergoing Minimal Invasive Esophagectomy For Esophageal Cancer.
Presenter - Dr Nikhil Dharmadhikari Co-author â€“ Dr Amit Patil, Dr Nikhil Gulavani, Dr Rajesh Mistry Centre for Cancer, Kokilaben Dhirubhai Ambani Hospital, Mumbai Aims and Objectives To confirm the perceived advantages of Minimal Invasive Surgery in terms of postoperative morbidity and morbidity. Materials and Methods All patients with biopsy proven esophageal carcinoma, either Squamous
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cell carcinoma or Adenocarcinoma, undergoing Minimal Invasive Esophagectomy will be recruited in the study. MIE will include all those patients undergoing MIE (thoracotomy + laparotomy) and Hybrid MIE (laparotomy with thoracoscopy or laparoscopy with thoracotomy). Patients with conversion to open surgery will be excluded from the study. All patients will undergo routine evaluation, including history and physical examination, chest radiography, esophagoduodenoscopy and CECT of the chest and abdomen and PET scan if indicated. Patients will be followed up during OPD visits. The categorical data will be summarised by frequency count and percentages of the categories. To prove the statistical significance, Chi-square / Fishers exact test will be used at 5% level of significance. Results We studied 60 patients who underwent minimal invasive esophagectomy during the study period. The mean age of patients was 60.2 yrs with 63.33% males and 36.67% patients being females. Of the 60 patients 55% had lower esophageal and GE junction growth while 38.33% patients had middle third lesion and 6.67% were upper esophageal lesions. Twenty nine patients underwent NACT followed by surgery while 31 patients were taken up for primary surgery. Hybrid MIE- 3 field was done in 78.33% of patients, 10% underwent total MIE, 3.33% underwent Hybrid Ivorlewes and 8.33% underwent laparoscopic transhiatal esophagectomy. Pulmonary complications accounted for 16.67% and were the commonest to occur while CVS complications occurred in 15% of patients. Minor wound complications accounted for 6.67%. Cord paresis due to injury to the recurrent laryngeal nerve intraoperatively occured in 11.67% of patients while in 3.33% of patients developed leak postoperatively. Conduct related problems like tube dilatation, anastomotic stricture occurred in 6.66%. Postoperative mortality was 3.33%. Of the 60 patients, 58 were followed up (2 died postoperatively), 51 patients (85%) are disease free, 1 patient (1.67%) is alive with local recurrence, 3 patients (5%) are alive with distant metastases, 2 patients (3.33%) have died of disease while one patient (1.67%) died of other cause. Conclusion Several minimally invasive esophagectomy techniques have been described and represent safe alternatives for the surgical management of esophageal cancer. We have demonstrated that MIE is feasible and safe, with low mortality, acceptable morbidity. The data suggest that operative morbidity and mortality is not significantly different between open and MIE. The data however are severely limited in that the majority of the studies are either retrospective case series, or case control studies, or meta-analyses of retrospective case control studies—all limited by both selection and publication bias with only two randomised control trials in the literature, both reporting advantage of MIE over open esophagectomy. Further prospective, randomized studies are are needed to clarify the role of MIE in the surgical treatment of oesophageal cancer.

Abstract Id: YUGP0962

A New Shield For Intraoperative Electron Radiotherapy In Early-Stage Breast Cancer

Presenter- Dr. Mariko Kawamura
Co-author - Takeshi Kamomae, Yoshiyuki Itoh, Tohru Okada

Purpose: Intraoperative electron radiotherapy (IOERT) can be safely performed in patients with breast cancer by using a shield disk made of hard acrylic resin and copper. However, the shielding disk must be larger than the irradiated field, which leads to large scars with poor cosmetic outcomes. The purpose of our study was to design a new shield that can be inserted via smaller scars and inflated to the size of the irradiated field. Herein, we will report the basic assessment of our newly designed shield consisting of a breast tissue expander and contrast media. Materials and methods: The radiation shielding performance of the contrast media consisted of three different mixture ratios of iodine (240 mg/ml, 300 mg/ml, and 350 mg/ml) that were verified in contrast to water by experimental measurements using 9- and 12-MeV electron beams. The acrylic container filled with water or contrast media was placed at a depth of 90% of the percentage depth dose (PDD) curves in each beam, and the doses at the entrance and exit of the acrylic container were measured. Results: The 90% values of the PDD curve (R90) were 28 and 38 mm for 9- and 12-MeV beams, respectively. The measured doses at the entrances of the acrylic containers filled with water, 240 mg/ml, 300 mg/ml, and 350 mg/ml of contrast media were 94.2%, 96.3%, 100%, and 99.1%, respectively, for the 9-MeV electron beam, and 89.9%, 98.0%, 98.7%, and 99.0%, respectively, for the 12-MeV electron beam, showing larger back scatter with contrast media. The transmitted doses at the exits of the acrylic containers were 18.5%, 3.7%, 2.4%, and 2.2%, respectively, for 9-MeV electron beam and 47.2%, 25.7%, 19.5%, and 20.6%, respectively, for 12-MeV electron beam. The Monte Carlo simulation doses agreed within 2.0% of the experimental doses. The transmitted doses of the breast tissue expander was 95% for the 12-MeV electron beam when filled with water, which was 5% greater than that for the acrylic container filled with water. Conclusion: The new shield consists of a breast tissue expander filled with contrast media that may reduce the transmitted dose by more than half in contrast to water while maintaining the uniform dose to the target, which may enable IOERT with smaller scars in patients with breast cancer. This new technique may improve the cosmetic outcomes of patients with breast cancer who undergo IOERT.

Abstract Id: YUGP0964

Free Flap €“ Are They A Boon? : A Quality Of Life Analysis

Presenter- Dr. Shitanshu Sharma
Co-author - Shashank Nath Singh, Mohnish Grover, Nishi Sonkhiya

Background We always assess the treatment being administered to the cancer patients in terms of 5-year survival often ignoring the quality of life which the patient has. Life is not something to be quantified without making it better. It is not just about prolonging the duration of survival. This study is being carried out in our institution to emphasize on this aspect of patients€™ life rather than just counting the years he lives after being diagnosed and treated for cancer. During this study all the University of Washington quality of life (UW-QOL) data collected in the institute since July 2014 of the patients who underwent free flap microvascular reconstruction after ablative oral cavity cancer surgery was analyzed. Methods This ongoing study comprises of 51 patients who underwent surgery for oral cavity squamous cell carcinoma followed by free flap reconstruction at SMS Medical College and Hospital since July 2014. The patients were asked to complete the UW-QOL questionnaire (validated Hindi version). The questionnaire represents the patient€™s own perception of their level of QOL. Version 4 of the UW QOL, in use since 2000, has 12 domains, a question that asks patients to choose up to three domains of most importance to them and three global questions about their health-related and overall QOL. Overall QOL includes not only physical and mental health, but also many other factors, such as family, friends, spirituality or personal leisure activities that are important to the enjoyment of life. Results and discussion The cohort comprised 51 patients. Mean age was 56.6 years. 82.35% were men and 17.65% were women. T3/T4 advanced tumors were present for 35.29%. All the patients had free-flap surgery and 41 patients (80.4%) had adjuvant radiotherapy. The patients rated swallowing, speech and chewing as top 3 domains of concern. Overall, when asked what their HRQOL had been like during the previous 7 days, patients replied as: 2(3.92%) outstanding, 17(33.33%) very good, 20(39.21%) good, 9(17.64%) fair, 2(3.92%) poor and 1(1.96%) very poor. Overall, QOL not only includes physical and mental health but also many other important factors, and the patients rated their overall QOL in the previous 7 days as: 3.92% outstanding, 33.33% very good, 33.33% good, 23.53% fair, 3.92% poor and 1.96% very poor. Conclusion UW QOL provides an important tool to assess the quality of life a patient leads after he is cured of the disease. The study pins the importance to the patient€™s aspect of the treatment outcome. Stage of the disease and radiotherapy were seen to affect domain scores. Studies have shown that patients reconstructed with free flap had a better appearance and better shoulder function as well as

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better role emotion when compared to those patients reconstructed with other loco-regional flaps. The composite score and overall QOL as assessed using the UW-QOL scale (version 4) were modestly high in our series of patients who had undergone free flap reconstruction.

Abstract Id: YUGP0968

Retrospective Review Of Operable Carcinoma Esophagus Ä¢" Our Institutional Experience
Presenter - Dr. ROHIT JHA
Co-author - DR PRASAD KASBEKAR, DR KIRAN C KOTHARI

Aim:- To assess the outcomes of carcinoma esophagus operated in our institute and the possible lessons learnt. Materials and methods:- A retrospective analysis of 98 patients of carcinoma esophagus operated in the year 2013-14 in our institute was done. These patients were evaluated in terms of neo-adjuvant treatment given, surgery done, post surgical results and follow-up. All patients of carcinoma esophagus stage T2 or greater were considered. Advanced cases were excluded from our study. Results:- 65% of patients were between 40-60 years of age. Male and females were equally affected. 89% of cancers were in lower 1/3rd (32cm or lower). 70% were Squamous cell carcinoma and rest Adeno carcinoma. 54% of patients were directly operated, 30% received NACT (neo-adjuvant chemotheraphy) and 5% received NACT + RT (neo-adjuvant chemoradio chemotherapy) and 1 patient was operated after palliative RT. only 22% of patients were pathologically N0. Highest nodal positivity was among surgery group (44%) and NACTRT had the lowest rate (23%). Post operative mortality rate was 11% and complication rate was 33% of which 62% were respiratory. NACT+RT group had maximum post operative morbidity. NACT group had the lowest recurrence and mortality rate (7.6% each) at 2 years, while surgery group had the highest recurrence rate (12.5%) and the NACTRT group had the highest mortality rate (23%). Discussion:- thus NACT has shown the best outcome in terms of surviviorship. NACTRT has high morbidity and mortality rate in our study despite having better loco-regional response. Poor socio-economic status and poor general health of the patient could contribute to this as compared to western countries. CONCLUSION:- our study favours NACT followed by surgery to be the best treatment modality for carcinoma esophagus patients in the Indian scenario with the least recurrence and mortality rates.

Abstract Id: YUGP0970

Comparative Study Of Clinico-Radiological And Histopathological Staging In Oral Cancer Patients
Presenter - Dr. ROHIT JHA
Co-author - DR PRASAD KASBEKAR, DR KIRAN C KOTHARI

Aim:- to compare the accuracy of clinic-radiological staging of cancer patients in comparison with the final histopathological staging in patients of buccal mucosa cancer. Materials and methods:- a retrospective analysis of 260 patients of buccal mucosa cancer operated in our institute in the year 2015 was made. A comparative study was then done between the stage of the disease by clinic-radiological assessment and the final histopathological stage obtained. Also compared was the accuracy of the conventional C.T. scan in detecting bony involvement in these patients when compared to the histopathological data. Results and discussion:- it was seen that clinic-radiological staging had an accuracy of 82.6% in detecting T1 lesions, 51.54% in detecting T2 lesions, 41.6% in detecting T3 lesions and 77.5% in detecting T4 lesions. Accuracy of detecting bony involvement by CT scan was 77.3% with false positive of 7.3% and a false negative of 15.4%. Conclusion:- thus clinic-radiological accuracy was seen to be greater in T1 and T4 lesions as compared to T2 and T3 lesions. This could be due to the difficulty in accurately measuring the tumor dimensions, as well as due to a change in the tumour size post surgical resection. CT scan was shown to have a high false negative rate in detection of bony erosion as well as a significant false positive rate.

Abstract Id: YUGP0974

Effect Of External Radiation To The Formation Of Micronucleus In Buccal Mucosaâ€™s Epithelial Basal Cell In Head And Neck Cancer Patients
Presenter - Dr. Arundito Widikusumo
Co-author - Rosita Anggraeni, A. Haris Budi Widodo, Schandra Purnamawali

ABSTRACT Introduction: External radiation for head and neck cancer may induce damage on healthy cellâ€™s chromosome in buccal mucosa which is characterized by the formation of basal cell micronucleus Method: This study uses pretest protest control group design. As much as 17 head and neck patients in the Department of Radiotherapy, Prof. dr. Margono Soekarjo hospital were involved. Subject were divided into 2 groups, 10 patients underwent external radiation with 10 x 2 Gy dosage and 7 patient were control group who were untreated with external radiation. The sampling of buccal mucosa swab was conducted on day 0 and day 14. The swab were stained with Modified Fuelgen method. The number of micronucleus were analyzed using Paired T-test for each group and Independent T-test to compare between both group. Result: Means of micronucleus count per 1000 cells on day 0 and day 14 for treatment group were 8.64 ± 3.78 Â± 1.14 and 19.06 Â± 1.53, while in control group were 7.62 Â± 1.14 and 8.43 Â± 1.10. Escalation of micronucleus count for treatment group was 11.2 Â± 1.74 (p<0.05). Micronucleus count for treatment group was significantly higher compared to control group (p<0.05).

Abstract Id: YUGP0976

Role Of Biopsy Tract Excision During Surgery In Extremity Osteosarcoma After Neoadjuvant Chemotherapy
Presenter - Dr. Sivakumar Mahalingam
Co-author - Anandraja,

Background: Biopsy for osteosarcoma is usually performed by a needle biopsy. Osteosarcoma being a chemo-sensitive malignancy, neoadjuvant chemotherapy can sterilize the biopsy tracts. Purpose: Our primary purpose was to see if disease is present in needle tract biopsy scars excised during surgery following neoadjuvant chemotherapy in extremity osteosarcoma and the need to remove the same. Methods: A retrospective study of 150 consecutive patients treated at our Institution. Inclusion criteria: Patients having extremity osteosarcoma with a needle biopsy performed at our Institution and having surgery after neoadjuvant chemotherapy. Histology on biopsy tracts were standard reporting format. Exclusion criteria: Extremely osteosarcoma undergoing straight surgery. Biopsy performed outside our Institution. All open biopsies. Results: 150 patients were included in the study. All patients received neoadjuvant chemotherapy. 80(53.33%) patients underwent surgery after 3 cycles of chemotherapy, 62(41.33%) underwent surgery after 4 cycles, 8 patients underwent surgery after 6 cycles of chemotherapy. The sites were distal femur(68%) followed by proximal tibia(29.33%) and the proximal humerus(2.66%). 139 patients(92.66%) patients underwent limb salvage surgery and the remaining underwent amputation (7.34%). On histopathology only two patients had residual tumour in the biopsy tract, on review of the records, both patients had progression on chemotherapy and underwent amputation. 13 patients had complete pathological response to neoadjuvant chemotherapy. 79 patients had response rate > 90%, 27 patients had response rate between 60-90% and the remaining had response less than 60%. 7 patients had local recurrence during follow-up. Conclusion: In patients who have a needle biopsy and later undergo surgery for extremity osteosarcoma following neoadjuvant chemotherapy, the role of excision of biopsy scars is questionable.
Abstract Id: YUGP0978

A Retrospective And Prospective Study Of Clinical, Radiological And Pathological Parameters In Determining Neck Metastases In Early Stage Anterior 2/3rd Carcinoma Tongue

Presenter - Dr. GARIMA DAGA
Co-author - Sanjay Sharma,

Basis of study: To study clinical, radiological and pathologic predictive factors to determine cervical nodal metastasis in early stage carcinoma of anterior 2/3rd of the tongue in our Indian cohort. Material and methods: A retrospective and prospective study was conducted on fifty patients with early carcinoma tongue of anterior 2/3rd tongue from January 2011 to June 2015. All patients underwent primarily surgical treatment i.e. glossectomy and neck dissection. Data regarding clinical parameters including age, T stage (cT stage), growth pattern, radiological parameters including tumor size, radiological tumor thickness (RTT) and pathological parameters including pathological tumor size (pT stage), grade of differentiation, pathological tumor thickness (PTT), perineural and lymphovascular invasion (PNI and LVI) and margin status and pattern of invasion was collected and correlated with presence or absence of neck metastasis. Statistical performance of each categorical variable including cT, RTT, pT, PTT, PNI, and LVI was calculated terms of sensitivity, specificity, positive predictive value (PPV) and negative predictive (NPV) to predict cervical lymph node metastasis. Results: cT, RTT, pT and PTT were found to be the most significant predictors (p

Abstract Id: YUGP0981

Solid Pseudopapillary Neoplasm Of Pancreas In Male: A Rare Entity

Presenter - Dr. GARIMA DAGA
Co-author - Prashant Kerkar,

Introduction: Solid pseudopapillary neoplasm (SPN) is a rare pancreatic neoplasm with a reported incidence of 0.1% to 2.7% of all pancreatic tumors. It typically affects young women with female to male ratio of 10:1. It usually shows an indolent behavior and often detected incidentally on imaging. Pathological and/or cytological evaluation remains the gold standard in establishing a definitive diagnosis. SPN carries good prognosis without any need of adjuvant treatment in most cases, even in the presence of metastatic disease. We hereby present a case of SPT in a 34 year old male with its clinical, diagnostic and management details. Material and methods: A 34 year old male was incidentally detected to have a pancreatic lesion on routine health check up. Abdominal USG revealed a 4 x 3.5 cms solid hypoechoic lesion in pancreas without any calcifications and liquefaction. Pancreatic protocol computed tomography revealed a well circumscribed 4 x 4 cms heterogeneously enhancing mass in head neck region of pancreas. EUS FNA revealed solid and cystic pseudopapillary neoplasm of pancreas. Tumors markers were within normal limits. Pylorus preserving pancreaticoduodenectomy was performed. Post operative course was uneventful Results: Final histopathology revealed SPN of pancreas which was confirmed on immunohistochemistry which was positive for CD 10, CD 56 and PR. Patient is doing fine till 18 months of follow up. Conclusion: SPN of pancreas should be considered in the differential diagnosis of any pancreatic mass in a young male despite of its rare incidence. SPN possesses a low malignant potential and complete surgical resection with clear margins is the treatment of choice and following R0 resection, SPN has an excellent prognosis

Abstract Id: YUGP0997

Multi-Institutional Clinical Studies Of Chemoradiotherapy For Cervical Cancer Among Asian Countries Under The Framework Of Forum For Nuclear Cooperation In Asia (Fnca)

Presenter - Prof. Masaru Watsatsuki
Co-author - Shingo Kato, Tatsuya Ohno, Yaowalak Chansilpa

The Forum for Nuclear Cooperation in Asia (FNCA) is a Japan-led cooperation framework for peaceful and safe use of nuclear science and technology in Asia. Under this framework, ten projects are currently underway, and radiation oncology project is one of them. This project was launched in 1993, and recently eleven countries has been participating in the project, including BGD, CHA, IDN, JPN, KAZ, KOR, MAL, MON, PHL, THA, VTN. The purposes of the project are to establish optimal treatment protocols of radiotherapy and chemotherapy for predominant cancers in Asia, and to improve the quality of radiotherapy in the FNCA member countries, and finally to improve treatment outcomes for predominant cancers in Asia. For these purposes, we have been conducting several activities, including international multi-institutional clinical studies of radiotherapy (RT) or chemoradiotherapy (CRT) for various cancers and physical quality assurance and quality control (QA/QC) of radiotherapy. Since the project started in 1995, we have conducted four multi-institutional clinical studies of RT or CRT for advanced cervical cancer among the FNCA member countries. In the first study (Cervix-I, 1996-2003), we standardized RT for cervical cancer, because various differences in RT techniques existed among the countries. We treated locally advanced cervical cancer patients according to the standardized protocol, and achieved favorable treatment outcomes. In the second study (Cervix-II, 1999-2006), we built a protocol of accelerated hyperfractionated RT to the pelvis and evaluated its toxicity and efficacy, because it was difficult to use CRT in some developing countries at that time due to technical and socio-economic constraints. In the third study (Cervix-III, 2003-2010), we conducted a phase II clinical study of CRT for locally advanced cervical cancer. We treated patients with locally advanced cervical cancer with concurrent RT and weekly cisplatin chemotherapy, and achieved favorable treatment outcomes with acceptable toxicities. In the fourth study (Cervix-IV, 2009-), we have been conducting a phase II clinical study of concurrent extended-field RT and weekly cisplatin chemotherapy for node positive locally advanced cervical cancer. When conducting the first clinical study, we experienced many problems and difficulties; 1) wide differences in the cultural and socio-economic status among countries, which may have resulted in large imbalance of patient enrollment, 2) wide differences in cancer imaging among institutions, which may have resulted in staging error, 3) poor compliance with the treatment protocol, and 4) poor follow-up rate. With the dedicated efforts of the physicians of the study group, these problems have been solved, and the quality of the recent Cervix-III and IV studies have been improved with the excellent compliance with the protocols and follow-up rates. Cervix-III protocol has become one of the standard treatment protocols of CRT for cervical cancer in the FNCA member countries. Radiation Oncologists and medical physicists in the FNCA member countries have been trained through conducting clinical studies. And the network established by the FNCA project has the potential to promote and strengthen further international cooperation in the field of radiation oncology in Asia. We will initiate a new clinical study of 3D image guided brachytherapy for cervical cancer this year.

Abstract Id: YUGP1004

Incidence And Risk Factors Of Oral Candidiasis In Head And Neck Cancer (Hnc) Patients Receiving Radiotherapy (Rt) Or Concurrent Chemoradiotherapy (Crt)

Presenter - Ms. Somying Wongsrit
Co-author - Imjai Chitapanarux,

Objectives: The purpose of this study was to estimate the incidence and determine risk factors of oral candidiasis in HNC patients receiving RT or CCRT. Methods: Sixty-five patients were examined weekly during RT to identify oral candidiasis. Swab cultures for fungi were obtained before RT (baseline), between the 15th -17th fraction of RT (mid) or immediately diagnosis of oral candidiasis, and immediately after complete RT (final). Results: The incidence of oral candidiasis in our study was 61.54% and the median occurrence of clinical oral candidiasis was 16th fraction (range 7th to 33rd fraction). The
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Abstract Id: YUGP1016
Young Onset Rectal Cancer- Live Fast, Die Young? Insights From A Tertiary Care Standalone Oncology And Research Institute
Presenter - Dr. Ruparna Khurana
Co-author - Swarupa Mitra, Manoj Kumar Sharma, Inderjit Kaur Wahi

BACKGROUND: There has been a dramatic increase in the incidence of rectal cancer in patients younger than 50 years of age, over the last few decades. This alarming trend is marred with advanced stage at diagnosis, aggressive histological features like mucinous and signet ring cells and poor overall response to therapy. This study aims to review young rectal cancer patients in terms of clinicopathological presentation, response to therapy and outcomes.
AIM: To assess clinical characteristics, response to therapy and clinical outcome in young onset rectal cancer patients.
MATERIALS AND METHODS: All rectal cancer patients referred to the Radiation Oncology department for preoperative chemoradiation between January 2010 and December 2015 were retrospectively reviewed from hospital data base and statistically analysed. Patients aged 50 years or less were categorised as young onset and were studied for clinical parameters, compliance to therapy, radiological and pathological response and sphincter preservation. Survival analysis using Kaplan-Meier plots was done to compute the disease free survival (DFS) and overall survival (OS). Univariate and multivariate analyses were done to identify predictive and prognostic factors for tumour down staging, DFS and OS.
RESULTS: A total of 246 rectal cancer patients attended the Radiation Oncology OPD from January 2010 to December 2015. One hundred thirty (52.8%) patients were young onset and the mean age at diagnosis was 36.7 years. A definite male preponderance was noted with 63.8% males. Most tumours involved the distal rectum with mean distance from the anal verge being 5 cm. Adenocarcinoma accounted for 98% of all histologies with moderate to poor differentiation present in more than half cases (60%). Advanced stage at diagnosis was noted with 81% of patients belonging to stage 3 and above. A good compliance to treatment was noted with 97% patients undergoing preoperative chemoradiation and 71% patients undergoing surgery. Only 33.3% patients had down staging of tumours following preoperative chemoradiation. Furthermore, radiological complete response rate was 19% and pathological complete response rate was 17%. The sphincter preservation rate was 40%. The mean follow up duration was 21.4 months (range, 0 to 86.86 months), median DFS was 54.46 months (95% CI, 41.65-67.26) and the median OS was 56.83 months (95% CI, 51.94-80.04), which is not significantly different from OS in the older patients. Stage at diagnosis, nodal status and pre-treatment CEA levels emerged as significant predictors of tumour down staging, DFS and OS on univariate and multivariate analysis.
CONCLUSION: Young onset rectal cancer is an emerging clinicopathological entity with increasing incidence. Further research is needed to understand unique genetic and molecular features that make it different from its conventional counterpart. Our review suggested that young age at diagnosis portends a poor prognosis. However young patients with an inherent advantage of better general health and compliance may do better if diagnosed earlier. Hence meticulous and well-structured screening programs, high index of suspicion for early diagnosis and initiation of therapy are warranted.
reduce, and after 10th fractions there was no bleeding. Conclusion Radiotherapy can be one of the therapeutic modalities for treating excessive vaginal bleeding of primary site in GTN which did not response to conservative therapy. Adequate data and further research are needed to obtain effectiveness of radiotherapy in excessive bleeding control in GTN.

Abstract Id: YUGP1032

Mr Mammography For Evaluation Of Residual Disease After Excisional Biopsy For Breast Cancer
Presenter- Dr. Shubha Garg
Co-author - Dr Veda Padma Priya, Dr Rajeev Kumar,

BACKGROUND : Approximately 10% of patients with early breast cancer present to our institute after initial excisional biopsy performed at another hospital. The T stage and margin status are often not available. In this setting we sought to assess the utility of breast MRI in evaluating residual disease in patients after excisional biopsy on basis of morphology & kinetics. MATERIALS & METHODS: The medical records of 114 patients who underwent surgery for early breast cancer post lumpectomy status from September 2010 to December 2014 were reviewed retrospectively. 67 patients underwent contrast-enhanced MRI before surgery and subsequently underwent either re-excision lumpectomy or mastectomy with histopathological correlation. RESULTS: About 67 patients were found eligible for our study. The mean age of onset was 44.97 years(Range 28-70). The ratio of Left: Right were 30:37. 38 patients were positive for residual disease on MRI - 27 underwent MRM or mastectomy and 11 underwent BCS. 3 patients were found to have multifocal and multicentric disease on MRI and none had a contralateral disease. 29 patients who were negative for residual disease on MRI ace 8 had residual disease on final histopathology report. The sensitivity and specificity of MRI for detecting residual disease were 77.14% and 65.62%. The positive predictive value of MRI was 71.05 and negative predictive value was 72.41. CONCLUSION: Although post surgical changes challenge assessment of residual disease, MR mammography is still useful in prediction of residual lesion after excisional biopsy for breast cancer. Hence, it should be considered in patients post excisional biopsy.

Abstract Id: YUGP1034

Primary Mucosal Malignant Melanoma Of Ano-Rectal And Vulvo-Vagina: Epidemiology, Clinico-Pathological And Survival Characteristics With Proposal Of Reconciliation The Tumor Staging
Presenter- Dr. Arun Pandey
Co-author - , ,

Background Primary malignant mucosal melanoma (PMMM) arises from the melanocytes located in mucosal membranes lining respiratory, gastrointestinal, and urinary tract. The common sites of PMMM are nasal cavity, oral cavity, ano-rectum, vulva, and vagina. Most mucosal melanomas tend to occur in occult sites, which together with the lack of early and specific signs contributes to the late diagnosis and thus poor prognosis. PMMM accounts for only 1.4% of all melanoma cases, and its incidence is reported in literature to have remained consistently stable over last many years. PMMMS arising in ano-rectum and vulvo-vagina carry poor prognosis in comparison to the conventional common histological types of cancers. Material and methods We analysed patients who presented at our institute with PMMMs over the last decade, with the primary sites of ano-rectum and vulvo-vagina tract mucosa. We compared the PMMM of rectum and anal canal with aspect to epidemiology, clinical staging, treatment (surgical and non-surgical, including new targeted agents) and stage specific disease free and overall survival with adenocarcinoma of rectum and squamous cell carcinoma anal canal, respectively. PMMM vulvo-vagina compared with squamous cell carcinoma of vulva and vagina, respectively. Median follow up was 23 months (range 3-41 months) in all groups. Results At our institute, a tertiary cancer care centre, the proportion of PMMMs in comparison to cutaneous melanoma has increased over the last decade. We identified a total of 98 case of PMMM, which included anoectal primary in 51, vulva primary in 31 and vaginal mucosal primary in 16 cases. PMMMs of ano-rectum and vulvo-vagina presented with advance stage either with local infiltration or lymph node metastasis. Three-year overall survival (OS) of anal canal PMMM versus SCC in stage I to IV was 67% vs 89%, 41% vs 69%, 13% vs 52% and 9% vs 29%, respectively. Rectal PMMMs versus adenocarcinoma 3-year OS was 49% vs 92%, 42% vs 67%, 18% vs 47% and 4% vs 15% in stage I to IV, respectively. In PMMMs of vulva versus SCC vulva 3-yr OS, 41% vs 88%, 36% vs 67%, 20% vs 37% and 7% vs 23%, and in vaginal PMMMS 39% vs 87%, 32% vs 59%, 17% vs 43% and 3% vs 19% in stage I,II,III, and IV, respectively. Conclusion PMMMs are rare and aggressive tumours with poor prognosis. Each anatomic site has peculiar approach to its treatment, in spite of the same tumour morphology and origin. PMMMS of ano-rectum and vulvo-vagina have poor prognosis in a comparison to common types of cancer in these regions when adjusted for stage-distribution (pathological AJCC staging). Thus, we recommend further discussion regarding the reassignment of the AJCC staging of anoectal and vulvo-vaginal PMMMs in reconciliation with the staging for other common histological cancer types in these regions.

Abstract Id: YUGP1036

Assessment Of Risk Factors Predicting Central Compartment Nodal Metastases In Clinically Node Negative Papillary Carcinoma Thyroid - A Prospective Study
Presenter- Dr. Arun Pandey
Co-author - , ,

Introduction Nodal metastases in papillary thyroid carcinoma (PTC) are associated with a higher rate of locoregional and distant recurrence. Need for a central compartment lymph node dissection (therapeutic CLND) in cN0 PTC is universally accepted; this however, is not true for cN0 PTC, where a consensus for performing prophylactic CLND (pCLND) remains lacking. Aim & Objectives To identify risk factors related to patient or tumor characteristics (age, sex, tumor size, focality, bilaterality, tumor extent, tumor location), to predict risk of CLNM in cN0 PTC. And thus, facilitating a risk based approach to selection of patients for prophylactic CLND. Material and methods Patients presenting with previously untreated PTC, found to have a cN0 disease based on findings of clinical examination and USG neck, were included in the study. All patients underwent total thyroidectomy with pCLND. Patients having pathologically reported CLNM were analysed with respect to presence or absence of previously identified risk factors. At the time of analysis, 43 patients had been included in the study (November, 2014 to June, 2016) and are analysed here. Results CLNM was found in 65.1% cases on pathological examination. Most of the patients had bilateral CLNM (63%). Tumor size (>4cm), and extrathyroidal extension were shown to be significantly associated with CLNM (p-0.024, and 0.04 respectively); while, multifocality (p- 0.02), ipsilateral CLNM (p- 0.001), and extrathyroidal extension (p-0.016) were found to be significantly associated with contralateral CLNM. Risk of permanent hypoparathyroidism, and permanent RLN injury was not significantly different from that seen in patients who underwent total thyroidectomy at our institute during the same time period. Conclusion In this study, we present here our interim results, as the study is still continuing. According to the present study, at least an ipsilateral pCLND should be considered in patients with extrathyroidal extension, and tumor size >4cm; while consideration for bilateral pCLND should be given in cases with multicentricity and those with extrathyroidal extension.

Abstract Id: YUGP1038

Anti Tumor Activity Of A Fraction Of Hydatid Cyst Fluid On Colon Cancer Growth Tumor In Animal Model
Abstract:

**Presenter: Dr. Shahla Rostamirad**
**Co-author: Prof. Yousofi, Hanum**

Background: Hydatid cyst is the larval stage of the tape worm Echinococcus granulosus which is located in human and livestock viscera. Cancer is the main cause of death in developed countries. There are some scientific evidences indicating that parasitic infections induce antitumor activity against certain types of cancers. In this study, the effects of a fraction of hydatid cyst fluid on colon cancer tumor in BALB/c mice were investigated. Materials and methods: In this experimental work three groups of mice were challenged with mouse colon cancer cells. Two weeks later group one was injected with a fraction of hydatid cyst fluid absorbed on alum as adjuvant. The second group was injected with alum alone and the third group left intact. The tumor size in all mice were measured. Result: In mice injected with a fraction of hydatid cyst fluid tumor size was smaller than the two control groups and the difference was statistically significant. Conclusion: The results of this study showed that injection of a fraction of hydatid cyst fluid significantly inhibits the growth colon cancer growth.

**Abstract Id: YUGP1046**

**Unusual Intraoperative Complications During Minimally Invasive Surgery**
**Presenter: Dr. Jagannath Dixit**
**Co-author: Dr Rajesh, Dr Ashok, Dr Manish**

Few of the unusual complications we experienced during the intial Laparoscopic and Robotic surgery in GI malignancy surgeries 1. Ontable pneumothorax during central line insertion 2 thoracic duct leak 3. Snapping of the IMA 4. Ureteric injury during stapling 5. ileostomy twist causing obstruction and correction using Drain tube insertion 6. Ureteric and rectal wall stapling causing diarrhoeal presentation all are managed without significant morbidity.

**Abstract Id: YUGP1048**

**Cancer Profile In Jakarta Province Region 2008 - 2012: Based On Data At Ciptomangunkusumo Hospital As Controlling Center For Cancer Registration Of Jakarta Province**
**Presenter: Mr. Wahyudi Nurhidayat**
**Co-author: Denny Handoyo, Dion Firli Bramantyo, Fathiya Juwita Hanum**

Background: According to WHO (World Health Organization) data in 2012, cancer occupies the second cause of death in developed countries after cardiovascular disease and become the third leading cause of death in developing countries after cardiovascular and infectious diseases. Currently, data on cancer profiles obtained from cancer registration activitie s in Indonesia does not exist. Cancer profiles with good collecting and reporting methods are required for the establishment of Indonesia population-based cancer registry. The Minister of Health of Indonesia has designated Ciptomangunkusumo Hospital as a control center for cancer registration of Jakarta Province. This study aims to provide a description of cancer profile of Jakarta Province in 2008 to 2012 based on data from Ciptomangunkusumo Hospital as a control center for cancer registration of Jakarta Province. Methods: This was a cross sectional descriptive study by collecting data from cancer registry at Ciptomangunkusumo Hospital to establish cancer profile in Jakarta Province in 2008 to 2012. Results: 14,726 cancer patients were found, with male and female ratio of 1:1.8. The majority of patients are between 45-54 years old. Most of patients came to the health care facility were in advanced stage, as many as 31.8%. The number of patient is highest from West Jakarta (27.5%) and followed by from East Jakarta (25.5%). The five most frequent cancer found in both sexes were breast cancer, cervical cancer, hematopoietic and reticuloendothelial system malignancy, lung and bronchial cancer, and nasopharyngeal cancer. The five most common cancers in male were lung cancer, nasopharyngeal cancer, hematopoietic and reticuloendothelial system malignancy, liver cancer, and lymph node cancer. The five most common cancers in female were breast cancer, cervical cancer, ovarian cancer, hematopoietic and reticuloendothelial system malignancy, and thyroid gland cancer. Conclusion: The results of this study are similar with GLOBOCAN 2012 results for Southeast Asia region, but the data coverage was still not optimal because not all health care facilities in Jakarta submitted cancer patients data. Suggestion: Further research is needed with broader coverage involving all health care facilities in the Province of Jakarta. Keywords: cancer, cancer profile, cancer registration, Jakarta Province

**Abstract Id: YUGP1056**

**Prostate Specific Antigen Nadir Within 12 Months As An Early Surrogate Marker Of Biochemical Failure And Distant Metastasis After Low-Dose-Rate Brachytherapy For Localized Prostate Cancer**
**Presenter: Mr. Shuichi Nishimura**
**Co-author: Toshio Ohashi, Kaneda Tomoya, Sakayori Masanori**

Purpose: Nadir prostate-specific antigen (nPSA) after definitive radiotherapy for prostate cancer has been investigated as a predictive factor for treatment outcomes. However, nPSA usually requires several years before determination in many patients, limiting the clinical utility of nPSA as a predictive factor. Earlier markers of recurrence risk after the completion of radiotherapy would be clinically useful. In this study, we investigated the significance of nPSA within 12 months (nPSA12) after low-dose-rate prostate brachytherapy (LDR-PB) on biochemical failure (BF) or distant metastasis (DM). Methods and Materials: Between 2006 and 2014, 474 consecutive patients with localized prostate cancer were treated with LDR-PB without androgen deprivation therapy. The minimum follow-up duration was 24 months. The median age at diagnosis was 70 years. The median pretreatment PSA was 6.5 ng/ml. By NCCN guidelines’s risk group, 237 were low risk, 210 were intermediate risk, and 27 were high risk. BF was defined according to Phoenix definition. Kaplan-Meier method was used to estimate BF free survival rate (BFFS) and DM free survival rate (DMFS). Univariate and multivariate analyses were used to determine the significance of nPSA12 and other clinical factors on BF and DM. Results: The median follow-up duration was 61.4 months. Of the 474 patients, 19 experienced BF, and 11 experienced DM. The median nPSA12 was 0.7 ng/ml. When dividing patients according to low (<0.7) and high (>0.7) nPSA12, the 7-year BFFS rates for patients with nPSA12 <0.7 and >0.7 ng/ml were 99.1% and 90.2%, respectively (p = 0.004), and the 7-year DMFS rates with nPSA12 0.7 and >0.7 ng/ml were 99.5% and 94.8%, respectively (p = 0.010). Multivariate analysis demonstrated that nPSA12 was an independent predictor of BF (p = 0.004) and DM (p = 0.020). Conclusions: The nPSA12 in prostate cancer patients treated with LDR-PB is signif icantly associated with the risk of BF and DM. For patients achieving nPSA12 0.7 ng/ml, the risk of subsequent failure was
classical yoga texts and contemporary yoga literature an integrated yoga module was formulated. Five experienced yoga experts, who fulfilled the inclusion criteria, were selected for validating the content of the IYM. A total of 28 practices were included in the IYM, and each was rated as (i) not essential, (ii) useful but not essential, and (iii) essential; Lawshe@’s formula, was used to calculate the content validity ratio (CVR) for the module. Results Data analysis revealed that of the 28 IYM practices, 22 exhibited significant content validity (cut-off value: 0.99, as calculated by applying Lawshe@’s formula for the CVR). Conclusions The IYM received good content validity and thus is valid for cervical cancer. However, future studies need to be conducted to determine the feasibility and efficacy of the developed module. Acknowledgement this project is completely sponsored by Ministry of AYUSH, Govt of INDIA.

Abstract Id: YUGP1064
Feasibility Of Conducting Yoga Program In Carcinoma Cervix Patients Undergoing Chemoradiation.
Presenter- Dr. GOVARDHAN HB
Co-author - Govardhan H B, Khaleel I A, Sridhar P

Aim: The aim of the study was to test the feasibility of comprehensive yoga program designed for cervical carcinoma. Settings and Design:A yoga program was chosen which included practices like loosening exercises (loosening exercises), relaxation techniques, breathing exercises (Pranayama) and chanting meditation to be taught by a professional yoga instructor in a 4 week period daily with home practice for one month. Materials and Methods: The yoga therapy was pilot tested on 10 cervical carcinoma cases undergoing chemoradiation in KIDWAI Cancer Institute, Bangalore. Questionnaires namely: EORTC QLC C-30 for quality of life, DASS 21 for depression, anxiety and stress, FACT (version 4) for fatigue, FACT Cx for general wellbeing were recorded weekly to assess the feasibility and acceptability of the practice. Results: Severity of depression, anxiety and stress substantially reduced at the end of 4 weeks and one month follow up post therapy. The over all quality of life showed better scores with a greater impact on the emotional wellbeing. Conclusion: A comprehensive yoga therapy is feasible in patients with cervical cancer and useful to alleviate the stress and anxiety which further better treatment outcomes. Acknowledgement this project is completely sponsored by Ministry of AYUSH, Govt of INDIA.

Abstract Id: YUGP1066
Completion Thyroidectomy For Differentiated Thyroid Cancers - Predicting Contralateral Disease
Presenter- Dr. RANGANATH RATNAGIRI
Co-author - MEGHA UPPIN, SHUBHRANSHU JENA, RAJSHEKHAR PATIL

Background: Completion thyroidectomy is a neck re-exploration performed when the biopsy report of a hemithyroidectomy is an unexpected malignancy or when an incomplete resection has been performed on the ipsilateral thyroid lobe. In spite of the various risk models available to decide upon the extent of surgery, we end up performing a good number of completion thyroidectomies. These surgeries are associated with an increased risk of hypoparathyroidism (9.6% to 15%) and also the danger of recurrent laryngeal nerve injury (up to 6%). Hence, this study was performed to determine the pathologic factors which would predict the occurrence of malignancy in the contralateral lobe. Materials and methods: A retrospective review of the case records of all patients who underwent completion thyroidectomies between January 2010 and December 2014 was done. A total of 90 patients underwent completion thyroidectomy during this period. The histopathology reports of the original surgery were analysed with respect to the following variables: tumor type, tumor stage, presence of extra-thyroidal spread, presence of capsular invasion, perineural spread, lymphovascular invasion, nodal positivity and multifocality of the tumor. Statistical analysis was done using the chi-square test and odds ratio. Results: A total of 28 patients (31.1%) were detected to have malignancy in the contralateral lobe. All these were histologically well differentiated thyroid cancers with 25 being papillary carcinomas and 3 being follicular. The two factors which were statistically significant in predicting the occurrence of malignancy in the contralateral thyroid lobe were multifocality of the tumor (p

Abstract Id: YUGP1068
Contextual Analysis Of Breast And Cervical Cancer Screening And Association Of Health Care Utilization And Health Insurance Coverage With Screening Uptake Among Adult Women In India
Presenter- Dr. Sutapa Agrawal
Co-author - Awdhesh Yadav, Preet K Dhillon, Elizabeth A. Van Dyne

Background: Worldwide one in every five women with cervical cancer comes from India, and breast cancer is now the most commonly occurring cancer in India. Studies in breast and cervical cancer screening in high-income countries show that women with greater access to healthcare are more likely to have been screened and hence, have earlier stages at diagnosis and longer survival. Having a recent physician visit or a usual source of health care also is a predictive of screening adherence. India’s National Programme for Cardiovascular disease, Diabetes, Cancer and Stroke (NPDCS), 2014 recommends breast and cervical cancer screening for 30-64 year old women, yet no empirical evidence exists about the prevalence and determinants of population-level cancer screening in India. Objective: We aim to describe the prevalence of pelvic examination and use of PAP smear test for cervical cancer screening and the prevalence of mammography for breast cancer screening among women aged 30-64 years in India and to estimate its association with health care utilization, health insurance status, current health conditions and other socio-economic determinants and lifestyle risk factors. Data and Methods: We used data from the national population-based multi-stage stratified nationally representative World Health Organisation’s Study on Global Ageing and Adult Health (WHO-SAGE), conducted in six large populous states in India namely Assam, Karnataka, Maharashtra, Rajasthan, Uttar Pradesh and West Bengal during 2007-2010. The sample consisted of 12,198 respondents (4717 men, 7481 women) aged 18 years and above. Our analysis focused on 4724 number of women aged 30-64 years of age in consistency with NPDCS guidelines. The outcome was reporting of a pelvic examination, a PAP (Papanicolaou) smear test for cervical cancer screening and undergoing a mammography for breast cancer screening, ever. The main independent variables were health care utilization and the presence of health insurance. Multivariable logistic regression analysis was performed to assess the association of health care utilization, health insurance status and other selected characteristics with cancer screening uptake. Results: One out of ten women (12.3%;n=457) reported ever having a pelvic examination and two out of five among those (20.2%;n=98) reported having a PAP smear test, and 1.6% (n=77) reported ever having a mammography. Prevalence of pelvic examination and a PAP smear test was higher among women who reported inpatient hospital care, outpatient care, having health insurance coverage, among those who reported of suffering from arthritis, angina, chronic lung disease, or depression, those who rated their current health status as good, women with more than six years of education, in Hindu women, women residing in urban areas, and belonging to richest wealth quintile household. A similar pattern was found for mammography use. In multivariate logistic regression analysis, the likelihood of reporting a pelvic examination was higher among women who had inpatient hospital care (OR:2.23;95%CI:1.72-2.90), outpatient care (OR:1.58;95%CI:1.11-2.24), women reported of suffering from chronic lung disease (OR:1.84;95%CI:1.02-3.30), hypertension (OR:1.38;95%CI:1.03-1.76), or 40-49 years
Abstract Id: YUGP1075

A Generic Treatment Modality For Malignancy By Assisted Molecular Self-repairing And Cell Ablation And, In Combination With Virtual Fencing And Modified Radiosurgery

Presenter: Dr. Jayakar Johnson Joseph

Co-author - , ,

Introduction: In this treatment modality, we intend to use a set of IoT devices of Molecular Dynamics Synchronized Manipulator System of (MDSMS) Instrumentation to orchestrate the treatment for Malignancy. Adapted Postulates: Core of this Instrumentation is a specific Signal detector which is assigned to detect the signals of Wave-bundles in dual wavelengths, emitted from Bio-molecules. This detector is designed with a new postulate which describes an eigen-rotational wave mechanics, that provides attributes to simulate the intrinsic dynamics of the source molecules that is analysed by Wave Bundle Spectrometry for precision targeting and manipulation of the dynamics of the source in Virtual Reality. Experimentations to Calibrate the Instrumentation: To calibrate this instrumentation, we propose to conduct cell culture experimentations with Cancer Exosomes that perform Cell-Independent MicroRNA Biogenesis and promote Tumorigenesis. The variables on these experimentations are representational in a Fish Bone Diagram to express the Cause-Effect analysis for Reverse engineering the Transformation of Normal Cell into Cancer Cell. Thereby, we propose Wave Bundle Spectrometry Analysis of all Bio-molecules available from these Cell Culture Experimentation, so that we may be able to deploy molecular profiling for all bio-molecules involved in the transformation of Normal cell into Malignant cell, with their Wave Bundle Spectral Signature Patterns by Machine Learning. These Wave Bundle Spectral Signatures are used to identify Specific Bio-markers and to proceed with real-time treatment by precision targeting and mater-energy delivery. Treatment Modes: Though the treatment modality is generic in nature, the sets of devices in this instrumentation that orchestrate for the treatment differs depending on the location of the tumour and stage of manifestation of the disease. Moreover, some of the devices of MDSMS Instrumentation is also integrated with the Radiosurgery units for Precision targeting in radiosurgery. Thus, the treatment modes may be grouped as follows: For Pre-malignant transformations: â€¢ Only Assisted Molecular Self-reparing. â€¢ Assisted Molecular Self-repairing and Long-term Virtual Fencing and monitoring. For In-situ malignancy: â€¢ Cell Ablation with Assisted Molecular Self-repairing of the margins. â€¢ Cell Ablation with Assisted Molecular Self-repairing of the margins and, Long-term Virtual Fencing and monitoring. â€¢ Cell Ablation, followed by Wave Bundle Spectrometry Integrated Radiosurgery of the margins. For Established malignancy: â€¢ Wave Bundle Spectrometry Integrated Radiosurgery. â€¢ Massive Cell Ablation followed by Wave Bundle Spectrometry Integrated Radiosurgery of the periphery. â€¢ Surgical removal under Virtual Fencing to prevent Metastatic spread. â€¢ Surgical removal and Cell Ablation under Virtual Fencing to prevent Metastatic Spread. â€¢ Surgical removal under Virtual Fencing to prevent Metastatic spread, followed by Wave Bundle Spectrometry Integrated Radiosurgery of the margins. â€¢ Surgical removal and Cell Ablation under Virtual Fencing to prevent Metastatic Spread, followed by Wave Bundle Spectrometry Integrated Radiosurgery of the margins. For Metastases: â€¢ Cell Ablation. â€¢ Cell Ablation followed by Wave Bundle Spectrometry Integrated Radiosurgery. â€¢ Wave Bundle Spectrometry Integrated Massive Radiosurgery. Advantages: Targeted for Curative treatment with the exclusion of toxic Chemotherapy and very little use of high energy radiation.

Abstract Id: YUGP1076

To Evaluate The Acute Toxicity Profile In Patients Undergoing Post Operative Chemoradiotherapy In Gastric Cancer

Presenter: Dr. Deep Shankar Pruthi

Co-author - Dr Musthaq Ahmad, Dr Meenu Gupta, Dr Vipul Nautyal

BACKGROUND: The primary curative treatment of gastric carcinoma is surgical resection. However in view of high incidence of loco regional failure, it is recommended that patients with resected gastric cancer should receive adjuvant treatment. The median Overall Survival is significantly better in patients who were treated with adjuvant Chemoradiation. However, Chemoradiotherapy is associated with significantly increased toxicity, particularly hematologic and gastrointestinal. MATERIAL & METHODS: Between November 2013 and November 2014, 30 patients of Gastric Cancer underwent Adjuvant Postoperative Chemoradiotherapy. Chemoradiotherapy consisted of 4500cGy of radiation at 180cGy/day using 3DCRT technique, 5 days/week for 5 weeks, with fluorouracil (400mg/m2) and leucovorin (20mg/m2) administered on the first 4 days and the last 4 days of Radiotherapy. The primary endpoint was Acute Toxicity Profile of Chemoradiotherapy which was assessed as per the Common Terminology Criteria for Adverse Events v3.0 (CTCAE).

RESULTS: The mean age was 54.5 years and male : female ratio was 4:1. The AJCC stage distribution included 3 patients (10%) with stage IB, 18 patients (60%) with Stage II and 9 patients (30%) with Stage III disease. Most common site was antrum and pylorus (15 patients â€œ 50%). 29 out of 30 patients completed the treatment protocol. Among hematological toxicities, 9 patients (30%) developed Grade II anemia and 1 patient (3%) developed Grade III anemia. 12 patients (40%) developed Grade I-II Leucopenia while 2 patients (6%) developed Grade III-IV leukopenia. 5 patients (17%) developed Grade I-II thrombocytopenia while 3 patients (10%) developed Grade III-IV thrombocytopenia. In Gastrointestinal toxicities, nausea and vomiting was most commonly observed. 17 patients (57%) developed nausea and vomiting (Grade I & II) while 1 patient experienced Grade III nausea and vomiting. 5 patients (17%) experienced diarrhoea (Grade I & II) during EBRT. Radiotherapy interruption was seen in 4 patients, 3 patients with < 1 week duration and 1 patient with > 1 week duration. 7 patients required admission for supportive care during EBRT. 1 patient required Ryle Tube feeding while 7 patients required intravenous fluid administration. CONCLUSION: Chemoradiotherapy as Adjuvant therapy for Resected Gastric Cancer with Calcium Leucovorin and 5FU was well tolerated in terms of haematological and gastrointestinal toxicity. However a larger sample size is needed for significant results.

Abstract Id: YUGP1080

Colorectal Carcinoma An Increase In Younger Age Presentation-A Tertiary Cancer Hospital In Kurnool Study

Abstracts

Presenter- *Dr. Kumari Motepalli
Co-author - ,

Author : M Pandu Ranga kumari MD(RT) Back ground: Colorectal cancer is relatively uncommon malignancy in India when compared with the western world, generally a disease affecting individuals 50 years of age and older and is much less common in persons under 40 years of age. It is also a very uncommon pediatric malignancy but now there is a increase in incidence in younger age Aims: To study the age, gender, site of primary tumor, histopathological type of colorectal cancer cases with specific reference to young adults.

Settings and Design: Tertiary care hospital, Retrospective study, Materials and Methods: We conducted a retrospective study of all colorectal carcinomas (CRC) which were diagnosed during the past 6 years i.e., from January 2011 to December 2016. Patients were divided in to two groups - 40 years and younger, and older than 40 years. The records were analyzed in detail for age, gender, site of primary tumor, histopathological type. The results of the two groups were compared Results: Two hundred and twenty three patients were diagnosed to have CRC. Patients diagnosed below 40 years of age comprised 39.5%(88) and those under age 20 comprised 2.69%(6). Among those under 40 years of age, majority were males (56.8%), most occurred in the rectum (75%). Most of them were adenocarcinoma in that poorly differentiated, mucin-secreting, signet ring type adenocarcinomas are most frequent (35.2%) and presented at advanced stage (33%). This was similar to those reported in other literatures, Conclusions: CRC in our institution is more often seen in younger individuals too as reported in other studies. The reasons for this are not clear. Therefore, further studies are required to address the role of diet and personal habits with CRC in this region. Also, a high index of suspicion among young adults is necessary and further consideration for screening in Indians too Key words : colorectal cancer, young age, increased incidence, poor prognosis, need for screening

Abstract Id: YUGP1084
Cisplatin Versus Carboplatin In Patients Over 70 Years With Advanced Head And Neck Squamous Cell Carcinoma With Curative Intent Concurrent Chemotherapy?Radiation. Predictors Of Oncological Outcomes

Presenter- *Dr. Vijay kumar Srinivasalu
Co-author - Narayana subramaniam, Narender kumar, Deepak balasubramaniam

Introduction : Addition of chemotherapy either cisplatin (CIS) or carboplatin (CARBO) increases the effect of radiation in patients (pts) with advanced head and neck squamous cell carcinoma (HNSCC) who received concurrent chemoradiation (CCRT). In the elderly due to multiple comorbidities and issues on tolerance of chemotherapy a choice on CIS versus CARBO is highly debatable, hence we conducted this study. Materials and methods : Retrospective analysis of stage III/IV HNSCC in pts > 70 years who received linac based radical CCRT with dose equivalent to 70Gy in conventional fractionation (n=57) with either CIS or CARBO between 2006 to 2014 were included. Results: Pts with stage III/IV (25.6%/75.4%) HNSCC (n=57) of oropharynx (n=15), larynx (n=18) or hypopharynx (n=24) underwent radical CCRT having mean age 75.18 yrs (range 70?86 years) and male to female ratio of 10.4:1. Pts on CCRT who got cisplatin (CIS) (n=35) and carboplatin (CARBO) (n=22) had mean weight loss of 3.53 (range 0?10) kgs. Total of 61.4% (CIS=62.8%, CARBO = 59.1%) completed chemotherapy (defined as cumulative dose of 200mg/m2 of CIS and 5 weekly dose of CARBO at AUC 2) and 98.2% completed RT without any treatment related death. Higher grades of neutropenia(33.3%) and hyponatremia(17.5%) with CIS and hypercreatinemia(10.5%) with CARBO was noted. There was no significant difference in PFS and OS between the two groups. Factors predicting good PFS were ECOG (1 vs 2) HR=0.25 (95%CI:0.0970.70), Completion of treatment without any breaks while on CCRT, HR=2.54 (95%CI:1.0276.32, p=0.04), and age in 70?75 years, HR=1.09 (adjusted for alcohol and smoking) (95%CI: 1.01?1.20, p=0.08). Factors suggestive of poor PFS were hyponatremia, hypercreatinemia and weight loss > 3kgs from their baseline. PFS (80%) in pts with stage III and IV disease was 22 (95%CI: 12.4?87.2) months and 15.53 (95%CI: 8.6?720.6) months respectively. Conclusion: Curative intent CCRT should be considered as standard of care in elderly patients > 70 years with good ECOG status. Aggressive swallowing rehabilitation, abstinence from smoking and alcohol are likely to improve outcomes. Both cisplatin and carboplatin showed significant benefit in PFS with fewer side effects and either of them can be considered.

Abstract Id: YUGP1086
Evaluation Of Outcomes And Prognostic Factors In Paediatric Extraskelatal Ewings Sarcoma : A Single Institution Experience

Presenter- *Dr. Vijay kumar Srinivasalu
Co-author - Harisankaran, Arun philip, Annu susan

BACKGROUND : Ewing’s sarcoma (ES) represent the most frequent small and round cell bone tumors of childhood and adolescence. Data on extraskelatal ewings sarcoma (EES) with uniform chemotherapy protocol are very minimal. We aimed to assess this aspect in our patients and identify prognostic factors in patients with extraskelatal ewings sarcoma. MATERIALS AND METHODS : A retrospective analysis of data was done between January 2005 and January 2016. These paediatric EES patients who received chemotherapy with VAC-IE regimen were evaluated for their response, overall survival (OS) and Event free survival (EFS). The prognostic factors which influenced their overall survival was also analysed. RESULTS: 41 paediatric EES patients were diagnosed at our institute out of which 31 patients received treatment at our hospital. 25.8% (8) were metastatic at presentation. The mean age was 12.37 years (1-18 years) with a predominant female preponderance 54.8%. The commonest site at presentation was presacral mass (7) and mass in the brain parenchyma (8). Rare sites of presentation as a nasal mass and parotid mass was seen in one patients each. 78% received chemotherapy with VAC-IE regimen. The ORR was 71% (8 CR + 9 PR), Commonest hematological toxicity was grade III neutropenia in 5 (20.8%). 8 patients received local RT. The 3 year OS and EFS in the localized EES was 55% and 39% and in metastatic EES was 35% and 24% respectively. Low hemoglobin (P?=?0.05) and high LDH (P?=?0.01) predicted inferior OS for the entire EES cohort on multivariate analysis. CONCLUSION : High LDH and low hemoglobin is associated with poor OS for patients with EES ewings sarcoma. VAC-IE is a very effective and a safe chemotherapy regimen and should be considered in patients with extraskelatal ewings sarcoma.

Abstract Id: YUGP1088
Validation Of Prostate Cancer Metastasis Through Low Cost Microfluidic Approach.

Presenter- *Dr. Deepika Sharma
Co-author - Assim Verma, Bhano Prakash,

Cancer metastasis includes complex microenvironment with several ligands and factors spreading the spread of cancer from its primary sites to other vital organs like bones, liver, lungs and brain. To study the metastasis process effectively organ-on-chip with 3D cell culture system is vital. Microfluidics gives us ability to mimic the complex microenvironment on PDMS based chips. However conventional process for microfluidic chip fabrication is based on X-Ray lithography process which has several shortcomings like productivity, associated cost and time consumption. We have fabricated Organ-on-chip which mimics complex organ microenvironment by conventional photolithography techniques seem promising by precisely mimicking secondary organs in a chip surrounded by endothelial cell monolayer. We have validated prostate cancer metastasis using organ-on-chip fabricated by laser on PDMS. Also, the role of bone specific
Abstract Id: YUGP1098

Triple-Negative Breast Cancer In Young Women-Indian Scenario

OBJECTIVE: To investigate the clinicopathological characteristics and prognosis in young patients with estrogen receptor (ER)-negative, progesterone receptor (PR)-negative, and Her-2-negative (triple-negative) breast cancer (TNBC) in young patients. METHODS: Young patients (< or = 40 years old) with TNBC treated at the Rajiv Gandhi Cancer Institute & research Centre between October 2010 to September 2016 were included in the study. The clinicopathological features and prognosis of those 85 patients were retrospectively analyzed. SPSS 23 was used for statistical analyses and Kaplan Meir graph plotted. RESULTS Among 320 young (< = 40) patients with breast cancer, 85 patients (26.56%) were triple-negative. The median age was 34.01 years. 85 patients (100%) were diagnosed with invasive ductal carcinoma. 62.35% of the patients were classified as T1 or T2. The TNM stages included: 9 patients in stage I (10.6%), 44 in stage II (51.7%), 32 in stage III (37.64%). The overall disease-free survival (DFS) was 88.2% and stage wise in Stage I-100%, Stage II 97.7% and Stage III was 71.9%. The corresponding overall survival (OS) rate was 98.8% and stage wise in Stage I and II 100%, Stage III 96.9% respectively. 10 patients developed recurrence or metastatic disease during the follow-up period. 9 developed recurrence or metastatic disease within 1 year of surgery while 1 patient developed recurrence 16 months following surgery. CONCLUSION BRCA positive cases in triple negative young

Abstract Id: YUGP1106

Low Rectal Cancers:Evolution From Apr To Sphincter Saving Procedures

Background: Distal rectal cancers present a challenging task for surgeons in terms of providing a Sphincter Saving Procedure (SSP) as compared to Abdomino Perineal Resection (APR) and maintaining oncological safety. APR used to be commonly performed surgery for distal rectal cancers, but because of better understanding of cancer biology, better surgical techniques, newer neoadjuvant therapies & advent of surgical staplers, SSP are being preferred by both surgeons & patients. OBJECTIVES: Our primary aim was to compare the trend of APR & SSP in distal rectal cancers at a high volume Colorectal surgery centre. Secondarily we aimed to compare the quality of life (QOL) between APR & SSP & also determine the incidence of diversion stoma following Low Anterior Resection (LAR). METHODS: This was a retrospective study of 3 years. Patients with cancers & precancerous lesions within 10cm from anal verge who underwent APR & other SSP were included. RESULTS: Overall incidence of APR as compared to SSP was 17.36. In lesions ?6cm & ?7.5cm APR constituted 26.4% & 22.7% respectively. There was no significant difference in overall quality of life (QOL) between patients subjected to APR & LAR. However, urinary frequency (p=0.0001), abdominal pain (p=0.0001) & embarrassment (p=0.0001) were more in APR as compared to SSP group. Covering stoma was fashioned in 62.5% patients overall & in 91.8% & 83.3% in patients with lesions 76 cm & ?7.5 cm respectively. CONCLUSION: As a result of improved surgical skills, better technology and high volume centre the trend is shifting more towards sphincter saving procedures. As a result of complications following LAR, QOL between APR & LAR does not differ much. Majority of patients with very low colorectal or coloanal anastomosis have a diversion stoma.

Abstract Id: YUGP1109

Experience With Primary Retro-peritoneal/Abdominal Germ Cell Tumor In Children.

Background: Primary extra-gonadal germ cell tumors are rare and account for only 1 â€“ 4% of all germ cell tumors. Prognosis is usually excellent after complete excision but perioperative management is a distinct challenge. Aim of this study is to present perioperative problems and morbidity associated with management of these tumors. Material and Method: (T) retrospectively evaluated the patients having non-renal retro-peritoneal/abdominal masses from July, 2012 to July, 2016 at our center from hospital records with diagnosis of germ cell tumor. Details of patients were reviewed including demography, clinical presentations, investigations, perioperative problems, pathology, management, final outcome and follow-up. Result: From July, 2012 to July, 2016, 11 patients with retro-peritoneal/abdominal germ cell tumor were managed. Diagnoses were yolk sac tumor (YST) in 3 patients and teratoma in 8 patients. 4 patients were female and age ranged from 2.5 months to 6 years (median age 14 months). 2 patients had respiratory problems while 3 had sub acute bowel obstructions at the time of presentation. Patients with YSTs and 2 patients with immature teratoma received chemotherapy. Almost complete excision performed in all patients. Perioperative problems include excessive bleeding (2), excision of part of adjacent organ (2), hypothermia and respiratory problems and chemo related toxicity (1). Adhesive bowel obstructions occurred in 5 patients with in 3 month of post surgery in which 4 required re-explorations and adhesiolysis. 2 patients were died while 2 were lost in follow-up. Rest patients are under follow-up without recurrence. Follow-up period ranged from 6 â€“ 45 months. Conclusion: The management of retro-peritoneal/ abdominal germ cell tumor (GCT) is challenge. Various surgical difficulties and morbidity associated with resection of these tumors depends on clinical presentation, size and site of tumor and age of patient. KEY-WORDS: Germ cell tumor; Yolk sac tumor; Teratoma; Retro-peritoneal; Management.

Abstract Id: YUGP1119

Pretreatment Neutrophil: Lymphocyte Ratio As A Predictor Of Recurrence In Locally Advanced Cervical Cancer: Preliminary Study.

Introduction: One of the cancer characteristics in hallmark of cancer is tumor inflammation. Tumor inflammation has a big contribution in tumor progression. The neutrophil lymphocyte ratio (NLR) is an emerging biomarker of inflammation, which has a prognosis value in various cancers. Higher NLR is associated with more aggressive disease. This study was conducted to investigate the role of pretreatment NLR as a predictor of recurrence in locally advanced cervical cancer in our population. Methods We evaluated retrospectively our medical record for locally advanced cervical cancer

patients, which underwent radiotherapy at our department between January and April 2015 and had follow-up more than 6 months. NLR was calculated before treatment. Pretreatment NLR was tested for association with recurrence status, pathologic prognostic factor and correlation with hemoglobin level. Results 15 patients were enrolled in this analysis. There was no difference in pretreatment NLR in recurrent compared with non-recurrent (median 4.14 compared with 3.79, p= 0.794). For pathologic prognostic factor: There was no difference on pathologic type; squamous cell carcinoma compared with adenocarcinoma (median 6.69 compared with 2.27, p=0.068); There was no difference in cell differentiation; well differentiation compared with moderate differentiation (median 3.33 compared with 6.69, P=0.41). There was no difference in LVS (+) compared with LVS (-) (median 2.25 compared with 6.03, p=0.18). There was negative-weak non-significant correlation between hemoglobin level and pre-treatment NLR (r=-0.352, p=0.198). Conclusions: Due to small sample size, there was no significant NLR difference between recurrent disease and not recurrent disease. We need to evaluate more data to make more accurate conclusion. Keywords: cervical cancer, lymphocyte, neutrophil, ratio.

Abstract Id: YUGP1127
Design Of Biodegradable Spacers For Delivery Of Chemotherapeutic Drugs Synchronous With Radiation Therapy For Improved Efficacy
Presenter - *Prof. Dattatri Nagesha
Co-author - Ms. Rajasree P H ,

Cancer Nanotechnology is a new paradigm in cancer therapy which involves the design of novel drug delivery and/or diagnostic system. Commercially successful products, Doxil® and Abraxane® are nanotechnology-enabled chemotherapeutic agents that are currently available in the market. The past decade has seen the emergence of nanotechnology-based concepts for enhancing radiation therapy. Gold nanoparticles have been delivered to tumor region and when external beam radiation is delivered to that area there has been a significant improvement in treatment outcome in animal models. In another approach, gold fiducials that are used for tumor delineation purposes have been coated with chemotherapeutic drugs for localized chemotherapy. However, the full potential of nanotechnology-enabled improvements to radiation therapy is yet to be explored. A new concept that our Lab is working is to suggest improvements to brachytherapy spacers that are used in permanent brachytherapy. The inert spacers that are used for spatial distribution of brachytherapy seeds are modified to deliver chemotherapeutic drugs locally within the tumor area and thereby improving the efficacy of radiation treatment. In this work, we have designed biodegradable polycaprolactone spacers that have been loaded with two chemotherapeutic agents &© Doxorubicin and Curcumin. The choice of two drugs is to attack cancer by two different mechanisms and when this is synchronized with radiation, will result in a trifecta mode of kill and thereby improving the efficacy of radiation treatment. The results show that by optimizing the design parameters the drug release was tuned between 20 to 45 days. The novelty of this concept is there is no literature on the design of such biodegradable spacers for localized delivery of radiosensitizers synchronous with radiation. The versatility of this method is that the choice of drugs can be changed and the release kinetics altered to meet the specification of the treatment protocol recommended to the patient. The extension of this work in the future would be in personalized medicine wherein the design of these biodegradable spacers would be tailor-made for a specific person.

Abstract Id: YUGP1133
Prognostic Significance Of Keratinization And Non Keratinization In Squamous Cell Cancer (Scc) Uterine Cervix
Presenter - *Dr. BIBIN FRANCIS
Co-author - Dr O.P Singh, Dr Veenita Yogi, Dr H.U Ghorai

TITLE- Prognostic significance of keratinization and non keratinization in squamous cell cancer (SCC) uterine cervix. AIM- To determine the influence of keratinization on prognosis in squamous cell cancer (SCC) of uterine cervix. MATERIALS AND METHODS- A total of 105 patients with keratinized squamous cell carcinoma (KSCC) and non-keratinized squamous cell carcinoma (NKSCC) of cervical cervix that had started receiving treatment between 2012 and 2014 at dept. of radiotherapy GMC Bhopal were retrospectively studied and observed till date. Data were analyzed using Pearson Chi-square, Studentâ€™s T tests. Kaplanâ€’Meier and Cox Regression Proportional Hazards survival analysis was conducted in SPSS. RESULTS- The NKSCC group had 62 and the KSCC had 43 patients with mean age being 50 years in both groups, respectively. In general, patients with KSCC were more likely to have advanced stage (FIGO III and IV) disease while patients with NKSCC were more likely to have poorly differentiated neoplasm. The prevalence of lymph node metastasis remained similar in both histology types. Overall, the 5-year survival (among 44 patients who have completed 5 years of follow-up) in NKSCC was 63.64% (n= 14) as compared to 68.18% (n= 15) in the KSCC group (p= 0.75045). A total of 15 NKSCC and 16 KSCC patients did not received or completed treatment. 61 patients had completed 3 year follow-up at present among which 86% (n = 40) were having NKSCC and 44% (n= 21) KSCC while 3 year survival in NKSCC was 82.5% (n= 33) and in KSCC it was 57.14% (n= 12) (p= 0.032425). CONCLUSION- This is an institutional based study reporting the prognostic importance of keratinization in SCC. KSCC may be less radiosensitive and associated with shorter overall survival. Also, in SCC cervix, keratinization signifies striking reduction in survival of patients receiving complete treatment. KEYWORDS- Cervical cancer, Keratinization, Survival &©
Abstracts

Intubation was done initially by a double lumen endotracheal tube. Mobilization of the esophagus through right posterolateral thoracotomy could be done without any difficulty. Thereafter the endotracheal tube was replaced with a single lumen one. Stomach was mobilized through a midline abdominal incision. Then the neck dissection and mobilization of the cervical esophagus was undertaken. While mobilizing the cervical esophagus, a longitudinal tear was detected in the posterior membranous part of the trachea, about 5 cms long. The tear was identified on seeing the cuff of the endotracheal tube that got visualized in the neck dissection field. Immediately, the cuff of the endotracheal tube was deflated and the tube was pushed further inside by the anaesthetist that prevented air leak. The tear in the trachea was successfully repaired by interrupted 4-0 polypropylene suture. The rest of the surgery was completed by division of the esophagus and stomach, pull-up of stomach tube followed by esophago-gastric anastomosis in the neck. The tracheal defect was further secured by buttressing part of the pulled up stomach around it. The patient was kept intubated and on ventilation overnight. She could be extubated the next day morning and did not have any respiratory difficulty. She recovered well and could be discharged on the 7th post-operative day. Discussion: Tracheal injury during esophagectomy is an uncommon but potentially fatal complication. Majority of the injuries occur during transthiatal esophagectomy. The membranous trachea is most vulnerable for such iatrogenic tear. However, tracheal injury during trans-thoracic esophagectomy is unusual. There are few reports of tracheal injury during thorascopic mobilization of esophagus which were successfully managed by conversion to thoracotomy and repair. Injury to the trachea in the neck during esophagectomy is very rare and we have not found any report of such an event. The best management of such injuries is early detection and primary repair of the trachea. Repair is usually done with interrupted 4-0 polypropylene suture along with reinforcement by buttressing the gastric conduit over the tear. Neoadjuvant radiation and chemotherapy alone or in combination may be a risk factor for intraoperative tracheal tear.

Abstract Id: YUGP1145
Early Outcomes Of Immediate Breast Reconstructions Using Acellular Dermal Matrix After Mastectomy For Breast Cancer
Presenter- * Dr. Mihir Chandarana
Co-author - Mr. Mihir Chandarana, Mr. Soni Soumian, Mr. Sekhar Marla

Introduction About one-third of patients undergoing mastectomy in the United Kingdom have immediate breast reconstruction (IBR). The last decade has seen a paradigm shift from autologous reconstructive options to implant-based reconstructions using acellular dermal matrix (ADM). IBR is performed with either a subpectoral or a prepectoral implant placement along with ADM. We report short-term outcomes of IBR using implant and ADM after a mastectomy for breast cancer from our institution. Materials and methods A retrospective analysis of prospectively maintained data of all patients undergoing mastectomy with IBR from 1st January 2015 to 31st May 2017 was performed. Demographic details, pathological details, surgical techniques and perioperative outcomes were analyzed. Results Out of the total of 131 patients (155 reconstructions), 61 patients had prepectoral and 70 patients had subpectoral implant reconstructions. Median age was 51.2 years with a mean BMI of 26 kg/m2. About 20% of the reconstructions were bilateral. Median follow-up was 8.5 months. 19% patients had complications (Clavien-Dindo grade III or more). Overall explant rate was 5.4% in prepectoral group versus 11.6% in subpectoral group (p = 0.44). There was a statistically significant correlation between bilateral reconstructions and complication rate (p = 0.002) as well as explant rate (p = 0.027). Conclusion Implant-based IBR have acceptable outcomes following a skin sparing or nipple sparing mastectomy with comparable outcomes between subpectoral and prepectoral techniques. Bilateral reconstructions have a higher complication rate with a higher explant rate.

Abstract Id: YUGP1147
Lateral Intercostal Artery Perforator Flap For Partial Breast Reconstruction In Breast Cancer
Presenter- * Dr. Mihir Chandarana
Co-author - Mr. Mihir Chandarana, Sankaran Narayanan, Mr. Sekhar Marla

Background About 60% of patients with breast cancer in the Western world are treated with Breast Conservation Surgery (BCS). Resection of more than 20% of breast volume requires oncoplastic techniques to restore breast shape and symmetry. Reconstructive options like therapeutic mammoplasty, mini LD flap and free flaps have significant morbidity, longer operating times and scars in remote areas. Recently, local perforator flaps have evolved as a new technique for partial breast reconstruction. We report a case series of Lateral intercostal artery perforator (LICAP) flaps from our institution. Materials and methods A retrospective analysis of prospectively collected data was performed. All patients treated with BCS and reconstruction with LICAP flap were included in the analysis. Breast surgeons trained in oncoplastic techniques performed the surgery. Criteria for patient selection and short-term outcomes were evaluated. Results Ten patients underwent BCS and reconstruction with LICAP flap from June 2016 to June 2017 were included. The mean age of the cohort was 60.5 years, with a mean BMI of 28.5 kg/m2. Average specimen volume excised was 150.4 cc. Largest tumor excised was 45 mm on pathology. None of the patients had any post-operative complications or short-term morbidity. Two patients had a positive margin on excision and re-excision was performed without difficulty. All patients received adjuvant radiotherapy. Conclusion LICAP flap is a feasible option for partial breast reconstruction for tumors located in outer aspect of breast. It spares the latissimus dorsi flap for possible future use. Added advantages are avoidance of a mastectomy, mammoplasty, symmetrisation surgery and mini LD flap. Microvascular surgical techniques are not necessary for the reconstruction.

Abstract Id: YUGP1149
To Evaluate The Role Of Swastharakshak In Cancer.
Presenter- Ms. Ankita Umrao
Co-author - ...
formulation is dependent on other components in the formulation and poses a daunting task to delineate the efficacy of each component. An alternative approach to this problem is to procure a fingerprint by NMR spectroscopy, which enable positive identification of components in the formulations and thus standardization can be achieved. In the present preliminary study, the chemo-preventive and therapeutic potential of aqueous suspension of Swastharakshak@ against Ehrlich Ascites cells induced breast tumor and peritoneal Ascites in Swiss albino mice has been evaluated with respect to tumor burden, mean survival time, percentage life span and hematological parameters. An NMR spectra for the same is procured to maintain a standard reference. Materials and methods: In vivo and in vitro studies: In-vitro effects of different doses of Swastharakshak® in HeLa and K562 cell lines were studied. MTT assay for viability, Acridine orange staining for apoptosis was performed. In -vivo studies were performed in Swiss albino male mice (7-8 weeks old) weighing 20-25g. The animals were kept in ventilated cages having air-conditioned animal facility with 12 h light / dark cycle and provided with standard mouse food and tap water ad libitum. The animals were broadly divided in two groups: Prophylactic and therapeutic. Each group was further divided into five groups: Normal control, Correspondence: rathodps2003@yahoo.com Abstract To avoid

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Abstract Id: YUGP1161
Feasibility Of Lower Acquisition Time With IQ Spect In Myocardial Perfusion Imaging
Presenter- *Ms. SARANYA BALAMURUGAN
Co-author - INDIRANI M, AASHISH, ASRA

IQ SPECT-CT Consists of Smartzoom Cardio Centric and 3D iterative SPECT Reconstruction and makes it possible to perform myocardial perfusion imaging scans in a short time Abstract: IQ SPECT-CT can reduce myocardial perfusion imaging the acquisition time to one fourth (14 seconds/view) that at standard SPECT procedure. Further reduction of the acquisition time to one eighth of the standard time(7seconds/view) was evaluated. Methods: 30 patients with suspected (or) diagnosed CAD underwent Rest and / or Stress study in Tc99m SestaMIBI myocardial perfusion imaging protocol. Two consecutive SPECT acquisitions 14 seconds and 7 seconds were performed. Electrocardiogram â€” Gated image were reconstructed with & without attenuation correction. Polar maps were generated and visually scored by two blinded NM physicians for image quality and perfusion defect in 17 segments. Results: Image Quality scored higher with the 14 seconds view acquisition both with and without AC. The 7 seconds image and the 14seconds image with Attenuation correction were comparable images. Where as Non Attenuated correction images are not comparable. Conclusion: Image Quality with 7seconds acquisition was found to be comparable in AC image to previously validated 14 seconds acquisition. Reduced acquisition time with comparable image quality is possible only with the use IQ SPECT with CT based attenuations. It Provide patient comfort and efficiency of the department. However needs more clinical evaluation needed.

Abstract Id: YUGP1161
Video: Laparoscopic Nerve Sparing Radical Hysterectomy For Early Stage Cervical Cancer; The Endoscopic Magnification Facilitates Better Visualization. Presenter- *Dr. Praveen Rathod
Co-author - Praveen Rathod, Chamaraj, Manjula

Video Abstract: Surgical Technique Laparoscopic Nerve Sparing Radical Hysterectomy for Early Stage Cervical Cancer; The Endoscopic Magnification Facilitates Better Visualization, Authors: Praveen Rathod*, Chamaraj, Manjula, Balasubbhy Y. Department of Gynaecology, RDT Hospital Kalyanurd, Anantpur district, AP, Correspondence*: rathodps2003@yahoo.com Abstract To avoid
Abstract Id: YUGP1162

Video: Diaphragm Stripping And Resection To Optimize Primary Cytoreduction In Advanced Epithelial Ovarian Cancer.
Presenter - Dr. Praveen Rathod
Co-author - Praveen Rathod, Sravanti, Sneha

Video: Surgical technique Diaphragm Stripping and Resection to Optimize Primary Cytoreduction in Advanced Epithelial Ovarian Cancer. Authors: Praveen Rathod*, Sravanti N, Arpita A, Sneha R, Rajshekhar K, Pallavi V R, U D Bafna. Department of Gynaecological Oncology, Kidwai Cancer Institute, Bengaluru *Correspondence: rathodps2003@yahoo.com Abstract Standard approach for medically stable advanced ovarian cancer patients should be primary cytoreduction following platinum-based chemotherapy. The aim of surgical effort should be the complete removal of all visible disease. The objective optimal cytoreduction is one of the main factors improving survival outcomes in patients affected by ovarian cancer (OC). It is estimated that approximately 40% of OC patients have gross disease located on the diaphragm. Therefore, we aim to present this video to explain the anatomy of diaphragm, steps of liver mobilization and the resection of affected peritoneum from the peripheral muscular part. &delta;Diaphragmatic stripping&delta;. The full thickness diaphragm resection toward the central tendinous area, where the diaphragm is reduced to a thin aponeurosis, often requiring a full thickness resection. Once the resection and stripping of the diaphragm have been completed. The defect is closed by a single layer continuous locking water tight sutures with prolene or PDS 1-0. The intercostal drainage may not be needed once the closure is water tight. CONCLUSIONS: We conclude with our decades of experiences; the diaphragmatic surgery at the time of primary cytoreductive surgery for advanced ovarian cancer contributes to the achievement of complete cytoreduction with low perioperative complication rate; full-thickness resection is preferable if peritoneum stripping will not achieve a complete removal of the disease.

Abstract Id: YUGP1165

Role Of Main Pancreatic Duct Diameter And Remnant Pancreatic Volume In Predicting Pancreatic Fistula After Pancreato Duodenectomy (Pd)

bowel, bladder, and sexual dysfunction, a nerve-sparing radical hysterectomy has been developed. The operation seems to be associated with prompt recovery of bladder function, minimal need for self-catheterization, and less bowel dysfunction. Introduction: From the superior hypogastric plexus located over the sacral promontory, two hypogastric nerves containing sympathetic fibers run into the small pelvis beneath the ureter and are responsible for such functions as bladder compliance, urinary continence, and small muscle contractions at orgasm. The hypogastric nerves fuse with parasympathetic fibers of the pelvic splanchnic nerves, coming from sacral roots 2, 3, and 4, to form the inferior hypogastric plexus, which is situated in the dorsal part of the parietum and the dorsal vesicouterine ligament. The parasympathetic fibers are responsible for vaginal lubrication and genital swelling during sexual arousal, detrusor contractility, and various rectal functions. Method: This Laparoscopic surgery video demonstrates the identification of the hypogastric nerves fuse with parasympathetic fibers of the pelvic splanchnic nerves, coming from sacral roots 2, 3, and 4, to form the inferior hypogastric plexus (IHP), and sparing the nerve plexuses by dissection of the uterosacral ligament to lateralise the hypogastric nerves and sparing the inferior hypogastric plexus by dissection parametrium at the level of deep uterine vein. Conclusion: The built-in natural endoscopic magnification facilitates the better visualization of pelvic nerves and guides in fine dissection of hypogastric, splanchnic, and IHP at the level of uterosacral ligament and deep uterine vein. The preservation of nerves is important to prevent post-operative bowel, bladder and sexual dysfunctions in patients with early stage cervical cancers.

Abstract Id: YUGP1167

'Cytoreductive Surgery With Hipec "As Primary Treatment Modality For Advanced Ovarian Malignancies- Our Experience
Presenter - Dr. RAMYA Y
Co-author - Dr Somashekhkar SP, Dr Shabber S Zaveri, Dr Vijay Ahuja

Abstracts

Background: Post PD mortality has declined in the recent past; however, the morbidity continues to remain high due to high incidence of POPF. A number of risk factors have been studied earlier. We studied the role of remnant pancreatic volume (RPV) and the main pancreatic duct diameter (MPDd) in predicting POPF. Methods: A total of 58 consecutive patients undergoing pancreaticoduodenectomy were recruited. After the exclusion criteria, forty three patients were included in final analysis. The diameter of pancreatic duct at neck of pancreas (MPDd) on CECT scan and the presumed RPV from left border of SMV was calculated using Siemens CT Volumetric Software. Postoperative progress was monitored till the discharge Results: There was no significant difference in patient demographics, incidence of preoperative cholangitis, biliary stenting or CA 19.9 levels between patients with or without POPF except that fistula group of patients had significantly higher incidence of pruritis. (0.0187). The overall incidence of POPF was 46.5% (20/43). (Clavien- Dindo Grade1= 13 (65%), Grade2= 3 (15%), Grade3=4(20%). The (MPDd) varied from 1 mm to 12.5 mm. (mean 4.87 Â± 2.86 mm) and the residual pancreatic volume from 12.95 cm3 to 78 cm3 (mean 39.17Â± 18.71 cm3). The incidence of POPF was significantly high, 72.7% (8/11) in patients with non dilated PD (35 cm3 had fistula rate of 56.8% compared to 35% in RPV 35 cm3) (effective risk factor) predicted the development of POPF in 83.3% cases. Conclusions: It may be concluded that patients with non dilated PD had significantly high incidence of POPF than dilated PD in patients undergoing pancreaticoduodenectomy. There was no significant difference in the RPV of patients with or without POPF. Measuring RPV, an objective criteria is better than soft pancreas (subjective criteria) in predicting the development of POPF in patient with non dilated pancreatic duct.

Abstract Id: YUGP1174

Abstracts

Modality For Advanced Ovarian Malignancies- Our Experience
Presenter - Dr. Aditya Kulkarni
Co-author - V C Jha, G R Verma, Ajay Gulati

Aims & objectives: Cytoreductive surgery with HIPEC is a novel treatment for peritoneal surface malignancies. The role of HIPEC along with optimal cytoreduction in patients with Primary Stage IIC ovarian malignancies with peritoneal metastasis is yet to be established. This study was conducted to see the efficacy of the same in Indian setup. Materials & methods: This is a prospective study, done between July 2013 to June 2017. Patients with Stage IIC carcinoma ovary underwent optimal cytoreduction with HIPEC either as frontline or as interval setting were included. The perioperative data were analysed. Results: Total of 65 patients underwent the procedure: as frontline in 24.6% (n=16) and interval cytoreduction 75.3% (n=49). Mean peritoneal carcinomatosis index was 8.5 Â± 7.45 (Range 2-30). All patients underwent total peritoneectomy. 10% patients had multivisceral resection. Cisplatin was used as the agent for HIPEC in 86%. Average surgery duration was 9 Â± 2.7 hours (Range 5.5-19). Average duration of hospital stay was 13days. Majority of patients had papillary serous carcinoma type (90%). Postoperative morbidity Grade III & IV morbidity was noted in 12-16% & 30days mortality was 4.6%. Patients with PCI score >15, multivisceral resection had higher postoperative morbidity. After a median follow-up of 20 months, 15.8% had recurrences and 5.3% patients succumbed to disease. Conclusion: Advanced ovarian malignancies with peritoneal metastasis are amenable for extensive cytoreduction and HIPEC with acceptable morbidity in Indian patients even in the primary setting. A dedicated team of surgeon, anesthetist, medical oncologist, and intensivist is mandatory for better outcome.
Discordance Rate Of Er, Pr And Her-2 In Recurrent Breast Cancer

Abstract Id: YUGP1173
Discordance Rate Of Er, Pr And Her-2 In Recurrent Breast Cancer : A Study From Tertiary Cancer Center In South India.
Presenter- Dr. Abhishek Anand
Co-author - Linu Abraham Jacob, K C Lakshmaiah, K Govind Babu

Introduction: A central component of the treatment of breast cancer is full knowledge of extent of the disease and the biological features. Estrogen receptor (ER), progesterone receptor (PR) and human epidermal growth factor receptor 2 (HER2) status are clinically used to define breast cancer subtypes and are therapeutically as well as prognostically important in the management of breast carcinoma.

The discordance of hormone receptor status (HR) and HER2 status between primary and the recurrent breast cancer specimen has been recognized in studies. In addition change in therapy based on the receptor status of recurrent disease has also been reported. Although biopsy of recurrent breast cancer has been recently recommended by international guidelines, HR and HER2 status of primary tumors are still being used in making decisions for the systemic therapies of recurrent breast cancer. Moreover, fine needle aspiration cytology (FNAC) without the IHC is a common practice for the management of recurrent breast cancer in developing counties where resources are limited. Despite the ongoing studies looking into the discordance rate and its implications worldwide the data from India is limited.

In the present study we analysed the discordance rate of ER, PR and HER2 status between primary and recurrent breast cancer at a single institute. Methods: This was a prospective study carried out at the Department of Medical Oncology, Kidwai Cancer Institute, from September 2015 to February 2017. All breast cancer patients coming with a recurrence (locoregional or metastatic) were analyzed. The immunohistochemistry (IHC) report for ER, PR, and HER2 status of the primary tumor was required for inclusion in the study. Biopsy was performed from the recurrent site and IHC study was performed on the specimen. Hormone positivity was taken as ?3+ on study. Biopsy was done from the recurrent site and IHC study was required for inclusion in the study. The immunohistochemistry (IHC) report for ER, PR, and HER2 status of the primary tumor was required for inclusion in the study.

Results: A total of 78 patients satisfied our inclusion criteria and were analyzed. The discordance rate for ER was 13.7% (n=11). Among these 3.7% had ER changed from positive to negative whereas 10% had change from negative to positive. The discordance rate for PR was higher with 28.7% (n=23). Those who had receptor changed from positive to negative was 7.5% while 21.2% had change from negative to positive. The discordance of HER2 was seen in 21.2% (n=17) with 3.7% showing change from positive to negative and 17.5% showing change from negative to positive. The receptor status and discordance rate between primary and recurrent disease have been shown in Table 1.

Conclusion: Our results show that the EndoPredict assay could be routinely performed and the results can change the treatment decisions. Long term follow up is needed for the validation in our clinical setting.
Abstracts

Studies reported in literature which has analysed the molecular pattern, but only few amongst them has elucidated in detail, the implications for molecular typing in metastatic and recurrent setting breast cancer setting. There are not much studies, on Ki67 discordance being analysed. In this prospective study we have, in depth analysed the pattern of discordance in each sites of metastasis and the response to systemic therapy and hence the prognosis. Aims And Objectives: 1.To determine ER,PR,HER 2 Neu, Ki67 from recurrent and/or metastatic sarcoma breast ,to study the expression pattern and discordance. 2.To study the degree of discordance in relation to the site of metastasis and pattern of metastasis(synchronous vs metachronous). 3.To determine the correlation of expression/discordance pattern with the response to chemotherapy. TYPE OF STUDY: Prospective analytical study conducted at centre for oncology,government royapettah hospital for a period of three years. Duration - November 2014- January 2017 Materials And Data analysis: Data analysis was done using statistical p values, Kaplan meier estimator, and calculating the 95% confidence intervals(CI). &chi;² Total No Of Patients Enrolled So Far In Study- 110 &chi;² Total No Of Patients Analysed &chi;² 110 &chi;² Total No Premenopausal Patients - 41(37.3%) &chi;² Total No Post Menopausal Patients- 69(62.7%) &chi;² Total No Er,Pr +Ve Cases: 72( Premenopausal &chi;² 19, Post Menopausal-53) &chi;² Er Negative, Pr Positive-1 &chi;² Total NO of Her 2 +ve cases- 18(premenopausal=5, post meno-13) &chi;² Luminal A- 22cases(ER+ ,PR+ ,HER2- ,Ki67

Abstract Id: YUGP1181

The Less Studied Synovial Sarcoma- An Institutional Experience Presenter - Dr. K Siva Prasad Co-author - K Meher Lakshmi , G Stalin Bala, M Lakshmi Srinivas, G Sadashivudu, G Stalin Bala

Introduction : Treating soft tissue sarcoma (STS) poses several challenges to the clinician due to varied presentation, heterogeneous biology, and unpredictable recurrences in the majority of cases. The data specifically regarding synovial sarcoma is very less as many clinical trials combine with other soft tissue sarcoma during reporting. Available data are mostly from the western countries and in the Indian subcontinent it is sparse. Hence we tried to study the clinical profile, tumor characteristics and treatment strategies used were analyzed. Materials and Methods: It is a retrospective, observational medical record based study. We retrieved medical records of sarcoma cases at our institution treated between 2010 and 2014( 5 years). Total 452 cases of sarcomas are registered and among them bone sarcomas were 250 and STS were 202 cases. We found 42 cases of synovial sarcoma and details were analyzed. Results: The mean age is 30.1 years (range 10-53 years), male to female ratio is 1.25 :1. Commonest site being lower limb region in 32 (76%) cases followed by upper limb in 6 (14%) and thorax in 4 (10%) cases. Mean tumor size is 12.6 cm( range 3-20 cms) with 6 (14%) having lymphnodes at the time of diagnosis. Among 42 cases, 9 were metastatic at the time of presentation. Thirty three resectable cases underwent local excision in 25 cases and 8 underwent amputation of local part with margins of R0 in 29 (88%), R1 in 2 (6%) and R2 in 2 (6%) cases. The commonest sites for metastasis are as follows : lung, bone and liver. Median TTP is 19 months (range 12-60 months ) and in metastatic cases the PFS is 10 months (range 1-19 months). Conclusion : Synovial sarcoma is one of the commonest type of STS in the community which requires multimodality management. Most of the recurrences occurs in first 2 years of therapy and lung is the most common metastatic site. Limitations of this study include: single institute study, selection bias, small sample size. Urgent need of new therapeutic options are required and boom of immunotherapy yet to hit in the field of STS.

Abstract Id: YUGP1177

Prospective Study On Er,Pr,Her 2- Neu,Ki67 Expression And Discordance Pattern In Recurrent And/OR Metastatic Carcinoma Breast And Its Therapeutic Implications Presenter- Dr. Maheswaran Satishkumar Co-author - PROF. S.SUDBHIA, PROF GOPU, DR S.A HUSSAIN

Introduction: The treatment of breast cancer is complex with many molecular subtypes and various prognostic factors which influence treatment response, disease progression and survival. There are few
Abstracts

**Presenter: - Mr. Shuichi Nishimura**

**Co-author - Toshio Ohashi, Kenada Tomoya, Sakayori Masanori**

Purpose: Nadir prostate-specific antigen (nPSA) after definitive radiotherapy for prostate cancer has been investigated as a predictive factor for treatment outcomes. However, nPSA usually requires several years before determination in many patients, limiting the clinical utility of nPSA as a predictive factor. Earlier markers of recurrence risk after the completion of radiotherapy would be clinically useful. In this study, we investigated the significance of nPSA within 12 months (nPSA12) after low-dose-rate prostate brachytherapy (LDR-PB) on biochemical failure (BF) or distant metastasis (DM). Methods and Materials: Between 2006 and 2014, 474 consecutive patients with localized prostate cancer were treated with LDR-PB without androgen deprivation therapy. The minimum follow-up duration was 24 months. The median age at diagnosis was 70 years. The median pretreatment PSA was 6.5 ng/ml. By NCCN guideline's risk group, 237 were low risk, 210 were intermediate risk, and 27 were high risk. BF was defined according to Phoenix definition. Kaplan-Meier method was used to estimate BF free survival rate (BFFS) and DM free survival rate (DMFS). Univariate and multivariate analyses were used to determine the significance of nPSA12 and other clinical factors on BF and DM. Results: The median follow-up duration was 61.4 months. Of the 474 patients, 19 experienced BF, and 11 experienced DM. The median nPSA12 was 0.7 ng/ml. When dividing patients according to low (0.7) and high (>0.7) nPSA12, the 7-year BFFS rates for patients with nPSA12 0.7 and >0.7 ng/ml were 99.1% and 90.2%, respectively (p = 0.004), and the 7-year DMFS rates with nPSA12 0.7 and >0.7 ng/ml were 99.5% and 94.8%, respectively (p = 0.010). Multivariate analysis demonstrated that nPSA12 was an independent predictor of BF (p = 0.004) and DM (p = 0.020). Conclusions: The nPSA12 in prostate cancer patients treated with LDR-PB is significantly associated with the risk of BF and DM. For patients achieving nPSA12 0.7 ng/mL, the risk of subsequent failure was the regional metastasis were seen in the tumor thickness and sex. On the other hand, in the univariate and multivariate analysis, there was no significant difference in the local recurrence. According to the classification by Shibuya, grade 2 soft tissue complications were observed in 4 patients and grade 2 mandibular complications in 2 patients. There were no grade 3 late complications. Conclusion: Our 10-year treatment results of IBT for early stage tongue cancer showed favorable survival and low occurrence rate in patients with severe late complications.

**Abstract Id: YUGP1203**

*Only Methyline Blue In Sentinel Lymph Node Biopsy For Early Breast Cancer - A Prospective Study.*

**Presenter: - Dr. Rakesh Ramesh**

**Co-author - Dr Ramu D, Dr Suraj Manjunath, Dr Shivakumar K**

Only methylene blue in sentinel lymph node biopsy for early breast cancer - a prospective study. Dr Rakesh S Ramesh, Dr D Ramu, Dr Suraj Manjunath, Dr Shivakumar K, Dr Rajaram B V, Dr Hemanth N, Dr Elvis, Dr Faslu Rahman. The Department Of Surgical Oncology, St.Johns Medical College Hospital, Bangalore. Background Sentinel lymph node biopsy is the standard technique for negative axilla in early breast cancer for staging and for planning the adjuvant treatment. Sentinel lymph node can be identified by Blue dye technique or radioisotope technique. Most of the oncology centers will not have the nuclear medicine facilities to do the radioisotope technique. Studies have shown that only dye technique is equally effective compared to the combined dye and radioisotope technique. Since methylene blue is cheaper than isosulphane blue and easily available - this study is an effort to look for the efficacy of methylene blue in sentinel lymph node biopsy for early breast cancer patient in a teaching hospital.

**Abstract Id: YUGP1202**

*Interstitial Brachytherapy For Early Stage Tongue Cancer: Analysis Of The Long-Term Treatment Results For Survival And Complications.*

**Presenter: - Dr. Yuki Takeuchi**

**Co-author - Yuji Murakami, Nobuki Imano, Ippie Takahashi**

The basis of this study: The basis of this study was to evaluate the long-term treatment results of interstitial brachytherapy (IBT) in patients with early stage tongue cancer. Methods and materials: We analyzed 226 patients with early stage tongue cancer treated by IBT using Ir-192 sources and Au-198 seeds between 1994 and 2009. There were 78 females and 148 males. The median age was 59 years (22-93). Histology was squamous cell carcinoma in 224 patients, others in 2. There were Tis / T1 / T2 in 3 / 67 / 156 patients. The median thickness of tumor measured by sonography was 6mm (1-22). The growth type was infiltrative / superficial / unknown in 117 / 106 / 3 patients. IBT was performed using Ir-192 in 203 patients and Au-198 in 23 patients. Median irradiation doses of Ir-192 and Au-198 were 68 GY (43-73) and 84 GY (60-99), respectively. The prescribed point of brachytherapy was at the plane 5mm from the plane of the radioactive sources. External beam radiation therapy (EBRT) was performed before brachytherapy in 72 patients. Median dose of EBRT was 30Gy (15-46). Chemotherapy was combined with brachytherapy in 88 patients. Results: Median follow up time for survivors was 129 months (44-242). The 10-year overall survival (OS) and cause specific survival (CSS) rates was 71% and 87%, respectively. The 10-year local control and regional control rates were 85% and 68%, respectively. More than 80% of the regional metastasis was occurred within 1 year, and more than 90% was within 2 years. In the multivariate analysis, significant differences in OS were seen with age, tumor thickness and having double cancer. Also, significant differences in

**Abstract Id: YUGP1209**

*Arsenic Induced Cancers : Dreadful Situations Ahead.*

**Presenter: - Dr. PRABIR BIJOY KAR**

**Co-author -**

Presenter: Dr Prabir Bijoy Kar, MS, FAIS, Oncosurgeon Chief of Oncosurgery, Barasat Cancer Research and welfare Centre, W B Visiting consultant : AMRI cancer centre, Desun Hospital, Kolkata E mail : drpbkar@yahoo.co.in Mob : 09830039032 Address for communication: 114/1, Bosepukur Purbapara Rd, Kolkata - 700107 Arsenic has been known for centuries for its various uses in several industries and also for its deleterious effects on our body. Amongst the various bad effects chronic arsenic poisoning has been found to cause cancers of skin, lungs, kidneys, stomach, liver etc. This has been studied extensively in areas where the level of arsenic is higher than the safety levels as stipulated by WHO. This includes Northern Chile, Taiwan, parts of South East Asia including India, Bangladesh etc. In India most parts of West Bengal, parts of Bihar and Jharkhand are having high levels of Arsenic in groundwater resulting in chronic arsenic poisoning. The carcinogenic effects of arsenicosis has...
been well accepted by various research agencies and environment protection bodies like IARC USEPA. Major portion of West Bengal is not having arsenic free drinking water and a vast majority of population is exposed to arsenicosis. Several families are losing their members every year due to arsenic induced cancers. Most residents of villages and semi urban areas of north-eastern part of West Bengal are destined to have cancer deaths and hence need serious thought on this. This is a preliminary study report of such patients attending our hospitals mostly with various skin changes which are at large pre-malignant conditions and often reversible by appropriate treatment. This presentation is aimed to highlight the different modes of presentations, investigations for diagnosis and treatment in early and advanced stages. If appropriate measures are taken most of these cancers can be prevented and their lives can be saved.

**Abstract Id: YUGP1211**

A Randomized Controlled Trial Comparing The Efficacy Of Methylene Blue Dye Versus Combination Of Methylene Blue Dye And Radioactive Sulphur Colloid In Sentinel Lymph Node Biopsy For Early Stage Breast Cancer Patients

**Presenter:** Dr. Vikas Gupta

**Co-author:** Dr KVKN Raju, Dr T Subramanyseshwar Rao, Dr Satish pawar

**AIMS AND OBJECTIVES:** To study the efficacy of methylene blue dye alone versus combination of methylene blue dye and radioactive colloid in sentinel lymph node biopsy for early stage breast cancer patients.

**INTRODUCTION:** Sentinel lymph node biopsy (SLNB) has become a standard of care for management of axilla in patients with early stage breast cancer patients. However the technique of SLNB is still not well defined, with some studies favouring combination of blue dye and radioactive sulphur colloid whereas others showing equal outcomes with blue dye alone. Methylene blue dye is readily available for use in patients. Radioactive sulphur colloid on the other hand is available only in select centres with nuclear medicine facilities. The purpose of this study is to find out whether we can use Methylene blue dye alone for sentinel lymph node biopsy in early stage breast cancer patients instead of combination of methylene blue dye and radioactive sulphur colloid. This is more important in the Indian context where radioactive sulphur colloid and nuclear medicine facilities are not available everywhere.

**MATERIALS AND METHOD:** Preoperatively, all patients were investigated in the same manner with routine blood investigations, bilateral mammogram and Breast lump biopsy. Exclusion criteria included radiologically (Ultrasound) non suspicious axillary lymph nodes OR suspicious lymph nodes negative on FNAC. Patients randomized into methylene blue arm were injected with 5 ml of methylene blue peritumorally in subcutaneous tissue about 10 mins prior to incision, and injection site was adequately massaged for 5 mins. Patients randomized into methylene blue and radioactive colloid arm were first injected with 1 millicurie (mCi) of filtered technetium-99m sulphur colloid ([99mTc]TSC) in a total volume of 1 mL of normal saline periareolar, intradurally about 2 hrs prior to surgery and then 10 mins prior to incision patient was injected with methylene blue (5 ml) in the peritumoral area. An intraoperative gamma-detecting probe was used to help and guide the dissection. Histopathological analysis for sentinel LNs was performed by frozen section and permanent sections with H&E (haematoxylin and eosin), whereas the non SNs were evaluated by H&E alone. STASTICAL METHOD: Data was collected and analysed by the SPSS 12.0 program. Fisher’s exact test and Student’s t test were used to compare the two groups. 

**Background**

Tobacco use is the single biggest preventable cause of death in the world. 14.6% of students use tobacco in any form (GYTS 2009). Educational short films can be used in tobacco awareness campaigns to educate people about the risks of tobacco use and to encourage them to quit smoking. These films can highlight the negative consequences of smoking, such as lung cancer, heart disease, and respiratory problems, and emphasize the importance of living a healthy lifestyle. By educating the public about the dangers of tobacco use, these films can help to reduce the prevalence of smoking and improve public health outcomes.
Radiation induced dermatitis is a common adverse effect of radiotherapy, in spite of skin sparing effect of megavoltage. Approximately 90% of the patients received radiation therapy may develop skin reaction of any grade during therapy, leading to therapy delays, diminution of patients health state and quality of life. In this study we have used topical aloe vera gel for treatment of higher grade radiation induced dermatitis. Material and Methods: This prospective study conducted on 85 carcinoma patients of head and neck, breast and cervix during year 2015 and 2016. All the patients have received EBRT on cobalt-60, at least 46 Gy. According to the RTOG skin reaction grading, patients who have developed grade III and IV skin reaction were advised to use aloe vera gel on irradiated site thrice daily with routine skin and nursing care. Results: In this study 67% female and 33% were male patients. Median age of the patients was 43.3 years (range 25-70 years). Head and neck patients were 42%, breast 23% and cervix 35%. The prescribed radiation doses were 46-70 Gy, 2 Gy per fraction, for a treatment duration 32-52 days, using a field size 80-380 cm², according to treatment site. Out of 85 patients, 65 treated with concurrent chemotherapy. Grade III (22%) and grade IV (14%) dermatitis occurs in the 5th week of radiation which causes treatment delay 2-6 weeks, according to severity and patient related factors. It was noticed that after application of aloe vera gel, dermatitis completely recovers within 3-7 days. Conclusion: Radiation induced dermatitis has to be happened due to rapid cell division in skin. In spite of skin sparing effect of megavoltage, 35-40% dose is received by skin and it increases in parallel opposing field. Till date no treatment is available which can prevent radiation induced dermatitis. In our observational study, it was noticed that topical aloe vera gel was more effective in recovery of higher grade radiation induced dermatitis.

Abstract Id: YUGP1245
Patterns Of Failure After Definitive Treatment Of Squamous Cell Carcinoma Of Oropharynx, Hypopharynx And Larynx Treated By Higher End Techniques: An Institutional Experience From Western India.
Presenter - Dr. UPENDRA NANDWANA
Co-author - NARESH JAKHOTIA, TEJPRAKASH SONI, NIDHI PATNI

Introduction: As most of the centers in India is still cobalt based, limited clinical data is available in India about the effect of newer techniques like intensity modulated radiotherapy (IMRT), image guided radiotherapy (IGRT), Rapid arc. Aim: To detect patterns of failure after definitive treatment of squamous cell carcinoma of oropharynx, hypopharynx and larynx treated by higher end techniques like IMRT, IGRT, Rapid arc. Material and Methods: Between May 2015 to 2017, fourty four patients treated by higher end techniques. 40 definitively and four postoperatively were analysed. Standard radical dose was 70Gy/35f in definitive setting while 60-66Gy/30-33f in adjuvant setting. Results: Median age was 58.5 years (range 30-82 years). Five patients had stage II, 15 patients had stage III and 24 patients had stage IV disease. 39 patients received concurrent chemotherapy either cisplatin or cetuximab and five patients did not receive any systemic therapy. Median follow up was 9.78 months (range 3-26 months). 25 patients (56.81%) out of 44 patients had locoregionally controlled disease. Seven patients had residual disease, six patients had local recurrence, six patients had nodal recurrence, one patient had both local and nodal recurrence and one patient had distant metastasis recurrence only. The 2 year rate of locoregional controlled disease (LRC) was approx 60%. The rate of overall survival and distant metastasis free survival rate were 20.53 months and 16.38 months respectively. Among the 19 patients who failed 14 patients had oropharynx as primary, 2 had hypopharyngeal primary and 3 patients had laryngeal primary. Conclusion: Our study clearly supports the use of higher end techniques like
Abstract Id: YUGP1247
Sentinel Lymph Node Detection In Early Stage Cervical Cancer Patients Using Methylene Blue.
Presenter - Dr. Vijaya Lakshmi
Co-author - Dr Narendra H, Dr Amit K Chouhan,

objective : the aim of this study is to investigate the feasibility of sentinel lymph node detection with methylene blue dye alone in early stage cervical cancer methods : in a prospective study between july 2016 and june 2017 ,15 patients with early cervical cancer (2 in stage I, 1 in stage IIa, 10 in stage IB1, 1 in stage IB2, 1 in stage IIa) underwent radical hysterectomy and pelvic lymphadenectomy. Prior to surgery 1 ml 1% methylene blue was injected at 3.6,9,12, 0 clock position peritumoral results : a mean of 3.13 sentinel nodes were detected per patient. the test has a sensitivity, specificity and negative predictive value of 97.5%,99.82%, 93.76% respectively . Most common location of detection was obturator group of lymph nodes conclusion : methylene blue is an effective tracer to detect sentinel lymph node in patients with early stage cervical cancer

Abstract Id: YUGP1249
Research In Pediatric Solid Tumor In India: Need To Focus On Basic Research And Survivorship Issues
Presenter - Dr. SUJITH KUMAR M
Co-author - ,

Background: Pediatric oncology research especially in solid tumors is limited, in spite of significant number of children treated in our country. Aim: To identify the areas of pediatric solid tumor research in the country and to compare with international research Materials and Methods: Literature search was done in Pubmed regarding the published data on pediatric solid tumors (except neurological and osteosarcoma) from Indian researchers and from all over the world during last 3 years (March 2014 to March 2017). No other literature review sites were used. Comparisons were drawn and descriptive statistics used. The final analysis was limited to neuroblastoma, retinoblastoma, hepatoblastoma, germ cell tumor and wilm tumor. Results: A total of 738 published Pubmed indexed studies were identified (Indian: 84, International: 654, 11%). The majority of studies were related to Neuroblastoma (51%) followed by Wilms tumor (19%) and Retinoblastoma (14%). Among Indian studies, Neuroblastoma and Retinoblastoma were predominant (35%) followed by Wilms tumor (19%), Hepatoblastoma (5%). Total published papers (n=738) included (in descending order), preclinical/molecular lab studies (33%), case reports/series (19%), review/ guidelines (11%) etc and survivorship studies were minimum (2%). Treatment related papers were 14% (systemic chemotherapy-6% and local therapy including surgery/radiotherapy/interventional radiology-8%). Diagnostic (imaging/pathology) studies were 9% and other clinical studies were 6%. Targeted therapy/Immunotherapy related papers constituted 5%, majority in Neuroblastoma. Indian papers included (in descending order), case series/reports (40%), review article (15%), preclinical/molecular (15%, majority in retinoblastoma) etc. No studies on survivorship issues/ targeted therapy were published. Conclusion: In this study, Indian studies on pediatric solid tumor research constituted about one tenth of international published studies with predominant type being case reports/series. In India, Preclinical/Molecular research is lacking when compared to international scenario. Globally, there is very low focus on pediatric solid tumor related survivorship issues and needs to be addressed by the pediatric oncology community urgently.

Abstract Id: YUGP1251
Comparative Study On Intra Operative Localization Of Sentinel Lymph Node In Breast Cancer Patients Using Tc 99M Sulfur Colloid And Blue Dye.
Presenter - *Dr. Vindhya Malasani
Co-author - Dr. Ishita B Sen, Dr. Vineet pant, Dr. Sugandha Dureja

Background: A sentinel lymph node (SLN) is considered to be the first lymph node which is draining the tumor site. Radioactive Tc-99m labeled sulfur colloid, vital blue dye such as isosulfan blue or methylene blue, or the combination of the both are generally used for sentinel lymph node localization. In this study, we compare the sensitivity of both the methods to establish an effective method for SLN localization. Methods: Forty patients diagnosed with stage I and II breast cancer evidenced by fine-needle aspiration, core biopsy or lumpectomy without clinically palpable lymph nodes had undergone sentinel lymph node localization by both radiocolloid and dye. 300-400kBq of 99mTc-labeled filtered sulfur colloid in 0.3â€¢0.4 mL was administered intradermally in the periaerolar region in the tumor quadrant, 30 mins â€¢ 1 h prior to the surgery. For blue dye analysis, 1ml methylene blue dye, was administered in 4â€¢6 sites, intraparenchymally, in the peritumor locations during the surgery. All lymph nodes with counts greater than 10 times that of the background counts, whether or not blue dye positive, and all blue dye-positive lymph nodes, whether or not radiocolloid positive were excised and labeled accordingly. Frozen sectioning and hematoxylin and eosin and immunohistologic (cytokeratin) staining inspection were conducted on all lymph nodes. Results: SLN localization was positive in 36 patients with radiocolloid and 34 patients with blue dye and 2 patients did not show either of the two. The sensitivity for colloid alone, blue dye alone and the combination of both the methods was 90%, 85% and 95% respectively. The concordance between blue dye and radiocolloid was 80%. Metastatic lymph node involvement was found in 13/38 (34.2 %) of patients. Conclusion: Both the radiocolloid and dye drain to the same node in most of the patients, however the sensitivity is highest with the combination of the two methods.

Abstract Id: YUGP1261
Verrucous Carcinoma Of The Penis â€“ Our Experience
Presenter - Dr. Rajendra Nerli
Co-author - Rajendra B. Nerli, Shridhar C. Ghagane, Vishal Kadiel

Introduction: Penile verrucous carcinoma is an extremely rare disease. The etiology, diagnosis and treatment of this carcinoma remain poorly understood. We report our series of pure penile verrucous carcinoma and discuss the clinical, pathological and outcome following surgical treatment. Materials & Methods: Hospital data was retrospectively retrieved in relation to patients admitted and treated for verrucous carcinoma of the penis at our center. Age at presentation, presenting clinical symptoms, biopsy techniques, histopathological reports, surgical procedure and outcome were noted and analyzed. Results: During the period, a total of 27 males with a mean age of 57.1 Â± 5.5 years were treated for verrucous carcinoma of the penis. All the 27 patients presented with exophytic lesions appearing like cauliflower, verrucous and papillary. An appropriate biopsy was performed in all and the biopsies confirmed the diagnosis of verrucous carcinoma. Twenty two (81.4%) patients partial penectomy and Five (18.51%) others underwent wide excision. All these patients were followed up and none of the patients exhibited local recurrence. Conclusion: Penile verrucous carcinoma is rare with locally invasive characteristics and complete surgical excision is the management of choice. Close follow-up is of great importance due to a substantial risk of local recurrence of the disease.

Abstract Id: YUGP1267
Influence Of Gantry Angle Increment On Head And Neck Volumetric Modulated Arc Therapy Planning And Delivery In Elekta Synergyâ€‘ With Monaco Planning System.

Co-author - Dr. SUJITH KUMAR M
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Abstracts

Presenter - *Mr. MIDHUN KUMAR K M*
Co-author - D. Manigandan, P. Mohandas, Narendra Bhalla

Aim: The objective of the study was to evaluate the influence of gantry angle increment (GAI) on planning and delivery of head and neck volumetric modulated arc (VMAT) plans. Methods/Materials: Three nasopharyngeal cancer patients treated with VMAT were chosen for this study. VMAT Dual arc (190°-340°) plans were generated for same targets with different GAs (10°, 15°, 20°, 30° and 40°) (6000cGy/30Fractions, Only Phase-1 targets were considered for study). For consistency, all plans were generated by same planner using Monaco treatment planning system (Ver.5.11) for Elekta Synergy,® linear accelerator for 6MV photon beam with 1cm leaf width at isocenter. Patient specific QA was performed for each plan using PTW OctaviousTM phantom and 2D Array729 detector and gamma pass rate (GPR) (3mm/3%) were small. For plan comparison, conformity index (CI) = Planning Target Volume (PTV) received by 95% of the Prescribed dose/volume of PTV, heterogeneity index (HI) = Dose Received by the 5% of the PTV/Dose received by the 95% of the PTV, were analyzed. In addition, mean doses to left, right parotids, Maximum dose to brainstem (DBrMax), spinal cord (DSpMax) and monitor units (MUs) required delivering a plan were studied. Results/Discussions: The average CI for PTV were 0.91±0.01, 0.96±0.01, 0.98±0.01, 0.99±0.06 and 0.96±0.01, for GAI of 10°, 15°, 20°, 30° and 40°. Similarly, HI was 1.13±0.02, 1.12±0.01, 1.10±0.01, 1.08±0.02, and 1.12±0.01. Mean doses to left, right parotids increased from 10° to 30° GAI and reduced at 40° GAI. DBrMax were 3687±253cGy, 4016±76cGy, 4020±92cGy and 3945±65cGy for increasing order of GAI. DSpMax were 4030±15cGy, 3994±21cGy, 4059±44cGy, 3956±58cGy, and 4036±21cGy for GAI of 10°, 15°, 20°, 30° and 40°. Use of higher GAI reduced the number of MU required (1069±101cGy, 966±233cGy, 921±172cGy, 893±227cGy, and 802±128cGy). Quality plans were found to be produced with the use of GAI 20°- 30° with reduction of MU and good dose coverage. Average GPR observed for all the plans was 97.5±2.0.5% and GAI was not affecting the deliverability of the plan. Conclusion: For nasopharyngeal cancers, quality VMAT plans can be achieved with GAI of 20° to 30° without compromising plan quality and deliverability.

Abstract Id: YUGP1275

A Retrospective Study Comparing Pathological Complete Response After Neoadjuvant Chemotherapy Or Chemoradiotherapy Followed By Surgery For Carcinoma Esophagus

Presenter - *Dr. Amit Patil*
Co-author - Dr. Tirathram Kaushik, Dr. Rajesh Mistry.

Aim: To study the pathological complete response rates among various histological subgroups of carcinoma esophagus treated with multimodality therapy in the form of neoadjuvant chemotherapy or chemoradiotherapy followed by surgery. Materials & Methods: All patients with biopsy proven esophageal carcinoma (either Squamous cell carcinoma or adenocarcinoma) and who underwent multimodality treatment in the Centre for Cancer, Kokilaben Dhirubhai Ambani Hospital, Andheri (W), Mumbai, India from 1st January 2010 to 30th April 2016 were included in the study. Demographic, clinical and pathological data was collected from the hospital database and analysed. To prove the statistical significance, Chi-square / Fishers exact test was used with a p value less than 0.05 considered statistically significant. Results: A total of 111 patients underwent multimodality treatment for carcinoma esophagus and were included in the study. The mean age of patients was 57.8 yrs with 71.2% males and 28.8% patients being females. Twenty nine patients underwent neoadjuvant CTRT followed by surgery while 82 patients underwent neoadjuvant CT followed by surgery. The margin positivity and rate of R0 resection was similar in both the groups. The pCR rate was 7.3% in the neoadjuvant CT group and 24.1% in the neoadjuvant CTRT group and difference was statistically significant (p= 0.038). The pCR rate was independent of the tumour histology and location. The percentage of patients with TRG 1 was 12.2% in the CT group and 31% in the CTRT group and the difference between the two groups was statistically significant (p=0.041). Conclusion: Multimodality treatment is the standard of care for carcinoma esophagus. Our data suggests that neoadjuvant CTRT improves the pathological complete response rates and tumour regression grades as compared to neoadjuvant chemotherapy.

Abstract Id: YUGP1290

Neoadjuvant Chemotherapy With Docetaxel, Carboplatin And Trastuzumb-Preliminary Analysis Of Clinical And Pathological Response Rates

Presenter - *Dr. Asoora Arunsha*
Co-author - Dr.SURESH KUMAR, Dr.MINTU MATHEW ABRAHAM.

Neoadjuvant chemotherapy with docetaxel, carboplatin and trastuzumab—preliminary analysis of clinical and pathological response rates. Introduction and background: Carcinoma of the breast is rapidly becoming the most common malignancy in India. Neoadjuvant chemotherapy in carcinoma breast is a very important and rapidly evolving topic in Clinical Oncology. In the Indian scenario, this topic is especially important as a very high percentage of our patients present with locally advanced disease, unfit for primary surgery. The evolution of neoadjuvant chemotherapy from the early regimes like CMF to the most recent recommendations schedules like TAC have been associated with higher clinical, pathological and correspondingly higher survival rates, but sadly they are associated with higher toxicities also. As pCR rates have been directly correlated with survival rates, the need of the hour is to establish chemotherapy regimens with higher pCR rates but lower toxicities. The safety and efficacy of the DCH regimen in Her2 +ve patients in the neoadjuvant setting has been tested in various international trials achieving pCR rates of >50%. This study aims to replicate the results in an Indian setting while monitoring the toxicity profile. Materials and methods: This is a single arm prospective study which included locally advanced breast cancer patients from age 18 to 70. All patients were planned for treatment with neoadjuvant chemotherapy and surgery + adjuvant Radiotherapy. All patients were proven Her2+ve by IHC/FISH testing on trucut biopsy specimens. After obtaining cardiology fitness and written informed consent, all patients were given the DCH schedule (docetaxel, carboplatin and trastuzumab) with prophylactic GCSF support. Clinical evaluation was done after every 3 cycles and after completion of 6 cycles of chemotherapy, patients underwent radical surgery and pathological evaluation. Results: 10 patients who were included in the have completed the treatment out of which 6 patients have completed surgery and have pathology reports for assessment. Among these 6 patients 5 had complete pathological response and 1 had partial response (83% pCR) out of the remaining 4 who completed 3 had complete response clinically (by RECIST criteria) and 1 had a partial response (ORR 100%). All of the patients have completed the planned treatment and no dose reduction had to be done in any patient. Only one patient had a grade 1 neutropenia in one cycle. No mucositis or cardiotoxicity was reported. Conclusion: The preliminary data from this study suggests that the DCH schedule is a well tolerated schedule which gives higher pCR rates than conventional chemotherapy schedules with reduced toxicity. Studies like this could be the herald of a paradigm shift in the neoadjuvant chemotherapy of carcinoma breast in that it not only foregoes the traditional Anthracycline and cyclophosphamide based schedules but also adds targeted agents along with Platinum, which is not an agent used in the radical treatment of carcinoma breast.

Abstract Id: YUGP1308

Role Of 18F-Fdg Pet/CT In Guiding Management Of Clinically Node Negative Neck (Cnl) In Carcinoma Oral Cavity

Presenter - *Dr. Anushree Vartak*
Abstracts

Co-author - BRIG SANJAY KAPOOR, GP CAPT P JAISWAL, COL D MUKHERJEE

BACKGROUND Conventional staging paradigm with clinical examination or imaging invariably leads to underestimation of occult metastatic neck disease in early stage oral cavity carcinoma. The advantage of 18F-FDG PET/CT over conventional staging modalities is in its ability to identify lymph nodes without morphological changes yet harbouring occult metastases. We present findings of our study conducted to evaluate diagnostic accuracy of 18F-FDG PET/CT, in detecting occult cervical lymph node metastasis in carcinoma oral cavity at a tertiary health care centre. MATERIAL & METHODS In a single institution prospective study, 51 consecutive patients with histologically proven, T1/T2 oral cavity carcinoma and no evidence of lymph node metastases (cN0) by clinical examination or imaging (USG/CT/MRI) underwent 18F-FDG PET/CT before elective neck dissection of 58 neck sides. 18F-FDG PET/CT findings were compared with histopathology of dissected nodes, to calculate sensitivity, specificity, positive & negative predictive values & diagnostic accuracy. RESULTS 18F-FDG PET/CT correctly characterized the occult lymph node metastasis status (TP +TN) in 51 of 58 neck sides, yielding an diagnostic accuracy of 87.93%. Sensitivity of 18F FDG PET/CT in detecting occult lymph node metastases was 90 % while specificity was 87.5 %. While a positive PET accurately predicted the disease in only 60% (PPV), a negative 18F-FDG PET/CT reasonably ruled out occult metastases in 97.67% (NPV). If a decision regarding the need for neck dissection had been based solely on 18F-FDG PET/CT, the number of neck dissections would have been reduced by 74.13%. CONCLUSION In early stage carcinoma oral cavity, 18F-FDG PET/CT is more accurate than conventional staging modalities in staging of neck. Based on the high negative predictive value of 18F-FDG PET/CT found in our study, incorporating 18F-FDG PET/CT in the preoperative staging paradigm of T1/T2 carcinoma oral cavity will guide in selection of patients in which cN0 neck can be safely observed.

Abstract Id: YUGP1314

Institutional Experience Of Single Stage Dual Plane Implant Reconstruction -Post Modified Radical Mastectomy : Challenges And Outcomes

Presenter - Dr. Anushree Vartak

Co-author - BRIG SANJAY KAPOOR, GP CAPT P JAISWAL, COL D MUKHERJEE

Introduction: Breast Reconstruction results have continued to improve as we have seen an evolution in mastectomy techniques from radical, to modified radical. However, currently practiced techniques of implant-based reconstruction are far from perfect. Review of current literature shows that postoperative complications with direct-to-implant sub-pectoral reconstruction remain significant. At our institute we were able to lower the risk of complications including implant loss while providing patients with a safe and aesthetically pleasing result with modification of dual plane technique. Aims: This study analyzes results of our series of patients with carcinoma breast who underwent modified radical mastectomy followed by immediate reconstruction with dual plane implant. Material & Methods: All patients who underwent single-staged dual plane cohesive silicone gel filled implant-based breast reconstruction using a Modified Stewart’s/Onko™ mastectomy incision were included. Demographics, clinical data, operative details and postoperative complications were analyzed. Results: Fifteen patients (19 breasts) underwent single-staged dual plane implant based reconstruction over the period of 3.92 yrs. The average age of the patients was 36.88 years at the time of the operation. Mean follow-up time was 13.33 months (1-47 months). Postoperative complications occurred in 3 patients which were resolved with conservative management while no cases resulted in implant loss. Implant size varied depending upon the contra lateral breast volume. Most patients were early breast cancers except 2 LABC patients out of which one had local recurrence post BCS. Both received NACT followed by adjuvant chemotherapy and radiotherapy. Four patients had bilateral carcinoma breast out of which one had hereditary breast ovarian cancer syndrome (BRCA positive). Conclusions: The results of this study show that an immediate single-stage dual plane breast reconstruction with a cohesive silicone gel filled implant can be performed with excellent aesthetic outcomes and minimal complications.

Abstract Id: YUGP1328

An Enigma Of Incidental Gallbladder Carcinoma: Single Institution Experience From A High Incidence Area

Presenter - Dr. ANKUR VERMA

Co-author - Dr Vivek Kumar Malhotra, Dr Akash Agarwal,

Introduction Incidental gallbladder carcinoma (IGBC) is an incidental finding diagnosed on histopathological examination (HPE) of gallbladder specimen removed for benign gallbladder diseases. The incidence of IGBC ranges from 0.19 - 3.3%. However, many such tumors are probably missed on either pre-operative evaluation and/or during cholecystectomy. Objectives To find the proportion of patients of IGBC who had preoperative and/or intra-operative suspicious of GBC but were subjected to simple cholecystectomy. Materials and Methods An analysis of data collected from 56 consecutive IGBC patients who presented to our centre between April 2016- May 2017 was done.A review of preoperative imaging and operative notes was done to ascertain any suspicion of malignancy-in-retrospect. Results In our study, preoperative ultrasonographies (USG) were suspicious in 39% (22/56) of patients. CECT scan was done in 13 suspicious patients based on preoperative USG and had suspicious findings in 10 patients. Majority of procedures were open cholecystectomy (39/56), one patient underwent conversion from laparoscopic to open cholecystectomy. Suspicion for malignancy (gallbladder mass, poly, dense adhesion and enlarged lymph nodes) was documented in only 15 (26.7%) patients intra-operatively. Twenty two patients had pathological T2 lesion, eight patients had T3 and only two had T1b lesion. T stage was not known in 24 patients. 17/56(30.3 %) patients were referred within one month of primary surgery 35.7% (20/56) between in one to two months, 23.3% (13/56) between two and six months and 10.7% (6/56) after six months of primary surgery. 17 out of 56 (30.3%) were advised completion surgery. Of these, eight patients underwent completion surgery, nine did not undergo surgery. Locally advanced inoperable disease was present in seven patients. Seventeen patients presented with metastasis (17/56). Fifteen patients were lost to follow up. Conclusion In patients with GBC, a radical R0 resection is the only hope for cure. Radiologists and surgeons should keep a high index of suspicion of GBC in high incidence areas. Whenever, there is any suspicion, patients should be promptly referred to centres experienced and equipped in managing these patients. Even when detected incidentally, prompt referral is very important to maximise chances of curative resection. Surgeons in these high incidence areas should be educated about the harms of performing simple cholecystectomy in patients with suspicious lesion either on preoperative imaging and/or intraoperatively.

Abstract Id: YUGP1335

Kdr Mutation: A High-Frequency Rare Mutation And Its Correlation With Other Somatic Mutations In Indian Colorectal Cancer Patients

Presenter - Mr. Mayank Jauhari

Co-author - Vani Gupta, Yogender Shokeen, Sachin Minhas

Aim: This study aims to find out the frequency of KDR mutation in Colorectal cancer patients and if any correlation exists between KDR mutation and demographical features or with other common and uncommon gene mutations occurring in Colon cancer. Methods: FFPE samples of 112 patients were analyzed using Next
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Generation Sequencing. Results: KDR was found to be mutated most frequently among the uncommon gene mutations in patients (19.6%). 21/22 patients had the p.Q472H type of KDR mutation. It was significantly associated with PTEN (p = 0.003), KRAS (p = 0.026), APC (p = 0.033), EGFR (p = 0.036), NOTCH1 (p = 0.029) and ERBB4 (p = 0.008) mutations. More number of males (22.06%) harbored KDR mutations than the number of females (15.9%). A higher number of KDR mutations in Stage III (31%) as compared to other stages 4-11 (19.23%) and IV (7.31%) was reported. KDR mutations were found to be greater number in patients with lymph node metastasis (27.3%) as compared to liver metastasis (8%). However, a statistically significant association of any clinical parameter was not found. Conclusion: Our results suggest that although KDR is a rare somatic mutation in CRC, it plays a pivotal role in the development of colon cancer via angiogenesis pathway.

Abstract Id: YUGP1339

Neoadjuvant Chemotherapy Plus Concurrent Chemoradiation Versus Concurrent Chemoradiation Followed By Adjuvant Chemotherapy For The Treatment Of Nasopharyngeal Carcinoma: A Retrospective Study

Presenter - Ms. Panchalee Phakoetsuk
Co-author - Panithan Kongsupaprisri, Siriarryapa Chachvarat, Imjai Chitapanarux

Objective: To determine whether neoadjuvant chemotherapy can improve survival rates compared to adjuvant chemotherapy in nasopharyngeal carcinoma patients. Materials and methods: A total of 162 patients with biopsy-proven nasopharyngeal carcinoma were assigned to receive neoadjuvant chemotherapy then CCRT or CCRT followed by adjuvant chemotherapy between January 2007 and December 2013 in Maharaj Nakorn Chiang Mai Hospital. The regimen of chemotherapy was platinum-based in both groups. Radiation technique was done by whether 2D or IMRT. The survival rates were assessed by Kaplan-Meier analysis, and survival curves were compared using log-rank-test. Multivariate analysis was conducted using the cox proportional-hazards regression. Results: With a median follow-up of 32.4 months, the median overall survival 14.9 months, the 3 years overall survival (OS) rate is 48.68%. The 3 years OS rates differed significantly between two groups. The 3 years overall survival rates in CCRT followed by adjuvant chemotherapy were 62.3% versus neoadjuvant chemotherapy plus CCRT 38.46% (p = 0.01, HR 1.69, 95%CI 1.16-1.43). In multivariate analysis: age separately rather reported to relay signal downward being attached to a three component module within a scaffold. In a signaling relay where activation of MAP kinase kinase kinase by ras is followed by MAP Kinase Kinase Kinase mediated phosphorylation of MAP kinase kinase which then phosphorylates tyrosine and threonine residues of a MAP kinase for its activation. Resulting MAP kinase activation triggers the phosphorylation of many gene regulatory proteins which in turns activate many genes necessary for cell growth, differentiation, proliferation and survival. Abnormalities such as permanently switched on, absence of component, extra copy number in the cells etc. from any of this signaling component mediated by mutation or any other cellular changes result in uncontrolled excessive proliferation of the cell, designated as cancer and RTK pathways malfunctioning are reportedly increasing in various cancer development now a days. Key Words: Cancer, Receptor Tyrosine Kinase (RTK), Mitogen Activated Protein (MAP) Kinase, Ras, Phosphorylation, Catalytic Cell Surface Receptors.

Abstract Id: YUGP1359

Prospective Study Of Sequential Ultra-Low Then Standard Dose 18F-Fdg Pet/CT Scans For Lung Lesion Detectability

Presenter - Dr. Ivan Thiam
Co-author - Joshua Schaefferkoetter, David Townsend, Maurizio Conti

Background Lung cancer screening with low?dose computed tomography ?CT? is better than chest X?rays but is nonspecific. Accuracy is improved with positron emission tomography ?PET?, at a cost of additional radiation. We had previously reported on simulated low?dose PET imaging and demonstrated that 10x106 net true counts is sufficient to generate images with acceptable diagnostic quality. We now hypothesize that we can maintain image quality with a 92% reduction of fluorodeoxyglucose ?FDG? tracer activity from 6 mCi to 0.5 mCi. Methods Nine patients have been scanned with two sequential PET/CT scans on the same day. The patient is first scanned with 0.5 mCi FDG and a low?dose CT protocol, followed by a routine PET/CT with 6 mCi FDG. PET data from the standard?dose scan were manipulated to emulate various noise ?dose? levels, corresponding to nine pre?defined true count levels. Data were matched to the level of the low?dose scan, to compare noise statistics to a ground truth and to directly validate our methods. The data were reconstructed, with many independent noise realizations, and the images were reviewed. Ten lesions, in seven patients, were identified as having the size and uptake consistent with those found in early disease. For a given count level, the corresponding images were determined to be acceptable if lesion detectability was comparable to that found in the full?statistic image set. Detection performance was determined automatically by machine learning, namely, convolution neural networks trained by 4 previous observer responses. Results Lesion detection accuracy was evaluated in 4458 total image sub?volumes. Regions containing both target lesions(2627 samples) and healthy lung background(1831 samples) were used to assess sensitivity and specificity at all noise levels. Results presented are stratified by true count/millions: 20. The mean sensitivities and specificities (% across the 4 observer models were 0.35, 0.63, 0.64, 0.73, 0.69, 0.79, 0.76, 0.76, 0.80, 0.84, 0.85, 0.86, and 0.84, 0.84, 0.84, 0.84, 0.84, 0.84, 0.84, 0.84. Conclusion Low?dose PET can provide good performance for lesion detection within the true count range 5?10?—106.

Abstract Id: YUGP1365

Role Of Rhoc-Rock2 Signaling In Cervical Carcinoma Radiation Response

Presenter - Dr. Sweta Srivastava
Co-author - Annapurna P; Pavana Thomas, Avinash Udayashankar

Radiation therapy plays an important role in the local and regional control of tumours. Attempts to enhance the efficacy of radiotherapy
Abstract Id: YUGP1367
The 8th Edition Of The Uicc/Ajcc Staging System For Nasopharyngeal Carcinoma Is Prognostically Useful For Patients Treated With Intensity-Modulated Radiotherapy
Presenter- Prof. Junlin Yi
Co-author - Li Gao, Jingwei Luo, Xiaodong Huang

Purpose: To evaluate the 8th edition of the International Union against Cancer/American Joint Committee on Cancer (UICC/AJCC) staging system for nasopharyngeal carcinoma (NPC) in patients treated with intensity-modulated radiotherapy (IMRT). Methods and materials: A total of 520 patients with biopsy-proven, non-metastatic NPC treated with IMRT in our institution between January 2003 and January 2010, were retrospectively re-staged with the 8th edition staging system. The distribution and the impact of T stage, N stage and clinical stage on overall survival (OS), disease-free survival (DFS), local recurrence-free survival (LRFS) and distant metastasis-free survival (DMFS) were analyzed. Results: The proportion of patients in Stage I, II, III and IVa were 35.5%, 18.1%, 46.0%, and 32.5%, respectively. The 5-year OS, DFS, LRFS, and DMFS were 97.1%, 94.5%, 93.7% and 73.9%, respectively. The differences between T1 and T2, T1 and T3, T2 and T3 were lack of significant statistically. The 5-year DMFS rates for N0-3 patients were 100%, 85.8%, 82.8% and 71.7%, respectively. The differences between N1 and N2 were lack of significant statistically. The 5-year disease-specific survival (DSS) rates for stage I-IV patients were 100%, 93.3%, 84.6% and 64.0%, respectively. The differences between I and II, I and III, II and II were lack of significant statistically. Conclusions: The 8th edition of the staging system is acceptable with regard to the distribution of clinical stage and prediction of treatment outcomes.

Abstract Id: YUGP1369
10 ÆŒkey ÆŒ Steps During Laparoscopic (Robotic-Assisted) Radical Prostatectomy Needed To Optimise Continence Recovery Post-Surgery: Analysis And Outcomes.
Presenter- Dr. Santosh Waigankar
Co-author - Tirathram Kaushik, Abhinav Pednekar, T.B. Yuvaraja.

Introduction & Objectives: Quest for maximum continence recovery after robotic radical prostatectomy (RRP) continues. As experience increases RRP procedural steps undergo modifications. We analyse the outcomes of using 10 ÆŒkey stepsÆ in laparoscopic (robotic-assisted) radical prostatectomy w.r.t urinary continence. Material and Methods: 200 consecutive RRPs performed by a single surgeon for localised prostate cancer were analysed. Two groups were formed: Group A (first consecutive 100 pts-Few key steps) & Group B (next consecutive 100 pts-All key steps) and compared. The 10 key steps [Semenal vesicle pedicle clipping, Endopelvic fascia incision, apical dissection, bladder neck dissection & reconstruction, athermal nerve sparing approach, athermal ligation of the DVC, urethral length, modified Rocco stitch, water tight vesicourethral anastomosis and dynamic lateral suspension of posterior reconstruction stitchÆ (DLSPRS)]. Patients were evaluated at 1m, 3m and 6months for continence using the Expanded Prostate Cancer Index (EPIC) urinary function scale and pad usage/day (continence defined as zero pads per day). All were taught Kegel exercises during postoperative period. Results: Patients’ characteristics and perioperative outcomes were comparable. In Group A, the continence rates at 1, 3 and 6months were 38%, 60% and 69% & in Group B it was 65%, 76% and 88% respectively. Group B had significantly higher continence at 1 and 3 months (p value 0.04). There were no complications related to these key steps. Conclusion: The ÆŒkey stepsÆ helps in improving early continence recovery. Further prospective non randomized study is underway in our institute.

Abstract Id: YUGP1371
Presenter- Dr. Santosh Waigankar
Co-author - Tirathram Kaushik, Dr. Abhinav Pednekar, T.B. Yuvaraja.

INTRODUCTION AND OBJECTIVES: The Pentaecta is a conglomerate of measure of effectiveness of robotic partial nephrectomy (RPN) in treating small renal masses. The applicability of Pentaecta for analyzing the outcomes of small renal masses 4cm and 7 cm). Tumor complexity was assigned according to R.E.N.A.L Nephrometry score. Tumors were further divided into low (4-6), intermediate (7-9) and high-risk (10-12) groups. Pentaecta included glomerular filtration rate (eGFR) decreased < 10% from baseline post-surgery, negative surgical margin, zero perioperative complications, warm ischemia time of 25 minutes and early return to work within a week. Factors predicting Pentaecta (tumor size, R.E.N.A.L Nephrometry score, experience with RPN, Charlson comorbidity score, preoperative GFR and body mass index) were analyzed. RESULTS: 120 patients met our inclusion criteria. Median age was 61 years (Range 35-69 yrs), median tumor Nephrometry score was 9 (82 low, 30 Intermediate & 8 High-risk groups), median warm ischemia time was 23 min with overall complication rate of 5% and zero positive margin rate. Pentaecta was achieved in 80% pts (96 patients). Multivariable analysis showed increasing cumulative RPN experience and increasing tumor complexity score as predictors of achieving Pentaecta. CONCLUSIONS: Robotic partial nephrectomy helps to achieve reasonable outcomes. Pentaecta rates is a good parameter to measure them. Renal Nephrometry score and surgeonÆ™s experience with RPN are good predictors of achieving Pentaecta for T1b tumors. Pentaecta rates provide us with an immediate surrogate for surgical quality. More follow up data is required to validate utility of Pentaecta as a surrogate for long-term outcomes.

Abstract Id: YUGP1377
Multi-Institutional Retrospective Analysis Of Carbon Ion Radiotherapy For Prostate Cancer: The Japan Carbon Ion Radiation Oncology Study Group (J-Cross) 1501
Presenter- Dr. Hidemasa Kawamura
Co-author - Nobuteru Kubo, Takuma Nomiya, Hiroshi Tsuji.

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Basis; Carbon ion radiotherapy (CIRT) has been started in Japan in 1994 and favorable outcomes with low incidence of adverse effects reported. Multi-institutional analysis of the patients with prostate cancer who have received CIRT as the prospective study in each institute of the Japan Carbon ion Radiation Oncology Study Group (J-CROS) was carried out. Materials and methods; Data of patients enrolled in prospective clinical trials performed at National institute of radiological science, Gunma university heavy ion medical center and Ion beam therapy center, SAGA-HIMAT foundation were retrospectively analyzed. CIRT dose and fractions were 66.63Gy(RBE) in 20 fractions, 57.6Gy(RBE) in 16 fractions or 51.6Gy(RBE) in 12fractions. All patient risks were reclassified according to the D’Amico risk classification. A short-term (about 6 months) androgen deprivation therapy (ADT) and a long-term (more than 2 years) ADT were combined with CIRT for the intermediate-risk group and the high-risk group, respectively. ADT was not combined in low-risk group. The biochemical failure was defined as a rise of >2.0 ng/mL above PSA nadir (Phoenix definition). Results; Between December 2003 and December 2014, the total number of enrolled patients from all three institutions was 2157. The number of patients in low-risk, intermediate-risk, and high-risk groups were 263, 679, and 1215, respectively. A total of 1754 patients (82%) received ADT. The median follow-up periods of surviving patients was 29 months. The five-year biochemical relapse-free survivals (% of CSS) in low-risk, intermediate-risk, and high-risk patients were 92%, 89%, and 92%, respectively. The five-year local control rates (LCR) and cause-specific survivals (CSS) in low-risk, intermediate-risk, and high-risk patients were 98%, 96%, and 99% for LCR, respectively, and 100%, 100%, and 99% for CSS, respectively. The incidence of grade (G) 2 and G3 late toxicities were 4.5% and 0% for the bladder, and 0.5% and 0% for the rectum, respectively. Conclusions; The first multi-institutional data on CIRT for prostate cancer suggested that the treatment outcomes of CIRT were favorable with less toxicity, especially in high-risk group patients.

Abstract Id: YUGP1384

Relationship Between Dose-Volume Histogram Parameters And Local Control In Ct-Based 3D Image Guided Adaptive Brachytherapy For Cervical Cancer.

Presenter - Dr. Shohei Okazaki
Co-author - Shin-el Noda, Yu Kumazaki, Ryuta Hirai

Purpose: To investigate the prognostic factors of local recurrence in cervical cancer patients treated with three-dimensional image guided adaptive brachytherapy (3D-IGABT). Materials and methods: We retrospectively analyzed the data of 104 cervical cancer patients who received definitive radiotherapy at our institute between June 2013 and October 2015. Radiotherapy consisted of external beam radiotherapy (EBRT) and brachytherapy (BT). EBRT was delivered to the pelvis with a total dose of 39.6-55 Gy (median 50 Gy). CT-based 3D-IGABT was weekly performed 3-5 session in total. At each brachytherapy session, 6 Gy or more was aimed to prescribe to the high risk clinical target volume (HR-CTV). The relationships between the prognostic factors, including stage, tumor size, histology, use of chemotherapy, total (EBRT + BT) D90 and D98 for HR-CTV, and D90 and D98 for HR-CTV at BT and local control probability were analyzed. Results: Median age was 64 years (range, 29-85 years). Eleven patients had Stage I, 51 had Stage II, and 42 had Stage III-IVa. Median initial tumor size was 5.0 cm (range, 1.0-11.0 cm). Histologically, 90 patients had squamous cell carcinomas. Seventy-eight patients received concurrent chemoradiotherapy. The 2-year overall survival rates and local control rates for Stage I/II/III-IVa patients were 100%/94%/82% and 100%/94%/85%, respectively. Eight patients developed local recurrences, and 5 of them had recurrences within HR-CTV at the first BT. Univariate analyses showed D90 and D98 for HR-CTV at BT were significant factors for local control. Local control rate was higher when HR-CTV D90 at BT was > 36 GyEQD2 (p 28 GyEQD2 (p 6.5 Gy ( 9 GyEQD2) or HR-CTV D98 > 5.5 Gy (> 7 GyEQD2) at every BT session was needed to achieve high local control probability.

Abstract Id: YUGP1386

A Reliable Nomogram Predicting Overall Survival In Triple Negative Breast Cancer

Presenter - Prof. Nina Jing
Co-author - Ming-Wei Ma, Xian-Shu Gao2,

Purpose: Currently there is no reliable nomogram to predict overall survival (OS) for patients with triple negative breast cancer (TNBC). The purpose of this study is to examine our cohort of TNBC patients and to develop the above nomogram through the correlation of clinical characteristics and pathological parameters with OS. Methods: We analyzed 340 TNBC patients between April 2009 and April 2012 at our institution. Patients who had in situ carcinoma, special type of invasive breast carcinoma and who did not receive standard postoperative treatment were excluded from this analysis. Patients with no complete clinical data were also excluded. A total of 242 patients were eligible. Age, family history, menopause, operative type, tumor size, tumor histological grade, the number of axillary metastatic lymph node, postoperative pathological TNM stage, vascular invasion, perineural invasion, CK5/6 expression status, Ki67 index and E-cadherin expression status were analyzed. Predictors were used in multivariable logistic regression analysis based nomograms to estimate the probabilities of OS. The predictive accuracy and discriminative ability of the nomogram were determined by concordance index(C-index) with calibration curve and ROC curve. Analyses were performed with SPSS and statistical software R (version 3.2.1). Results: Median follow up time was 70.73 months (range, 7.2-95.93 months). Median age was 51 years (range, 29-69 years). 32.6%, 42.6%, 24.8% of the patients were in stage I, II, III, respectively. The 3-year and 5-year OS for all patients were 86.5% (95% CI, 82.2% to 90.8%) and 81.1% (95% CI, 76.2% to 86.0%), respectively. Multivariate analyses demonstrated that age, tumor size, the number of axillary metastatic lymph node and E-cadherin expression were the independent risk factors for OS. These predictors were used in nomogram to estimate the 3-year and 5-year OS, respectively. Calibration curves for probabilities showed good agreement between prediction by nomogram and actual observation. The C-index was 0.821. Conclusion: Using clinical-pathological information, we produced nomograms which may accurately predict the 3-year and 5-year OS for patients with TNBC.
Objective: To estimate the global incidence and prevalence of Acute Myeloid Leukemia (AML) by region over the next ten years using a multi-factorial forecast model. Methods: Using a critically appraised set of country-specific cancer registries, AML incidence was estimated for 45 countries, representing approximately 90% of the world population in 2017. Observed correlations between GDP, AML risk, and survival were used to trend AML incidence over the next ten years. AML survival was trended using an attenuated function of historical trends and factoring in the anticipated uptake of newer, more efficacious treatment regimens in the future by incorporating data from two phase II clinical trials. Prevalence was estimated as a cumulative incidence over preceding twenty years with adjustments for disease-specific and competing-cause mortality for each year. To estimate incident and prevalent AML globally, aggregate estimates for each region were divided by the proportion of countries in that region for which direct estimates were made using the methods described above. The incident population was stratified by FLT3-ITD and FLT3-TKD mutation status, based on estimates from the systematic literature review. Results: The incidence of AML in Africa, Latin America, lower-income Asia Pacific countries, high-income Asia Pacific countries, Europe, and North America is 0.4, 1, 1, 2, 4 and 5 cases per 100,000/ year. The prevalence of AML in Africa, Latin America, lower-income Asia Pacific countries, high-income Asia Pacific countries, Europe, and North America is 1, 4, 4, 7, 10, and 11 cases per 100,000. Africa is expected to see the highest growth in prevalent cases over the next ten year: 33% by 2027. Conclusion: The incidence and prevalence of AML is expected to increase globally. Improvements in the survival of AML patients will result in 81 thousand additional cases surviving by 2027 worldwide.
Presenter - Prof. Raj Govind Sharma
Co-author - Dr Bhairu Lal Gurjar, Dr. Suresh Singh, Dr Pinakin Patel

Background: With Global cancer burden doubling in the last thirty years, it has become mandatory to collect epidemiological data to detect any preventable factors. Cancer Data from Rajasthan is limited.

Material & Methods: A study to find the pattern of malignancies at various sites in the body for the years 2009 to 2013 was conducted by the Dept. of Surgical Oncology, SMS Medical College, Jaipur. Data was collected from major Hospitals, Pathology centres and from the dept. of Pathology SMS Medical College, Jaipur. Only histopathology or cytology confirmed cases were included in the study. Results: A total of 34834 cases of cancers were recorded during the study period 2009-2013. Male female ratio was 1.31:1. Females in the 4th decade had more number of malignancies as compared to males. Males were maximum in 5th to 7th decade. Overall Head & Neck cancers were highest as a group (22.3%) followed by Genitourinary (19.64%) and GI tract cancers (12.43%). In females Genito urinary cancers as a group (27.15%) were highest followed by Breast (22.34%). As an individual site Breast Cancer was the commonest cancer in females followed by Cervix (9.87%). In the Head & neck region, Oral Cavity cancers were highest both in Males (25.9%) and Females (27.2%). Second commonest in Males was Larynx. In Females Tongue cancers were highest on the list of Head & Neck Cancers. In the Genito urinary group, Prostate followed by Urinary Bladder and Kidney were commonest in Males. In Female Genitourinary group, Cancer Cervix followed by Ovary and Endometrium were the commonest. In GI tract, Esophageal and Stomach malignancies were the commonest in both males and females. Followed by Ano Rectum & Colon in Males but in females Gall Bladder Cancer was the third commonest. Lung cancer as an individual site was the commonest cancer in males (5.6%). It was low in females (1.03%). It was observed that Malignancies of Unspecified Site were 3886 cases. This shows the lack of proper documentation, systematic data collection and recording. Conclusions: In the absence of Cancer Registry, an attempt has been made to compile cancer data from Jaipur region. It was felt that Cancer should be declared as a notifiable disease so that accurate data of malignancies can be obtained.

Abstract Id: YUGP1406

Mri Versus Clinical Assessment In Staging And Response Evaluation In Locally Advanced Cervix Cancer Patients Treated With Concurrent Chemo-Radiation In A Tertiary Cancer Center- A Prospective Study
Presenter - Dr. Mintu Abraham
Co-author - Dr.MINTU MATHEW ABRAHAM, DR.ARAVINDH S ANAND,

Purpose or Objective This prospective study aimed to evaluate the correlation between MRI and clinical assessment in staging and response evaluation of locally advanced carcinoma cervix. It also aimed to assess the role of MRI as a predictor of recurrence free survival. Material and Methods 58 women with locally advanced carcinoma cervix were studied from January 2014 to October 2015 after obtaining informed consent. After MRI abdomen & pelvis ,patients were started on chemo-radiation. Pelvic External beam radiation (EBRT) to a dose of 45Gy/23 fractions with concurrent weekly cisplatin 40mg/m2 was given, followed by intracavitary brachytherapy 7Gy/fraction x 3 fractions weekly once. Treatment response was assessed as per RECIST criteria clinically and radiologically with MRI after 4-6 months. Both pre and post treatment radiological evaluation was done by independent radiologists. Any suspected recurrence was subjected to MRI assessment and biopsy for proof. Results Of the 58 patients available for evaluation by RECIST criteria, 32 patients (55.2%) had complete response, 22 patients had partial response and 3 patients had stable disease. It was found that 70% of patients had complete response clinically and 15% had a partial response and only 1 patient had stable disease. While comparing clinical response assessment to MRI assessment the kappa value obtained was 0.08 signifying poor agreement. One sample t-test comparing the differences in response assessment with 0 (complete agreement) revealed a mean difference of agreement of 0.28 with a significant p-value of 0.002 (Bland-Altman analysis). Kaplan Meir survival analysis showed a recurrence free survival of 69.6%. The hazard ratio of recurrence was 8.667 times between non-responders and responders by MRI (p=0.001. 95% CI 2.82 to 35.1) and 3.667 between non responders and responders by clinical assessment (p=0.0438). Kaplan Meir analysis for recurrence free survival separately done for patients who had achieved complete response (on MRI) vs. those who did not, showed only 10.7% percent of the responders and 50 % of the non-responders had recurrence. When assessing the clinical response , it was seen that the 27.9% of the responders and 38.5 % of the non-responders had recurrence showing MRI was more useful in predicting recurrences. The kappa analysis showed a value of 0.18 for initial staging and 0.08 for response evaluation was which signified poor agreement between MRI and clinical assessment in both staging and response evaluation. Bland-Altman analysis revealed a mean difference of agreement of 0.28 (0 being complete agreement) between MRI and clinical response evaluation (p= 0.002) Conclusion There are significant differences both in staging and response evaluation between FIGO and MRI in carcinoma cervix. In assessment of response to the standard treatment, MRI was found to be a better predictor of recurrence and thus ultimately, the outcome of treatment .This study proves that MRI may be used as a tool in assessment of treatment response thus predicting patients who may go for treatment failure, and may benefit from close follow up and early salvage. Declarations Funding: None Conflict of interest: Authors have no conflict of interest to declare Ethical approval: The study was approved by the institutional human ethics committee and institutional review board. All procedures performed in the study were in accordance with the ethical standards of the institutional ethics committee and with the1964 Helsinki declaration and comparable ethical standards

Abstract Id: YUGP1408

A Confirmatory Randomized Controlled Trial With Mistletoe Extract On Overall Survival In Patients With Locally Advanced Or Metastatic Pancreatic Cancer
Presenter - Dr. Stephan Baumgartner
Co-author - Danijel Galun, Marcus Reif, Wilfried TrÄfliger

Background Current second line treatments for late-stage pancreatic cancer patients are often so toxic that their risk-benefit ratios are unfavourable. Therefore, effective but non-toxic therapeutic approaches should be examined. Mistletoe extract (ME) therapy claims to be both, effective and non-toxic. The aim of this study was to assess the efficacy of ME regarding the overall survival (OS), quality of life (QoL), and safety in patients with locally advanced or metastatic adenocarcinoma of the pancreas. Methods In this randomized study (ISRCTN70765082) patients were stratified according to a binary prognosis index and evenly randomized to receive s.c. injections of ME (Iscedor® Qu) in a dose-escalating manner from 0.01 mg up to 10 mg three times per week, or no antineo-plastic therapy (control). All patients received best supportive care. The primary endpoint was 12-month OS. Results Baseline characteristics were well balanced between the ME and control group. Median OS for ME versus control patients was 4.8 vs. 2.7 months (prognosis-group adjusted hazard ratio, HR=0.49; p
Abstract Id: YUGP1412

&EQ;Experimental Non Randomized Study On Effectiveness Of &EQ;Instructional Strategy&EQ; On Knowledge, Practice And Quality Of Life Of Head And Neck Cancer Patients Receiving Radiotherapy in Selected Cancer Research Institute, Uttarakhand.&EQ; 

Presenter- &Ms. KAVETA NIGAM &Co-author - Prof. KAMLI PRAKASH, PRIYA JPN, &EQ;Experimental Non Randomized study on Effectiveness of &EQ;Instructional Strategy&EQ; on knowledge, practice and quality of life of Head and Neck Cancer patients receiving radiotherapy in selected Cancer Research Institute, Uttarakhand.&EQ; Kaveta Nigam, Kamli Prakash, Priya JPN Nursing Tutor, Vivekananda College of Nursing, Associate professor, Himalayan College of nursing ABSTRACT The cancer is a disease of cell in which the normal mechanism of the control of growth and proliferation has been altered. Annually, nearly 3,000,000 people die of cancer in India. The Indian Council of Medical Research said in 2016 the total number of new cancer cases is expected to be around 14.5 lakh and the figure is likely to reach nearly 17.3 lakh new cases in 2020. Over 7.36 lakh people are expected to succumb to the disease in 2016 while the figure is estimated to shoot up to 8.8 lakh by 2020. Data also revealed that only 12.5 per cent of patients come for treatment in early stages of the disease. Purpose: The Purpose was to educate the patients with Head and Neck Cancer undergoing radiation therapy about management of side effects to improve their quality of life. Cancer is one of the leading causes of adult deaths worldwide. In India International Agency for Research on cancer estimated that average life expectancy of Indian population will increase to 70 Years by 2021-25. In India more than 75% cases of oral cancers are associated with smoke and tobacco consumption. According to the National Cancer Institute, head and neck cancer accounts for nearly 3 to 5 percent of all cancer in the United States. These types of cancer are more common in men and in people older than age 50. Around 47,560 men and women in this country develop head and neck cancer every year.1 Cancers that are known collectively as head and neck cancers usually begin in the squamous cells that line the moist, mucosal surfaces inside the head and neck. Cancers of the head and neck are further categorized by the area of the head or neck in which they begin. Oral cavity, Pharynx, Larynx, Paranasal, sinuses and nasal cavity, Salivary glands.2 The three main types of treatment for managing head and neck cancer are radiation therapy, surgery and chemotherapy.3 Surgery, where a part or all of the tumor or cancer cells are removed. Chemotherapy, where certain drugs are used to kill cancer cells. Radiation therapy works in two ways: Radiation can stop or slow the growth of the cancer. Radiation can shrink tumors, reduce some symptoms, and relieve pain.1 Nurses in radiation therapy departments apply evidence-based practice when providing on patient and family education and managing side effects.4,5}
Abstract Id: YUGP1420

Immunological Effects Of Laparoscopic Colo-Rectal Surgery - A Leap in Lap
Presenter - Dr. Sanjeev B Kulkarni
Co-author - Dr Chandramohan k ,

INTRODUCTION: Laparoscopic approach has developed into an interesting therapeutic alternative as it allows for rapid return to preoperative activity with significantly shorter hospitalisation due to limited surgical trauma. Despite promising clinical results, only limited information is available regarding perioperative immunological effects of laparoscopic surgery when compared to open colorectal surgery. This is one of the first study conducted in India. AIMS & OBJECTIVES: The objective of our study was to compare the immunological effects of laparoscopic surgery with open colorectal surgery. METHODS: A prospective study was conducted on 52 patients. All were above 18 years and had no metastatic Colo-rectal malignancy treated with curative intent. Patients with known immunological dysfunction, on immunosuppressants were excluded. Blood samples were taken from all eligible patients on pre-op day and POD 1, 3 and 5. CRP was done and NK cells were quantified by profiling of CD3-CD16+ and CD56+. Minimally invasive Colo-rectal surgery was performed as a laparoscopic-assisted procedure with removal of the resected specimen via a horizontal Minilaparotomy or Perineum in case of APR. Conventional colorectal surgery was performed via a vertical midline incision. After removal of the resected specimen, stapler or hand sewn anastomosis was performed. RESULTS: Serum CRP showed trend towards being better in terms of having a better body image perception. Patients undergoing MRM in turn tend to perform better in terms of having a better future perspective of their disease. Disclosure: Conflict of interest-none Copyright of abstract assigned to IICC-2017 Address of author: Dept of surgical oncology, Regional Cancer Centre, Trivandrum-695011 Mail id-drnitishrahra05@gmail.com

Abstract Id: YUGP1424

Use Of 18F Fluorodeoxyglucose Positron Emission Tomography In Assessing The Treatment Response Of Neoadjuvant Chemoradiation/Chemotherapy In Locally Advanced Esophageal And Gastroesophageal Junction Cancers
Presenter - Dr. RAJIV PAUL
Co-author - ASIF SYED, NIKHIL GUPTA, SHIVENDRA SINGH

Background: For patients with locally advanced esophageal carcinoma undergoing neoadjuvant chemoradiation/chemotherapy followed by surgical resection, complete pathological response is associated with favorable overall survival(OS). PET scan is considered an important modality in staging of esophageal cancers. Off late, its use in assessing the response of neoadjuvant therapy is coming up. Whether the radiological response shown in PET scan before and after neoadjuvant chemoradiation or chemotherapy actually transforms into histopathological response and whether it would act as a predictor of overall survival is yet to be established. Aim: To evaluate the role of positron emission tomography (FDG-PET) in assessing the response to neoadjuvant chemoradiation/ chemotherapy and comparing it with histopathological response and its relation to overall prognosis. Methods: Retrospective data from October 2011 to December 2016 of operable patients with locally advanced carcinoma esophagus or gastroesophageal junction cancers was analyzed. All patients underwent FDG PET for initial staging and 4-6 weeks after completion of neoadjuvant chemoradiation or chemotherapy followed by definitive surgery. Results: The study included 96 patients. Most tumors were squamous cell carcinoma (62%) and stage T3(75%). All patients received neoadjuvant treatment (68 chemoradiation and 28 neoadjuvant chemotherapy). Post neoadjuvant treatment, PET scan showed complete metabolic response in 31 patients (32%), good response in 61 patients (63%) and stable disease in 4 patients (5%). 28 patients (29%) showed complete pathological response, 44 (46%) showed partial response and 24(25%) showed no response at all. PET CT response did not corroborate with the final histopathological response (p=0.235). Overall survival of patients showing complete metabolic response is 512.87 days. 526.7 days for patients with good response, 2 out of 3 patients with stable disease have expired. Conclusion: FDG PET response to neoadjuvant treatment in carcinoma esophagus and GE junction does not effectively correlate with the final histopathological response and to overall survival. Surgical decision should not be based on PET CT response and should be offered to all the patients irrespective of metabolic response.

Abstract Id: YUGP1426

Surgical Morbidity Associated With Neck Dissection In Oral Cavity Cancers
Presenter - Dr. Sanjeev B Kulkarni
Co-author - Dr Nivedita Sharma, Dr Paul Sebastian, Dr Nebu Abraham George

BACKGROUND Owing to high incidence of oral cavity cancer in India, neck dissection is the most commonly performed procedure in any head and neck oncology setup. Therefore, it is imperative that complication of such surgery and its attendant morbidity should be analysed and every effort should be made to minimise them. AIM To study the various short term and long term morbidities associated with neck dissections at Regional Cancer centre, Trivandrum. MATERIAL AND METHODS A total of 105 cases of oral cavity cancers who underwent neck dissection between 1 January to 31 December 2015 at surgical oncology division, RCC were evaluated prospectively and were followed for 6 months. Demographic data, tumor characteristics, type of neck dissection, complications including nerve injury and vascular injury were recorded. RESULTS Of 105 patients, 73% underwent selective neck dissection and 27 % modified radical neck dissection. Marginal mandibular weakness was recorded in 17 % cases at 6 months. Most had only slight angle of deviation while smiling, with only 2 patients had drooling of saliva. Phrenic nerve palsy as determined by chest xray was present in 4.7% in immediate post op which decreased to 2.8 % at 6 months. No patient developed any pulmonary complication. 13% patient had shoulder dysfunction at 6 months and no correlation was found between type of neck dissection, contrary to what proposed by many studies. There was no chyle leak and only one patient developed IJV thrombosis in immediate post-op period and that too resolved at 6 months. Current study showed that wound infection developed in 5 patients, with 3 of whom had uncontrolled diabetes status . Also, wound complications were found to be significantly higher in MRND group compared to SND CONCLUSION Majority of complications in present study were
lower or same as recorded in previous studies. Also, there was no significant correlation with type of neck dissection except for wound complications. Despite the best planning, complications can still occur but their impact can be minimised by a vigilant, proactive and protocol driven approach in perioperative period.

Abstract Id: YUGP1438

**Determination Of Planning Target Volume Margin Using Implanted Fiducial Based Daily Marker Matching For Dose Escalated Image Guided Radiotherapy In Patients Of Prostate Cancer**

**Co-author - NEERAJ RASTOGI, K J MARIA DAS, SHALEEN KUMAR**

Objective: Image guided radiotherapy (IGRT) is current standard of care in locally advanced prostate cancer patients. We analyzed 12 consecutive patients of prostate cancer treated by dose escalated IGRT using 3 implanted fiducial marker daily matching to generate planning target volume (PTV) margin in our setup. Material and methods: Three gold fiducial markers were placed under transrectal ultrasonography by an experienced uro-oncologist, first at the base of right lobe, second at middle of left lobe and third at the apex of right lobe. At least one week gap between fiducial marker placement and radiotherapy planning CT scan was kept to take care of localized edema and marker shift. Patients were immobilized using knee rest in supine position. When pelvis lymph nodes were treated, Radiotherapy (RT) volume was the whole pelvis to a dose of 50.4 Gy/28f followed by prostate boost 26Gy/13f by IGRT. For tumor limited to prostate only, prostate only RT to a dose of 76Gy/38f by IGRT was delivered. A Population based PTV margin of 10 mm was given in all direction except posteriorly where 5 mm margin was given. Daily on board KV images (OBI) were taken before treatment and on line shifts were applied before treatment. Analysis of data sets of Daily on board KV images (OBI) was done. Systematic error, random error and PTV margins in medio-lateral, cranio-caudal, anterior-posterior direction were calculated using Von Herk formula. Results â€“ Analysis of the our data revealed Systematic error in medio-lateral, cranio-caudal, anterior-posterior direction was 2.94, 3.48 & 2.31 mm and random error was 3.74,3.63 & 2.66 mm and PTV margin required using Von Herk formula was 9.97,11.24 and 7.64 mm in medio-lateral, cranio-caudal, anterior-posterior direction respectively. Conclusions â€“ Population based PTV margin may not be accurate for dose escalated IGRT using 3 implanted fiducial marker matching in prostate cancer patients and generation of its own PTV margins by each institute is desirable.

Abstract Id: YUGP1440

**Chemoradiotherapy With Brachytherapy Boost For Anal Canal Carcinoma Treated At Tertiary Cancer Center In India: A Single Institution Experience.**

**Presenter - Dr. Vinay Babu AV**

**Co-author - Dr V Kannan, Dr Vivek Anand, Dr Ranjeet Bajpai**

Chemoradiotherapy with Brachytherapy Boost for anal canal carcinoma treated at tertiary cancer center in India.a single institution experience. Dr V Kannan, Dr V Anand, Dr R Bajpai, Dr Vinay Babu, Dr Ajay Kolte, Dr S Goswami, S Deshpande, Dr A Kapadia, Dr S Almel, Dr M Shaikh, Dr M Lala. P.D. Hinduja Hospital, VS Marg, Mahim, Mumbai, 400016. Purpose:The aim of this study is to determine overall survival, disease-specific survival and stoma-free survival after treatment of anal canal cancer with chemoradiotherapy followed by brachytherapy boost. Methods: A total of 17 patients with histologically confirmed anal canal cancer, who received concurrent chemoradiotherapy followed by HDR brachytherapy boost from May 2005 until December 2016, were analyzed. 70.6% patients had squamous carcinoma histology and remaining 29.4% patients had adenocarcinoma. 11 pts were T2 (64.7%) and 6 pts (35.3%) were T3. Two patients (11.8%) presented with inguinal lymph node involvement. 12(70.6%) patients were treated with IMRT, 2(11.8%) patients with 3D CRT and 3(17.6%) patients received conventional treatment. After chemoradiation, all patients were treated with HDR brachytherapy to a dose of 8Gy-16Gy in 2-4 fractions over 2 days. The primary end point was overall survival; secondary end points were progression-free survival, colostomy free survival, safety and tolerability. Results: Among 17 eligible patients, median planned dose of radiation was 45Gy over 5 weeks, range 30.0 to 55Gy, and median brachytherapy boost was 10Gy. Median follow-up was 42 months (range; 4-101 months) and 64.7% of patients had no evidence of relapse. 5-year overall survival, disease-free survival and stoma-free survival were 68% (95%CI, 54.9-93.8%), 62% (95%CI, 46.7-88.9%), and 82.3%, respectively. Three patients (17.6%) had an abdominoperineal resection with definitive colostomy. Conclusions: Outcomes of patients with anal canal cancers treated with concurrent chemoradiation followed by brachytherapy boost in our institution were comparable to the available data in the literature. Keywords: Anal cancer, Brachytherapy, Chemoradiation, Overall survival, Stoma free survival, Squamous cell carcinoma.

Abstract Id: YUGP1448

**A Case Of Adult Wilms Tumor**

**Presenter - Dr. Vijayakumaran Subramaniam**

**Co-author - Prof. Dr.K.KALAIHELVI, Dr.S.SURESHKUMAR, Dr.G.RAJA**

INTRODUCTION: Wilms tumour is the most common renal tumour in children. Wilms tumour in adults is extremely rare; accounts for less than 1% of all Wilms tumours. There are diagnostic and therapeutic difficulties in older age group. Histopathologically, there is no difference between adult and childhood Wilms tumour. Because of the paucity of literature, there are no standard protocols for the management of adult Wilms tumour, and therefore, it is managed as per paediatric Wilms tumour. CASE REPORT: 64 year old female presented with left sided flank pain and haematuria of 6 months duration. On evaluation CT scan abdomen showed exophytic well defined mass lesion arising from lower pole of left kidney. She underwent left radical nephrectomy and pathology was reported as adult Wilms tumour with strong positivity of WT1 on IHC (Immuno Histo Chemistry). Bone scan showed metastasis in L2 and L3 vertebra. Patient received palliative radiotherapy to spine metastases and she is now on chemotherapy as per NWTS-5, stage 4 protocol. This case is presented for its rarity. KEY WORDS: Adult Wilmsâ€™ tumour, Renal tumour, Nephroblastoma.

Abstract Id: YUGP1450

**Olanzapine Ondansetron Dexamethasone Regime Versus Aprepitant Palonosetron Dexamethasone Regime For The Prevention Of Chemotherapy-Induced Nausea And Vomiting: A Single Institute Based Study**

**Presenter - Dr. Vishnu Harilal**

**Co-author - dr rajesh kumar, dr vishnu h lal, dr h.s kumar**

Abstract BACKGROUND: CINV is a daunting problem for all patients receiving chemotherapy, especially highly emetogenic drug based chemotherapy. The background for this study are the recent phase 3 studies which proved the efficacy of olanzapine as a highly effective antiemetic agent in the CINV setup and hence its recent inclusion in NCCN guidelines. This study would compare a highly Economical regime comprising of olanzapine , ondansetron and dexamethasone (OOD) against the very popular but more costlier aprepitant palonosetron dexamethasone (APD) regime . Though many studies have proved that ondansetron is slightly inferior to palonosetron in the CINV scenario , this study would see whether this shortcoming can be compensated with the wide antiemetic spectrum of olanzapine. The study would also try to include a larger sample size and see
Evaluation Of 100 Cases Performed At A Single Institute. Dynamic Lateral Suspension Of Posterior Reconstruction Suture were noninferior to the APD regimen and also is cost effective. in patients on highly emetogenic chemotherapy. CR rates in OOD was comparable to APD in the control of CINV. DISCUSSION: In this delayed, and 41% overall. There were no grade 3 or 4 toxicities. OOD 61 patients receiving the OOD regimen. CR was 81% for the acute response (CR) (no emesis, no rescue) was 85% for the acute period and 26(45%), 19(33%) in OOD, APD arm respectively. Complete CR was 81% for the acute period, 74% for the delayed period, and 69% for the overall period in 58 patients receiving the APD regimen. Patients without nausea (0, scale 0-10, MD Anderson Symptom Inventory) were OOD: 80% acute, 51% delayed, and 51% overall; APD: 78% acute, 50% delayed, and 41% overall. There were no grade 3 or 4 toxicities. OOD was comparable to APD in the control of CINV. DISCUSSION: In this study, OLN combined with a single dose of DEX and a single dose of OND was very effective in controlling acute as well as delayed CINV in patients on highly emetogenic chemotherapy. CR rates in OOD were noninferior to the APD regimen and also is cost effective.


Introduction & Objectives: Post-prostatectomy urinary incontinence has an effect on the patientâ€™s quality of life and can be associated with moderate to severe postoperative morbidity. Search for techniques to achieve maximum continence after robotic radical prostatectomy (RRP) is ongoing. In this study we evaluate a novel technique â€œDynamic lateral suspension of posterior reconstruction suture (DLSPRS)â€œ after vesico-urethral anastomosis during robotic radical prostatectomy and compare early continence rates in patients who underwent DLSPRS versus those with only posterior reconstruction group (PRS). Material & Methods: Continence rates of 100 consecutive patients who underwent DLSPRS was compared with 100 patients with PRS. In brief technique include posterior Rocco repair of sphincter complex. After urethrovaginal anastomosis is completed, needles of posterior suture are passed through levator ani muscle and lateral arcuate ligament pulled to elevate the entire sphincter complex. It is presumed that while contracting levator ani muscle and lateral arcuate ligament pulled to elevate the entire sphincter complex. It is presumed that while contracting the entire sphincter complex elevates still further helping continence mechanism. Early continence was assessed with self-administered questionnaires (Expanded Prostate Cancer Index Composite) at 1, 3 and 6 months. Results: Patients' characteristics and perioperative outcomes were comparable. In DLSPRS group, the continence rates at 1, 3 and 6 months were 65%, 76% and 88% in PRS group it was 38%, 60% and 69% respectively. DLSPRS group had significantly higher continence at 1 and 3 months with p value of 0.04. There were no complications related to suspension of posterior

Abstract Id: YUGP1458 Robotic-Assisted Laparoscopic Radical Cystoprostatectomy With Neobladder Formation (Modified Karolinska Technique): Surgical Technique & Outcomes In A Single Institute Series. Presenter- Dr. Yuvaraja TB Co-author - Santosh Waigankar, Abhinav Pednekar, Vinayak Wagaskar

Introduction & Objectives: At present, robotic assisted laparoscopic orthotopic neobladder is emerging as the preferred and challenging method of urinary diversion. We share our single-institute experience of Robotic assisted neobladder reconstruction. Materials and Methods: Robotic assistance was used to construct a studer pouch in 20 cases of muscle invasive bladder cancers using the Modified Karolinska technique. Steps of Technique includes isolation of terminal ileum loops, Urethralâ€œneobladder and enteric anastomosis, ileal detachment, Posterior wall Construction, Anterior wall folding and construction, Uroteroenteric anastomosis (Brickerâ€™s), Ureteric stent and suprapubic catheter. Final anterior wall completion. Extended pelvic lymph node dissection was done in all cases. The follow-up period was 6months to one year. Results: Mean operating time was 190.4 minutes (range 180 to 220), blood loss was 460 cc (range 200 to 600) and hospital stay was 10 days. Clavien-Dindo Complications [Minor (Grade I & II) & Major (Grade III and above)] were 11% and 6% respectively upto 30days and 6% and 1% respectively between 30 - 90 days. Mean nodal yield was 24 (range 15to 30). Final diagnosis showed pT1-pT2 and pT3 aâ€œpT4 in 0% and 14% of specimens with a node positivity rate of 7% and no positive surgical margins. During follow-up there was no evidence of tumor recurrence. The day-time continence and potency at 12months was 72% and 80% respectively. Conclusion: This technique has good functional and oncological outcomes and appears to be a viable alternative to an open approach, offering patients the advantages of a minimally invasive approach.

Abstract Id: YUGP1460 The Role Of Flt-Pet/Ct Scan In Avoiding Radical Surgery In Masquerading Pancreatobiliary Lesions Presenter- Dr. Gautham Krishnamurthy Co-author - Vineeth Kumar, Ganga Ram Verma, B R Mittal

Background Gallbladder cancer in endemic in northern India, hence, to be on safer side, surgeons tends to perform radical resections even in benign lesions, i.e. XGC and resolving acute cholecystitis, masquerading as malignancy. Conventional imaging including FDG PET CT scan fails to differentiate benign from malignant pancreato biliary pathology. Our pilot study had shown that functional imaging with 3'-Fluoro-3'-deoxythymidine (FLT) PET CT scan can differentiate with accuracy of 92% and it has potential to avoid radial surgery in benign pancreato biliary lesions. Methodology Patients suspected of pancreaticobiliary malignancy admitted from July 2012 to Dec. 2016 were included. Diagnosis was made on clinical examination, contrast-enhanced computed tomography (CECT) abdomen and ancillary investigations. FDG-PET/CT and FLT-PET/CT was done in all patients. Management decisions were based on clinical evaluation and conventional imaging including FDG PET scan. Surgeons were blinded to the results of FLT-PET/CT scan. Histopathology of the resected specimen or fine-needle aspiration cytology (FNAC) in inoperable cases was considered as the gold standard for the final diagnosis. Results A total of 42 patients harboring 44 lesions of suspected pancreaticobiliary malignancy were included in the study. It
Abstract Id: YUGP1462

Robot Assisted Laparoscopic Radical Prostatectomy In Patients With Previous History Of Transurethral Prostate Resection (TURP): Single Centre Experience And Outcomes.

Presenter- *Dr. Ninad Gadekar*
Co-author - Amol Padegaonkar, Abhinav Pednekar, Santosh Waigankar

Abstract Id: YUGP1466

Robot Assisted Partial Adrenalectomy For Adrenal Tumours À€€“ Single Centre Initial Experience

Presenter- *Dr. Ninad Gadekar*
Co-author - Amol Padegaonkar, Abhinav Pednekar, Santosh Waigankar

Introduction & Objective: Recent reports in literature have described adrenal-sparing surgery as a surgical option for patients with hereditary syndromes, small benign lesions or bilateral tumors to preserve unaffected adrenal tissue. We report our early outcomes & experience of robot assisted partial adrenalectomy (RAPA) technique. Materials and Methods: We performed 5 RAPA procedures on 4 patients presenting with bilateral pheochromocytoma in one patient (two settings), two patients with Cohnâ€™s syndrome and one patient with adrenal adenoma at our institute between 2012 and 2017. Surgical approach included transperitoneal approach, exposure of adrenal gland, careful excision of mass, and haemostasis by clips, cautery and suturing the cut edge. Results: Mean age of the patients was 32 years (24-48), mean console time was 80 mts (60-130), mean blood loss of 60 ml (30-100), mean hospitalization of 3 days (2-5). Patient with pheochromocytoma had hypertension during surgery which was controlled. There were no other intra- or post-operative complications. Frozen section was not done. Functional assessment was normal in all other patients except one with adrenal adenoma in whom studies were not performed. At median follow up of 18 months (5-32), none of the patient had biochemical or local recurrences. Conclusions: RAPA is feasible, safe and provides encouraging functional and oncologic outcomes in patients with a adrenal lesion/s. It may decrease the risk of the development of adrenal insufficiency. Our experience showed good short term outcomes. However more number of patients with long term outcomes data is necessary.

Abstract Id: YUGP1468

Da Vinci Robotic Assisted Laparoscopic Hemi-Nephrectomy For Upper Pole High Risk Tumors: Single Centre Experience.

Presenter- *Dr. Yashasvi Choudhary*
Co-author - Kalyan Chakradh, Abhinav Pednekar, Santosh S. Waigankar

Introduction & Objectives: Da Vinci Si Robot assisted laparoscopic Heminephrectomy is gaining popularity in managing high risk upper polar renal tumours. It reduces the technical difficulty of parenchymal suturing during renorrhaphy. We aim to present the single centre experience & outcomes of Laparoscopic (robot assisted) heminephrectomy. Methods: We analyzed 12 heminephrectomies (5-Left and 7-right sided) done from 2012 to 2017 for 12 Renal tumors (8- INCIDENTAL & 4-hematuria) (All upper pole tumors) in 12 male patients. Our surgical approach included colon resection, hilar dissection, tumour identification, tumour scoring, arterial clamping, tumour dissection, inner and outer renorrhaphy with PCS closure, declamping and specimen retrieval. These were then analyzed for intra- and post-operative parameters. Results: The mean age was 42 years (24-54). The median RENAL Nephrometry score was 10P with angiography showing single renal artery. The mean age & eGFR of cancer patients who underwent radical cholecystectomy. Median age of the patients was 52 (range 22-78). Male to female ratio was 1.78. Upfront surgery was undertaken in 63 (42.5%) patients while revision surgery was performed in 85 (57.4%) patients with incidentally detected GBC. Adjacent organectomy was undertaken in 32 patients (bile duct resection in 21, colectomy in 5, tangential duodenal resection in 4, partial diaphragmatic resection in 1, and pancreaticoduodenectomy in 1 patient). Common postoperative complications were surgical site infection (n=10) and bile leak (n=5). There was no perioperative mortality. Median lymph nodes harvested were 16 (range 3-32). Margins were positive or close (p...
Abstract Id: YUGP1470

Robot Assisted Laparoscopic Radical Prostatectomy In Prostates With Large Median Lobe: Single Centre Experience & Outcomes.

Presenter - Dr. Yashasvi Choudhary
Co-author - Kalyan Chakradhar, Abhinav Pednekar, Santosh S. Waigankar

Introduction & Objectives: Large prostate size and median lobes may pose technical challenges during robot-assisted laparoscopic prostatectomy (RALP). We describe our single-institute experience with prostates with median lobe during RALP. Materials and Methods: A retrospective review of 360 consecutive patients who underwent robot-assisted radical prostatectomy at our institution from Jan 2012 to Jan 2016 was performed. Of these 20 (4.1%) had enlarged median lobe. These 20 patients (Group 1) were compared with 20 consecutive patients without a median lobe (Group 2) in terms of preoperative parameters, intraoperative parameters, and the pathologic and clinical outcomes. Follow-up period from 6 months to 12 months. Results: Group 1 showed an increase in the operative time required for bladder neck dissection or anastomosis (including reconstruction) but it was insignificant (164 v/s 170 mins p=0.013). Average blood loss was not significant between two groups (100ml v/s 120ml p=0.0142). In group 1 all patients required bladder neck reconstruction compared to 2 (6%) in group 2. The Gleason score and the prostate size in the specimen were not different (60 cm3 versus 26 cm3; P = 0.782). The surgical margins were negative in all. No difference was found in the postoperative urinary bother score (p=0.0221). The post-operative urinary function and sexual function recovery rates were similar between the two groups. Conclusion: Although median lobe prolonged RALP procedure times and increased EBL, it did not affect PSW or urinary and sexual function. Robotic assistance helps to deal with the complexities of dealing with enlarged median lobe during RALP.

Abstract Id: YUGP1472

Phyllodes Tumour Of The Breast: Analysis Of 30 Cases From A Single Institution

Presenter - Dr. Nived Rao Balmoori
Co-author - Dr. Yugandar Reddy, Dr. M. Ramesh, Dr M. Srinivasulu

Author - Dr. Nived Rao B, Mch post-graduate, Dept. of Surgical Oncology, MNJ Institute of Oncology and Regional Cancer Centre, Hyderabad-500004. E-mail: nivedraob@gmail.com and phone no.: 09049597778. Background: Phyllodes tumor, previously known as cystosarcoma phyllodes, is a rare fibro-epithelial tumor of breast constituting

Abstract Id: YUGP1478

Limb Salvage Surgery And Extracorporeal Radiotherapy For Metaphyseal Bone Malignancy : A Case Report

Presenter - Dr. Niju PEGU

Background En-bloc resection, extracorporeal irradiation, and re-implantation in limb salvage for bony malignancy is an oncologically safe option, without compromising long-term survival. This method was first reported by Spira and Lubin. This treatment is an alternative to replacement by prosthesis or allograft bridging techniques. One area of concern is avascular necrosis and resorption of the graft. Patient and Methods A young boy with ewing sarcoma of upper end ofibia planned for limb salvage surgery with megaprostesis but megaprostesis not used due to unaffordable .They also refused to give consent for amputation. The methods involved wide en-bloc resection of the tumour, curettage of the tumour from the resected bone, extracorporeal irradiation and re-implantation of the irradiated bone and fixation with plates and screws. The resected segment is wrapped in 2 wet sterile drape to minimise air gaps and placed in polycarbonated box and delivered for radiotherapy. The segment has a single midplane dose of 50 Gy at a rate of 1.8 to 2.0 Gy per minute and reimplanted. Conclusions A biological reconstruction with a precise anatomical fit is possible even in metaphyseal tumour and long term endoprosthetic problems and maintenance of bone banking facilities for allografts are avoided. Extracorporeal irradiation is an oncologically safe and inexpensive technique for limb salvage even in metaphyseal sarcoma with a considerable functional outcomes.

Abstract Id: YUGP1482

Clinical And Oncological Outcomes Of Young Patients With Hepatocellular Carcinoma After Hepatectomy

Presenter - Dr. Jayanand Sunil
Co-author - Rama Ranganathan, Ravishankar Pichaiya, Balasubramaniam

Aims/Objectives: The aim of the study was to analyze the clinical and oncological outcomes of young patients (Age ? 45 years) with hepatocellular carcinoma (HCC) after curative surgical resection. Methods: Young patients who underwent curative surgery between 1991 and 2014 for hepatocellular carcinoma were analyzed. Follow up data has been updated till November 2016. Their clinical characteristics and survival was compared with those aged > 45 years. The UICC TNM classification 7th edition was used in the study. Data analysis was performed using the SPSS software version 17. Results: The crude incidence rate of HCC in the Madras Metropolitan Tumor Registry is 3.1 per 1, 00,000 population. Of the twenty patients included in the study, ten were aged ? 45 years. Six of these patients were males and four were females. All the patients who underwent resection had Child-Pugh score A. The prevalence of Hepatitis B positivity, cirrhosis, major and minor liver resections, blood loss at surgery, presence of lymphovascular invasion, tumor size, stage distribution, recurrence rates and mean time to recurrence were not statistically significant between young and older HCC patients. Although serum AFP were higher in younger patients, it was not statistically significant between the two groups (Mean: 47143.4ng/ml versus 92.3ng/ml). The mean operating time was found to be higher in younger patients compared to older patients (304 minutes versus 236.43minutes, p = 0.033). The mortality rate was nil and there was no instance of post-hepatectomy liver failure in either groups. The five year overall survival in patients ? 45 years was 34.6% and that in patients > 45 years was 42%, but the difference was not statistically significant. The median follow up of the entire study population was 23 months (Range 6 to 153 months). Conclusion: In areas with low incidence of HCC, younger patients were found to have similar clinical characteristics as older patients. Serum AFP was higher in younger patients. However, younger and older patients with HCC after surgical resection did not exhibit any significant differences regarding overall survival.
Abstract Id: YUGP1486
Assessment Of Biochemical Profile In Head And Neck Cancer Patients Receiving Concurrent Cisplatin Chemotherapy
Presenter - Ms. Janhavi Moharir
Co-author - , ,

Title: Assessment of Biochemical profile in Head and Neck Cancer Patients receiving concurrent Cisplatin chemotherapy Authors: Ms. Janhavi Moharir Final term, MBBS Objectives: To study and follow the serum magnesium and calcium levels at onset, at different dosage levels of cisplatin and after completion of cisplatin therapy for head and neck cancer patients receiving concurrent radiation. Need for Study: Electrolyte imbalance specifically hypomagnesaemia and hypocalcemia are known events in patients on chemo therapy. A reduced level of magnesium can manifest as symptoms ranging from fatigue, muscle weakness to depression and convulsions and a reduced level of calcium can cause life threatening complications such as laryngospasm, arrhythmias. These effects adversely affect the progress of treatment leading to interruptions and eventual poorer outcomes. Results: Calcium Week Mean Standard Deviation 1 9.24 0.52 2 8.99 0.45 3 8.11 0.48 4 8.66 0.39 5 8.50 0.35 6 8.16 0.53 Magnesium Week Mean Standard Deviation 1 2.06 0.26 2 1.93 0.21 3 1.88 0.22 4 1.81 0.21 5 1.72 0.20 6 1.61 0.21 The results showed a reduction in serum calcium and magnesium levels over the treatment period with a p value of 0.005 with significant error being < 10^-8. Conclusion: Our study has shown that calcium and magnesium are equally important even in Cisplatin chemotherapy with concurrent radiation and one needs to keep a close watch to avoid morbidity.

Abstract Id: YUGP1490
The Effect Of Anti Egfr Humanized Monoclonal Antibody To Cellular Immunity Regulation In Uterine Cervical Cancer Therapy
Presenter - Dr. Ari Munandar
Co-author - Soehartati Gondhowiardjo, Nurjati C Siregar, Alida Harahap

Background: Advances in technology has brought cancer treatment to the era of minimal invasive, specific to tumor, with minimal side effect treatment, however no single therapy can achieve the optimal result and multifaceted approach with combination of the treatment available still remain as the main strategy. In late stage cancer, the number of recurrence and metastases are still high, one of the example is in uterine cervical cancer that can reach up to 40%. Therefore other approach should be considered to increase the treatment effectivity and disease free period. One of the mechanisms that might have an effect in preventing metastases is through the immunological regulation. It is stated in several studies that there is a relationship between immune cell infiltrations (T cell) in the tumor with response and prognostic of the therapy. Immunology has also play the role in cancer disease. In the first stage development of cancer, there is recognition by the immune cells to the cancer cells. At that phase, cancer cell was eliminated, however surviving cancer cell will develop ways to avoid the immune system and grow further. This so called immunooediting process consists of three steps that is elimination, equilibrium, and escape. MAb h-R3, an anti egfr humanized monoclonal antibody, has the function to block EGFR from epithelial tumor, especially in the condition where there is overexpression in EGFR, and has antitumor, pro-apoptosis and anti-angiogenic activity. Besides those activities, Mab h-R3 is also considered to have the capability to induce the immune mechanism. The monoclonal antibody that attached to the tumor cell can be recognized by the immune system and increase its response (opsonization process). This mechanism was considered related to the response of the therapy and prevents the recurrence. Study in mouse has shown that there was an anti-metastatic effect in using anti-mEGFR specific Mab (7A7) to Di122 tumor cell. It is also known that Man h-R3 can induce the mechanism of Antibody Dependent Cellular Cytotoxicity (ADCC), and it is related to the EGFR expression. From all of that background above, it triggers the research question whether giving Radiotherapy combine with Mab h-R3 (Nimotuzumab) in cervical cancer patient can increase the immunological response and related to therapeutical response and disease free survival? Methods: The objective of this research is to analyze the effect of Nimotuzumab combine with Radiotherapy to immunological response in cancer. This is a prospective cohort research in locally advance stage uterine cervical cancer patients receiving Nimotuzumab and Radiotherapy, compare with Radiation only. The number of cellular immunity in tumor tissue and whole blood were analyzed to see the effect of Nimotuzumab in inducing the immunology system and its relation with tumor response. Patients with Histopathologically proven squamous cell carcinoma of the uterine cervix, age 18 & 70 year, FIGO stage IIB & IIIB with EGFR expression +2 or +3 and able to undergo pelvic CT Scan using contrast for RECIST tumor measurement are recruited. This research is being conducted in Department of Radiotherapy Dr. Cipto Mangunkusumo National General Hospital. Prior receiving nimotuzumab, biopsy from the cervical tumor tissue and peripheral blood sample were taken, and were analyzed using immunohistochemistry and flowcytometry to count the Lymphocyte T CD 4, CD8, Dendritic Cell, and Natural Killer Cell as the baseline. One week later, before the second nimotuzumab and the first radiation given, another biopsy and peripheral blood sample were taken again. Nimotuzumab and Radiation were given as schedule, Nimotuzumab every one week and external radiation every day for 5 days a week up to 25 fractions. After 20 fractions brachytherapy can be started if possible. Before the first brachytherapy, biopsy from the cervical tissue and peripheral blood collection were done again. After that the subject will receive brachytherapy every one week for three times. The workflows are the same for the Control Group but without the giving of Nimotuzumab. Result: This is a progress analysis of the research. Until June 2017, 21 subjects have been recruited. 16 subjects have finished the treatment while the rest of 5 subjects are ongoing. 3 subjects have died due to disease progression, 15 subjects are available for whole blood flowcytometry analysis, 11 subjects are available for 1 month post treatment response analysis, and 7 subjects are available for 3 months post treatment response analysis. One week after Nimotuzumab administration, there is an increase in mean CD4 and CD8 number in treatment group (194/ul and 114/ul increment, respectively) compared to control group, while for mean CD56 number there is no difference in treatment versus control group. In the 1 month post treatment response analysis showed that the treatment group has 37.5% complete response compared to 33% complete in the control group. In the 3 month post treatment response analysis showed that the treatment group has 100% complete response compared to 50% complete response in the control group. Conclusion: From this temporary analysis there seems to be a different between treatment and control group in terms of CD4 and CD8 number. There is an increase in CD4 and CD8 number in treatment group, which might show that there is an systemic immunologic response from the targeted therapy given. Radiotherapy combined with targeted therapy showed better response compared to radiotherapy alone, and there seems to be a continuing effect even after the therapy has been stopped which showed by the response changes in 1 to 3 months post therapy.
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way for a distinguished concept. Every patient’s worriesome face reminded him that cry. He learnt the skills to crimp pain during higher studies but the norm did not allow him to take independent decisions. Few years passed, his dreams started becoming realistic when he could lead. He sharpened his ears to listen to the cry due to physical pain so that he and his team can reach them to heal. As his reign was continuing by healing all the physical pain that came across, he was stopped by a guru-a teacher with tongue cancer died himself even after getting rid of his pain. This made him think; he understood that he and his group did nothing different except for their passion to heal pain through something they learnt. The guru taught them that there are many things beyond physical and it is inevitable to consider them if they wish to cure the actual pain. They started taking care of psycho-social and spiritual needs along with the physical needs of patients through community involvement. This innovation helped in evolving a new concept in the land called palliative care with home care. World Health Organization recognized their efforts as a model project in developing countries which helped them gain visibility. Later, the passionate healer initiated Kerala State Palliative Care Policy. Their activities was not confined to a state but reached many, liaised the formation of a national palliative care strategy and moreover the amendment of narcotic policy for improving access to pain medications as excruciating pain is a common symptom in oncology patients. Though he and his team achieved many laurels but it is painful to say aloud that their work to heal pain through something they learnt. The guru taught them that even after getting rid of his pain. This made him think; he understood that he and his group did nothing different except for their passion to heal pain through something they learnt. The guru taught them that.

Abstract Id: YUGP1506
Cervical Cancer Screening : Bangladesh Perspective
Presenter- Dr. Md.Golam Zel Asmaul Husna
Co-author- PROF. GOLAM MOHUDDIN FARUQUE

Cervical cancer is one of the most important cause of cancer death in females in low socio-economic countries like Bangladesh. A study suggests that more than 17000 new cases of Cervical cancer is diagnosed every year and almost 11000 death occurs due to cervical cancer each year. It is projected, by 2025 number of new cases would be 31000 and death will reach to 18000. As we know, Human Papilloma virus is the leading cause for cervical cancer, and if proper screening program is taken, it can be prevented. If abnormalities like CIN are addressed and treated accordingly, this high death burden can be reduced dramatically. In 2004, UNFPA initiated and funded a nation wide cervical cancer screening program. This project took VIA as their operational tool to detect cervical abnormality. Bangladesh is one of the first countries to run nation-wide cervical cancer screening program by VIA. It started in 44 districts. In different Medical colleges, District hospitals and Maternal and child welfare centers. BSMMU played the lead role to train the paramedics and technological support. In 2008 an evaluation was made by UNFPA by local and international experts, who described it as very effective project though having some limitations. They suggested some quality assurance tools and protocols to run the project effectively. Even though VIA is not very specific or sensitive in compared to screening programs in developed countries, we adopted VIA in three visit setting (ie. if VIA positive then referred to PAP smear; and if Positive, then treatment or referral) that made the system very cost effective and complaint for target population. We lack standardize case definitions and treatment protocols for CINs, if these are corrected accordingly our program would be more effective.

Abstract Id: YUGP1504
Can Total Laparoscopic Radical Hysterectomy Be A Standard Surgical Modality In Stage Ib1A€”Ia Cervical Cancer? : A Retrospective Analysis Of 324 Patients From Single Center
Presenter- Dr. BOLENENI NAREN
Co-author- Dr T Subramaneyeswarao, Dr KVNN Raju, Dr Satish Pawar

Abstract Objectives To determine if total laparoscopic radical hysterectomy (TLRH) can be substitute for open radical abdominal hysterectomy for women with International Federation of Gynecology and Obstetrics (FIGO) stage IB1/IIA cervical cancer. Methods We retrospectively reviewed the medical records of head neck cancers patients who underwent TLRH with laparoscopic pelvic lymphadenectomy (LPL) from APRIL 2010 to JUNE 2016. Analysis was done on 31MARCH 2017. Results There were 324 patients who underwent TLRH with LPL 194 (59.8%) were in IIB, 69 (21.9%) were in IB2, 46(14.3%) was in IA1, and 15(4%) were in IA2 clinical stages. The median operating time, operative blood loss, post
operative day (POD) of oral liquids starting. POD of flatus passage, days of hospital stay, the number of harvested pelvic lymph nodes were 3.30 hrs (range 2-5 hrs), 100ml (range 20-400 ml), 1 day (range 1-6), 2days (range 1-4), 6days (range 4-16), 10 nodes (range 0-29) respectively. There was no un-planned conversion to laparotomy. No peri-operative mortality was present and grade 1-2 morbidity was seen in 33 patients (10.3%). Out of 324 patients, recurrence was seen in 30 (recurrence percentage 11.1%). In a median follow-up of 24.5 months (range 0â€“56), 44 patients (13.9%) were lost to follow up. Out of remaining 280 patients (86.1%), 45 patients (15.2%) were died & 235 patients (84.8%) were alive for final analysis. Disease-free survival (DFS) and overall survival (OS) rates were 82.3% and 84.9%, respectively. Statistical analysis was done by using Graphpad softwareâ€™s Fischerâ€™s t test. Parametrical involvement (p=0.0367), vaginal margin positivity (p=0.0045) & Lymph node positivity (p=0.0471) were significantly associated with DFS but not OS rates. Lymphovascular invasion, histological tumor type & grade of tumor were not significantly associated DFS or OS rates. Figo stage was significantly associated with both DFS (p=0.0355) & OS (p=0.0376) rates. Conclusions Total laparoscopic radical hysterectomy with pelvic lymphadenectomy is a safe and effective therapeutic procedure for management of early-stage cervical cancer in terms of survival with a far lower morbidity and better surgical outcomes than reported for the open approach. Our data suggest the need for larger prospective randomized trials which could support this approach as a new standard of care for stage IB1â€“IIA cervical cancer.

Abstract Id: YUGP1516
Our Experience Of Sentinel Lymphnode Biopsy(Slnb) In Breast Cancer.
Presenter- Dr. PINAKIN PATEL
Co-author - DR VIJAY PAL, DR BHERULAL GUJAR, DR GAJENDRANURAGI

BACKGROUND: Carcinoma breast is the most common Malignancy in Females. Axillary lymphnode status is an important prognostic factor. Axillary Lymph Node Dissection (ALND) associated with several morbidities as intercosto-brachial nerve sensory, decreased shoulder motion and Lymphedema, challenging the long term survival advantages of ALND, especially node negative patients. Sentinel Lymph Node (SLN) biopsy is a reliable and minimal invasive diagnostic method to determine the regional nodal status in Breast cancer. This study to assess diagnostic accuracy of SLN biopsy with Methylene blue dye in predicting Axillary nodal status in operable breast cancer. MATERIAL & METHOD: 70 patients with Breast cancer were subjected to SLN biopsy (using Methylene blue dye) followed by complete ALND and Lymphnode stained with dye identified.SLN assessed for tumor positivity and compared with other auxiliary lymphnodes . Statistical analysis was done. RESULTS: Of 70 patients with dye injected in 64 (91.43%) patients SLN identified.16 (22.86%) patients with stained dye was positive for malignancy. 48 (68.57%) patients with stained node show no evidence of malignancy. 6 (8.57%) patients were identified with Axillary lymph node positive inspire SLN biopsy was negative. In this study, methylene blue dye was accurately identified sentinel lymph node in 91.43% cases with sensitivity of 72.7%. CONCLUSION : Methylene blue dye was found to be a cheaper and safer alternative for the SLN biopsy. In our study, overall accuracy of the SLN biopsy was 96.6% which revealed that Methylene blue dye accurately predicts the status of axillary nodes and procedure can be used with confidence in surgical practice. SLNB can be considered in breast carcinoma as reliable and cost effective and safe method for lymph node status.

Abstract Id: YUGP1518
A 60 Years Old Male Presenting With Abdominal Pain, Dyspnoea And Limb Weakness

Abstract Id: YUGP1520
Adjuvant External Beam Radiotherapy In Differentiated And Medullary Thyroid Cancers: An Audit Of Clinical Practice
Presenter- Dr. SAMARPITA MOHANTY
Co-author - JP Agarwal, A Budrukkar, G Pantvaidya

Basis of the study: The role of adjuvant External beam radiotherapy (EBRT) is controversial in the management of differentiated and medullary thyroid cancers. Hence, we conducted an audit of patients with differentiated and medullary carcinoma thyroid who had received adjuvant EBRT at our center and analyzed the indications of EBRT and acute toxicities. Materials and Methods: We identified 48 patients of thyroid carcinoma who had received adjuvant EBRT between March 2012 and April 2017. Twenty-seven of these patients were suitable for this audit. Data was collected from electronic medical record and radiotherapy prescriptions. There were twelve papillary, twelve medullary, two follicular and one mixed medullary and papillary thyroid carcinoma. Twenty-four patients (89%) were treated with intensity modulated radiotherapy (IMRT) to a median dose of 60 Gy (range: 50 â€“ 64 Gy) at 2Gy/fraction with median overall treatment time of 45 days (range: 40 - 50 days). Results: The median age was 47 years (range: 24 - 73 years). Fourteen females and thirteen males were included. The median follow-up was 13 months (range: 2 - 58 months). The indications for EBRT were gross extrathyroidal extension (ETE) (n=21, 77.8%), residual disease (n=13, 48.1%), extracapsular extension at multiple lymph nodes (ECT) (n=22, 81.5%), loco-regional recurrence (n=2, 7.7%), ECE+ ETE+ residual disease (n=10, 37%), ECE+ETE+ (n=7, 25.9%), ETE+ residual disease (n=2, 7.4%).
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Eighteen patients had lateral neck and central compartment disease with ECE. All patients were referred for radioiodine ablation prior to consideration for EBRT. Acute skin toxicities less than grade 3 was commonly reported (87.5%). Grade 1 and 2 mucositis was reported in 95.6% patients and none developed grade 3 toxicity. Twenty (87%) patients developed grade 1 or 2 dysphagia. Twenty-five patients remained controlled at last follow-up. Conclusion: Adjuvant EBRT in thyroid carcinomas is feasible with acceptable acute toxicities. It merits consideration in cases of locoregionally advanced disease at high risk for recurrence.

Abstract Id: YUGP1522
Radical Radiotherapy For Stage I Glottic Cancer : 12 Year Data Of Various Hypofractionated Dose Schedules & Outcomes
Presenter - Dr. PUSHPAJA K U
Co-author - Binitha Baby, Dr Anoop R, Renil Mon P.S

INTRODUCTION Hypofractionated radiation has shown its efficacy in treating early glottic cancer in various centres world wide . METHODS All patients with stage 1 glottic cancer , who underwent hypofractionated Radiotherapy from 2005 to 2016 in the Department of Radiation Oncology at Amrita Institute of Medical Sciences were included. Total 220 patients were identified. All were treated either with Lateral or oblique wedged pair fields in Linac using 4 MV or 6 MV x-rays, after 3D planning, using fraction size varying from 2.4 Gy to 3.4 Gy/fraction, 5 days per week, to a total dose range from 52.5 Gy to 60 Gy. BED varied from 69.73 Gy to 78 Gy and EQD2 from 58.11 Gy to 65 Gy. Acute toxicity was evaluated according to RTOG Toxicities Scales. All Patients were followed up periodically. DFS and OS were calculated using the Kaplan Meier method. The Log-rank test was used to define the statistical significance of differences in local control in univariate analysis. RESULTS Out of total 220 patients , 210 were Males and 92% of patients were above 50 years of age. The anterior commissure was involved in 45 % patients. Six dose fractionation schedules were used of which 48% patients received 60 Gy in 20 Fractions. The 5 and 10 year OS is 94% and 88.7% respectively. The corresponding analysis for overall survival , dose > 55 Gy and dose with BED > 71 Gy & EQD2 > or = 60 Gy showed statistical significance. Site (anterior commissure involved or not involved), technique, beam energy, did not achieve statistical significance. CONCLUSION In this study of hypofractionated radiation for early glottic cancer , the results are similar to those published in the literature, showing that hypofractionation gives excellent OS and DFS with no increased toxicities

Abstract Id: YUGP1523
Hepatitis B Virus Quasispecies In Hbsag Negative Dlbcl
Presenter - Dr. Mahua Sinha
Co-author - Keerthanda Sundar, Premalata CS, Vikas Asati

Basis: Once infected with Hepatitis B virus (HBV), virus often remains latent within hepatocytes and lymphocytes in the form of Occult HBV infection (OBI). Host immune pressure and the virusâ€™ error-prone replication/mutation trigger evolution of quasispecies within the host. Quasispecies with potentially oncogenic mutations may contribute to hepatocellular carcinoma or lymphomagenesis. Aim of this study was to determine association of HBV/OBI with DLBCL using molecular tools and to identify HBV quasispecies in different tissue compartments within patients. Methods: From viral DNA extracted from different body compartments of DLBCL patients - B cells, plasma and formalin fixed paraffin embedded (FFPE) lymphoma tissues â€“ viral genes, S, P, C, X genes and covalently closed circular DNA were amplified by nested PCR. Next generation sequencing (NGS) of the amplified products was outsourced (SciGenom, Cochin). Results: 40 patients of DLBCL were enrolled in a year; all HBsAg negative. Plasma was available in all 40 cases, B cells in 31 and FFPE in 23. Twenty six patients showed two or more HBV gene products, characterizing OBI (65%). HBV DNA positivity was found in 72% of plasma, 74% of B cells and 56% of FFPE. Nineteen sets of genes/amplicons from 16 patients were subjected to NGS and compared for HBV quasispecies detection. In addition, 8 amplicons from FFPE and 9 S gene amplicons (irrespective of compartments) are being sequenced. Conclusion: Despite being HBsAg negative, 65% DLBCL patients showed evidence of OBI. HBV positivity was highest in B cells. Sequencing results are being analysed. We hope it sheds light on reasons for HBsAg negativity, molecular signatures in FFPE compartment and HBV quasispecies in DLBCL patients. HBV quasispecies evolution is clinically important with regard to emergence of viral mutants that are potentially oncogenic, resistant to antivirals and vaccine escape mutants and needs thorough study.

Abstract Id: YUGP1527
Two Fractions Versus Three Fractions Hdr Brachytherapy In Locally Advanced Carcinoma Of Uterine Cervix After Pelvic Concurrent Chemoradiotherapy- A Rct
Presenter - Dr. ISRAT JAHAN
Co-author - ,

Aim and objective: Uterine cervical cancer is the commonest form of gynecologic malignancy in Bangladesh. In locally advanced cases radiotherapy with a combination of external beam radiotherapy (EBRT) and intracavitary brachytherapy (ICRT) is the mainstay of treatment. The aim of this study is to compare the treatment outcome and acute complications following treatment with 9 Gy (gray) in two fractions of ICRT with EBRT. Material and methods: A randomized controlled trial was carried out in the Department of Oncology, Bangabandhu Sheikh Mujib Medical University, Department of Radiation Oncology, National Institute of Cancer Research and Hospital, Dhaka during the period of July 2015 to June 2016. Biopsy proven a total number of sixty patients of uterine cervical cancer were included and all patients received EBRT and inj.Cisplatin 40 mg/m² weekly followed by HDR intracavitary brachytherapy. EBRT treatment was delivered by Co-60 teletherapy with 50 Gy in 25 fractions of 2Gy per fraction over a period of 5 weeks. Then two fractions of ICRT with 9 Gy in two fractions weekly for 2 weeks was given to the patients of arm A and 7 Gy in three fractions weekly for 3 weeks to arm B. Treatment (RT) was completed in 7 weeks in arm A and 8 weeks in arm B. Every patient was evaluated weekly during treatment. Then follow up was done at week 6, 12 and at 6 months after completion of treatment to see the response and toxicities. Result: The mean age of patient at diagnosis was 50 years. Majority of patients in this study belongs to low to middle class population group. Follow up at 6 month after completion of treatment, complete remission was 90% and 86% respectively for arm A and arm B. The overall complete response was 88%. The common toxicities associated with treatment were bladder and rectal toxicities, skin reaction, and haematologic complications which were managed well. During follow up after 6 months, 3 patients in arm A and 2 patient in arm B developed grade II bladder toxicities and only 2 patients in arm A developed rectal grade II toxicities, but there was no rectal toxicity in arm B. Conclusion: This study showed that a total dose of 18 Gy ICRT in two fractions of 9 Gy over 2 weeks is equally effective in short term local control with acceptable toxicities in comparison with a total dose of 21 Gy in three fractions of 7 Gy ICRT.

Abstract Id: YUGP1531
Presenter - Prof. Thomas Ostermann
Co-author - Thomas Ostermann, Sebastian Appelbaum, Desiree Poier

Introduction: Extracts from white-berry mistletoe (Viscum album) are used as a complementary and supportive cancer treatment. A first
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meta-analysis from 2009 found positive effects with respect to survival of cancer patients, however, not in randomized clinical trials. The current meta-analysis therefore aims at updating the clinical evidence on the effect of mistletoe extract (Iscador) on cancer survival. Material and Methods: The databases EMBASE, PubMed, CAMbase, Scopus, AMED and Cochrane were searched for clinical studies in cancer patients treated with Iscador. Outcome data were extracted as they were given in the publication, and expressed as hazard ratios (HR) and the respective standard errors (SE). Meta-analysis was carried out using a random effect model. Sensitivity analysis was carried out for study design (RCTs versus non RCTs). The effect of sample size and cancer entities on the HR was analyzed using meta-regression models. Results: 60 studies met the inclusion criteria. Of those, 31 studies with 59 strata provided data to extract HR and their SE. The majority of studies reported positive effects in favor of Iscador. Heterogeneity of study results was moderate (I²=48.1%; p< 0.0001). Randomized studies showed less effects (HR=0.70; CI: [0.61; 0.79]) than non-randomized studies (HR=0.63; CI: [0.59; 0.67]), without being significantly different (p=0.18). In addition, meta-regression did not reveal an effect of sample size on the HR (p=0.34). Significant differences, however, were found with respect to cancer entities (p

Abstract Id: YUGP1541

Haematological Outcome Of Ccrt With Temozolomide Versus Rt Alone In Patients With High Grade Gliomas
Presenter- ‘Dr. MD. MAMUN OR RASHEED
Co-author - , ,

Abstract: High grade gliomas(HGG) are the most common primary CNS tumors in adult. Even with multidisciplinary approach the outcome is miserable. However recently concomitant chemoradiation (CCRT) with temozolomide has been effectively used. Temozolomide is an oral alkylating agents reported as second line therapy for patients with recurrent anaplastic astrocytomas(AA) and glioblastoma multiforme(GBM). It has found to increase median survival with good clinical outcome in patients with malignant gliomas. This was a quasi experimental study done in the department of radiation oncology in National Institute of Cancer Research & Hospital (NICH) Mohakhali, Dhaka during January 2014 to December 2014. Patients with newly diagnosed, histologically proved high grade (WHO grade III & grade IV) were assigned to receive radiation therapy alone (fractionated focal irradiation in daily fractions of 2 Gy in five fractions per week for six weeks, for a total 60 Gy) or radiation therapy plus temozolomide (75 mg/m² from 1st day of radiation therapy to last day of radiation therapy), followed by six cycles of adjuvant temozolomide (150 to 200mg per square meter for five days during each 28 day cycle). The primary end point was haematological and neurotoxicities. A total sixty patients were enrolled for study, haematological toxicities were compared between the patients of two arms. Patients treated by CCRT with temozolomide showed more toxicities than the radiation therapy alone in some stages. As a whole the differences were not statistically significant. Key words: High grade gliomas, concurrent chemoradiation radiation therapy, temozolomide.

Abstract Id: YUGP1543

Hypofractionated Radiotherapy In Inoperable Locally Advanced Head And Neck Cancer
Presenter- ‘Dr. Tusar Das
Co-author - , ,

Introduction: Standard treatment for inoperable advanced head and neck squamous cell carcinoma (HNSCC) is chemoradiotherapy but a significant proportion of patients are not suitable for curative treatment due to factors including tumour stage, performance status and co-morbidity of the patient. Hypofractionated radiotherapy for head and neck cancer is widely used. It has a useful role in the control of primary tumour as well as control of pain and other local symptoms. Aim: To assess the effectiveness of treatment with hypofractionated radiotherapy in locally advanced inoperable HNSCC. Material and Method: A cross sectional hospital based study was carried out in the Department of Oncology, BSMMU and Department of Radiation Oncology, NICRH, Dhaka, during the period January, 2015 to December, 2015. Patients with histologically or cytologically confirmed HNSCC without distant metastasis were included in this study. A total of 30 patients, each patient received 37.5 Gy in 15 fractions at 2.5 Gy per fraction over 3 weeks. Every patient was evaluated routinely to see the response and toxicities. Result: At the end of treatment all patients showed partial response (PR) in 25 patients, complete response (CR) in 4 patients. Acute and late reactions were acceptable. Conclusion: Hypofractionated radiotherapy is effective in relief of symptoms and loco-regional control of disease in locally advanced HNSCC.

Abstract Id: YUGP1545

Study Of Concurrent Chemoradiation With Cisplatin Versus Capecitabine In The Treatment Of Stage Iia- Ivb Carcinoma Uterine Cervix
Presenter- ‘Dr. Rokaya Sultana
Co-author - , ,

Aim and Objectives: In Bangladesh, cervical cancer is the most common malignancy among female and the second most common female malignancy in the world. Concurrent chemoradiation plays an important role in the treatment of locoregionally advanced carcinoma uterine cervix. This study was carried out to compare the complete and partial response, efficacy of CCRT with capecitabine and; toxicities following treatment with concurrent chemoradiation with cisplatin versus with capecitabine in locoregionally advanced stage of carcinoma cervix. Materials and Methods: A total number of 60 patients (30 patients in Arm-A & 30 patient in Arm-B) who have biopsy proven squamous cell carcinoma of uterine cervix with no history of previous treatment were chosen for the study. In this study, patients of Arm-A of stage IIB- IVA uterine cervical cancer during external-beam radiotherapy (50 Gy in 25 daily fractions over five weeks by 10 MV photon energy of LINAC machine) received - Inj. cisplatin 40 mg/m² in IV infusion on the first day of each treatment week. And patients of Arm-B of stage IIB-IVA cervical cancer received capecitabine, 825 mg/m² twice daily (Saturday- Wednesday), orally during external-beam radiotherapy (50Gy in 25 daily fractions over five weeks by 10 MV of LINAC machine). After completion of EBRT, three insertions (one insertion per week) of HDR intracavitary brachytherapy each 7Gy, total 21 Gy (HDR) in both arms were given. Total treatment duration with concurrent chemoradiation and ICRT of both arms were completed within 8 weeks from the first day of first treatment week. Results: In this study, out of 30 cases in each arm the overall response (complete and partial) in both groups was more or less equal. Complete response of Arm-A was 22 (73.33 %) and of Arm- B was 25 (83.33 %). Regarding toxicity, common toxicities with concurrent chemoradiation were more or less same for both arms except patients of Arm-A became more anemic during treatment period may be due to cisplatin based chemoradiation causes more Myelosuppression. Reversible vomiting (grade 3) 13.3%, nephrotoxicity 20%, neurotoxicity 3.33%, was observed in patients of Arm- A. And only 13.3% reversible grade 1 & 3.3% of grade 2 hand-foot syndrome seen in patients of Arm-B , this indicates that the use of concurrent chemoradiation with capecitabine was equally effective and a well tolerated option for patients of locoregionally advanced carcinoma uterine cervix. Conclusion: Capecitabine based concurrent chemoradiation is effective in achieving complete response in the treatment of locally advanced carcinoma cervix. There was no nephrotoxic patient seen in capecitabine based concurrent chemoradiation during toxicity evaluation. It can be the better treatment option for those patients who
Abstract Id: YUGP1549

Comparative Effectiveness Vs Cost Effectiveness Of Using Adjuvant Tamoxifen Vs Switching To Letrozole Once Into Menopause- In The Perspective Of Low Resource Countries.

Presenter- "Dr. ANM Kaiser Anam
Co-author - , ,

Aim Use of adjuvant Tamoxifen after radiotherapy beyond the initial 5 years irrespective of menstrual status was clinically compared with switching to Letrozole for 5 years in hormone receptor sensitive breast cancer patients. Background There are studies showing that Tamoxifen can be used both in pre-menopausal and post-menopausal women with hormone receptor sensitive breast cancer as adjuvant therapy and in metastatic disease. Studies show that aromatase inhibitors like Letrozole can be used in post-menopausal women for the same indications with more efficacy and favorable side effect profile. The price difference of these two drugs is substantial for the people of lower socio-economic standing. The comparative effectiveness and cost effectiveness of these two approaches should be explored in resource constraint setups eg. developing and underdeveloped countries. More studies dealing with this issue are needed. Method 50 patients presenting in the outpatient department from July/2016 to May/2017 for long term follow up after completion of adjuvant radiotherapy were evaluated cross-sectionally. None of them had distant metastasis at the time of radiotherapy. 30 patients had continued Tamoxifen after menopause. 20 patients switched to Letrozole for at least 2 years. The major criteria for comparison of effectiveness were development of local recurrence, distant metastasis and side effect profile. Major side effects like thromboembolic events, endometrial changes were recorded and compared. Loss of bone mineral density which is a side effect of letrozole was not evaluated. Common minor side effects like hot flushes, unusual tiredness, headache, constipation were also noted. Cost was compared by calculating the expected total expenditure over the course of ten years of adjuvant therapy for both approaches. Conclusion In the whole group receiving adjuvant therapy with either Tamoxifen or Letrozole, comparative effectiveness vs cost effectiveness was seemingly favorable for the Tamoxifen receiving group in the context of a lower socio-economic group of population. Although, further long term study is warranted to quantify and validate these observations.

Abstract Id: YUGP1555

Role Of Serum Ca-125 Levels In Predicting Optimal Cytoreduction To No Gross Residual Disease In Advanced Stage Ovarian Cancers Treated With Neoadjuvant Chemotherapy Followed By Interval Debulking Surgery

Presenter- "Dr. Shah Naveed
Co-author - Shah Naveed, Preeti Jain, Ghanish Panjwani

TITLE : Role Of Serum Ca-125 Levels In Predicting Optimal Cytoreduction To No Gross Residual Disease In Advanced Stage Ovarian Cancers Treated With Neoadjuvant Chemotherapy Followed By Interval Debulking Surgery

Objectives of the study:- 1)To study the role of serum CA-125 levels at presentation in predicting optimal interval cytoreduction to no gross residual disease in advanced epithelial ovarian cancers. 2) To study the role of pre-IDS serum CA-125 levels post neoadjuvant chemotherapy in predicting optimal cytoreduction to no gross residual disease in advanced ovarian cancers. 3) To study the clinical profile of patients presenting with advanced ovarian cancer in our population. Material and Methods:- Data collection technique and tools: All patients of adenexal mass suspicious of ovarian carcinoma who came to our O.P.D underwent thorough clinical examination and CA-125 levels at initial evaluation. Karnofsky performance score was calculated and recorded. Contrast Enhanced Computed Tomography of abdomen was done to evaluate extent of disease. Chest X Ray was done to look for any pleural effusion and cytology was obtained. USG guided FNAC of the adnexal mass was done to establish cytological diagnosis before sending patients for neo-adjuvant chemotherapy. When ascitis was present, fluid was sent for cytology. All patients received three cycles of Paclitaxel 175 mg/m2 and Carboplatin (AUC 6). After completing three cycles of NACT, patients were reassessed by the same surgical team. Thorough clinical examination and pre-IDS serum CA-125 levels were done. Contrast Enhanced Computed Tomography of abdomen was done to evaluate extent of disease. Chest X Ray was done to look for any pleural effusion. Based on decision taken by surgical team, patients underwent interval cytoreductive surgery or adjuvant chemotherapy. Post resectional margins, additional cycles of chemotherapy were reassessed for interval cytoreductive surgery and pre-IDS serum CA-125 levels were done. The present study was a prospective, observational study conducted to assess the role of serum CA-125 levels in predicting optimal cytoreduction to no gross residual disease in advanced stage ovarian cancers treated with neoadjuvant chemotherapy followed by interval debulking surgery. Total of 100 patients of advanced stage ovarian cancers were included who underwent 3-6 cycles of NACT followed by interval debulking surgery. RESULTS : 1) In our study comparing patients with no gross residual disease (NRD) vs optimal macroscopic disease (OMD), there was no statistical difference in the mean CA-125 at diagnosis. 2) The mean CA-125 level prior to interval debulking surgery was lower in NRD patients compared to OMD patients and it was statistically significant. Conclusions: - 1) In our series, after treatment with taxane and platinum-based chemotherapy, patients who were completely cytoreduced with no gross residual disease left, had pre-IDS (post NACT) serum CA-125 levels significantly lower than those patients in whom some gross residual disease (> 1cm) was left. 2) The serum CA-125 levels obtained at presentation of the patient to OPD was not significantly different between the two groups of patients, that is one group in whom N.R.D was achieved and one in whom O.M.D was achieved.

Abstract Id: YUGP1559

A Comparative Analysis Of Different Fractionation Schedules Used In Treatment Of Post-Mrm Carcinoma Breast Patients-A Prospective Randomized Study

Presenter- "Dr. SURABHI GUPTA
Co-author - Dr.Surabhi Gupta, Dr.Laxman Pandey, Dr.Mridul Chaturvedi

ABSTRACT: INTRODUCTION :- Breast cancer in female is a major medical problem. Worldwide it is the most common form of cancer in females. In India it is the second most common cancer after cervix accounting for 19% of the total cancer burden. The frequency of advanced breast carcinoma is 10 - 25% in the developed countries and 40 - 50% in developing countries like India[5]. Radiotherapy is usually given to the breast after conservative surgery or to the chest wall and drainage region after mastectomy to complete loco-regional treatment. Hypofractionated breast radiation therapy following mastectomy has been used by many institutions for several decades and have demonstrated equivalent local control, cosmetic results and normal tissue toxicities when compared with standard protocol of 50 Gy in 25 fractions. In the view of equivalent outcomes, patient compliance and proper resource utilisation benefits, hypofractionated radiotherapy can be considered the new standard treatment following modified radical mastectomy. Aims and objective-The aims and objectives were to compare conventional Radiotherapy with two different hypofractionated protocols treating chest wall & nodal areas.
Abstract Id: YUGP1562

Socio-Cultural Barriers To Seeking Medical Attention In Indian Breast Cancer Patients

**Presenter:** Ms. Annie Alexander  
**Co-author:** Annie Alexander, Rohini Kaluve, Jyothi S Prabhu

**Introduction:** Breast cancer is now the most frequently diagnosed cancer in urban Indian women. Advanced breast cancer in women under the age of 50, comprises approximately half of all new cancers. Attempts at increasing awareness have not yet translated into early reporting. We examined the psychosocial and cultural factors acting as barriers to seeking early care. Method: 378 patients were enrolled into a longitudinal study between the years 2008-2012, at two tertiary care hospitals in Bangalore, India. The median follow up as of May 31st 2017 is 78 months with only 2% loss to follow up over the past 8 years. Follow up was maintained by frequent meetings between the patient and a counsellor. The frequency was monthly during the initial treatment and then quarterly over the next 5 years. All patients were met in-person annually. Information on demographics was collected during the treatment phase and the psychosocial aspect was collected in non-structured interactions subsequently. This information included perceptions of the patient on barriers to seeking medical help - Information on awareness of the disease, denial of the disease, cultural beliefs, taboos and other social priorities. Results: 48378 (13%) of our patients were younger than 40 years at initial diagnosis. Despite the vast majority of them having completed 12 years of schooling (>80%), almost half of them (48%) presented with advanced disease. Though a significant proportion (89%) were aware of the presence of a lump in the breast and its association with cancer, only 12% presented in early stages. Lack of personal priority (5%) formed a minor reason while the cultural taboo associated with exposure of breast to a stranger (27%) and denial of the disease was reported in significant proportion (32%) of our patients. Most of these sensitive details were shared with the counsellor after establishment of a close rapport. Conclusion: Our findings support the role for long-term one-on-one contact between patient and counsellor as an important element in providing support. In addition to building awareness and improving access, it may be equally important to focus on circumventing entrenched socio-cultural beliefs to help women seek medical attention for breast lumps early.

Abstract Id: YUGP1568

Perceived Social Support And The Need For Support Groups In Cancer Patients.

**Presenter:** Dr. Rucha Sule  
**Co-author:** Dr Raj Nagarkar, Ms Dnyanada Joshi, Mr Ajay Dhilpe

OBJECTIVES- Professionally led support groups have been found to be useful for cancer patients in improving their quality of life, coping and affect. However, very few cancer patients utilise support groups. It is important to identify the factors which determine an individual’s willingness to participate in professionally directed support groups. more so in the Indian setting. MATERIAL & METHODS-As part of a pilot project, 110 patients diagnosed with different types of cancer, undergoing various forms of treatment, willing to participate in the study were randomly selected from a tertiary care cancer centre. These patients were given a semi structured questionnaire to assess their awareness about support groups and also their willingness to participate in such a group in future and what they would like as part of these support groups along with the multi-dimensional scale of perceived social support . The data obtained, was pooled tabulated and analysed using appropriate computerised software. RESULTS- The mean scores of the study group on the multi-dimensional scale of perceived social support were High (6.14). However, patients had very poor awareness on the concept of a support group and only 6.36% of them had attended one previously. Out of the study population, 70.90% voiced their willingness to participate in a support group run by the hospital, while 29.10% were either unwilling or unsure if they would like to attend. CONCLUSION- This pilot study helped us in understanding the various factors which determine a patient’s willingness to attend support groups and will help to structure the support groups upon the needs voiced by the patients, thus benefitting them.

Abstract Id: YUGP1570

Assessment Of Psychological Distress And Quality Of Life In Newly Diagnosed Cancer Patients.

**Presenter:** Dr. Rucha Sule  
**Co-author:** Dr Raj Nagarkar, Ms Dnyanada Joshi, Mr Ajay Dhilpe

OBJECTIVES- Cancer is still considered a dreaded disease in the Indian context in spite of the recent advances in treatment modalities and the improving survivor-ship all around the world. This study endeavours to explore the psychological distress and quality of life in newly diagnosed cancer patients. MATERIAL & METHODS- Of the newly diagnosed cancer patients, 160 individuals with different types of cancer, undergoing various forms of treatment, willing to participate in the study were selected from a tertiary care cancer centre. These patients were given a semi structured along with the Depression, Anxiety & Stress Scale 42 (DASS 42) questionnaire and the FACT G. The data thus obtained was pooled tabulated and analysed using appropriate computerised software. RESULTS-The mean Anxiety levels of the study population were severe (14.51) and mean depression levels were moderate (13.62). The mean total score on FACT G was 69.73 and that in the physical well-being (PWB) was 14.66 which was much lower than the established normative scores in adult population . CONCLUSION- Patients newly diagnosed with cancer show high levels of psychological distress and poorer overall quality of life. These findings reiterate the need of professional psychological and emotional support especially for newly diagnosed cancer patients.

Abstract Id: YUGP1574

Chemo-Radiation Therapy In Combined Treatment Of Rectal Cancer In Young Patients
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Abstract Id: YUGP1582
Chemo-Radiation Therapy In Combined Treatment Of Rectal Cancer In Young Patients
Presenter - Dr. Abror Abdujapparov
Co-author - Botir Korakhadjaev, Yakov Ten

Background: For a long time considered a CRC is characteristic for the older age group of people over the last few years the CRC rapidly "younger". Today, the disease is increasingly diagnosed in people younger than 50 years. Based Cancer Registry data Uzbekistan incidence rate of CRC per year per 100 000 young people rose by 1.8% in men and 1.9% for women in the period from 2004 to 2014. A retrospective analysis from 1999 to 2010, cancer incidence rate of colon and rectal cancer in young people has grown by 17% and 35%, respectively, unfortunately, their number continues to grow. Materials and Methods: The study of the efficacy of the developed neoadjuvant method of treatment of colorectal cancer with the use of remote large-fraction radiotherapy SD 4gr every other day to achieve cumulative dose 56-4gr conducted in patients receiving capcitabine at a dose of 1700 mg/m2 during the entire course of radiation therapy (21 days), 3 infusion of oxaplatin at a dose of 50 mg/m2 in 3, 10 and 17 days of treatment and 4-5 sessions of local microwave hyperthermia with course of metronidazole intrarectal administration radiosensitizing mixture consisting in 2 and 3 days of the course microwave hyperthermia. The treatment included 53 patients age of patients is from 25 to 35 with II-III stage of rectal cancer. \((LFR+CT+OXA+microwave hyperthermia+metronidazole)\). After a neoadjuvant treatment, all patients were operated in a radical amount within 4-5 weeks. Results: The results of our study were as follows: complete clinical response in patients wasn't observed, a partial response in 38 patients, the stabilization of process in 13 and progression of disease in 2 patients. In 30 patients due to clinical response was restaging disease decrease from III to II stage and from II to I stage. Postoperative complications were seen in 5 (9.4%) cases. In study group the use of preoperative large-fraction radiotherapy in patients receiving capcitabine, oxaplatin, microwave hyperthermia and metronidazole has increased the 5-year survival rate of up to 64.5%. The incidence of local recurrence was 37.6%, and the frequency of distant metastases of 21.8%. Conclusions: Method of neoadjuvant treatment \((LFR+CT+OXA+microwave hyperthermia+metronidazole)\) in combination therapy of colorectal cancer in young patients does not affect intra-and postoperative complications and slightly increases the frequency of the 5-year survival. Thus today, the question of the introduction of patients with rectal cancer at young age remains an important issue.

Abstract Id: YUGP1588
Predictive Factors And Measures To Decrease Acute Skin Toxicity For Head And Neck Patients Treated With Tomotherapy.
Presenter - Ms. MEGHA P V
Co-author - Dr. Akash Dhuru

Predictive factors and measures to decrease acute skin toxicity for Head and neck patients treated with Tomotherapy. Background: Tomotherapy treatment induced skin toxicity was a prominent clinical problem reported at our clinic for few of head and neck cancer patients receiving Intensity Modulated radiotherapy IMRT. Acute skin
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toxicity of Grade 3 and above could lead to temporary cessation of treatment for few patients. Severe skin reactions may be painful, lead to localized or occasionally systemic infection, and cause permanent scarring. The incidence of Tomo IMRT-related toxicity may be reduced by refinements in radiation techniques, such as improving dose conformity and dose homogeneity within the irradiated area. There are other factors involved, say the material used for immobilization, any adjuvant chemotherapy agent etc. In this study, we aim at analyzing causative factors for skin toxicity and to improve the treatment efficacy. Objective: To assess the factors affecting the incidence of radiation-induced dermatitis in head and neck patients treated with Intensity Modulated Radiotherapy by Tomotherapy and to compare with cohort of patients treated with C-Arm Linac. Materials and Methods: The study population consist of 20 patients who had undergone Helical Tomotherapy for treatment of Head and Neck site. All patients underwent immobilization procedure with thermoplast set followed by a planning CT with or without intravenous contrast along with or without secondary images like PET CT, MRI. Planning CTs were obtained with 2.5 mm slices, and treatment planning to Planning target volume (PTV) was then performed on Volo A® treatment-planning system. Patients treated with helical tomotherapy IMRT underwent daily megavoltage CT treatment scans for position verification and offsets corrected as needed before each radiation treatment delivery. Treatments were delivered with 6 MV un-flattened photons. Acute skin toxicity levels were monitored during the entire course of radiotherapy treatment. For each patient, we measured the setup errors using the daily MVCT acquired for image guidance of the treatment. Uncertainty associated with air gap, for patients who was having gradual weight loss and soft tissue reduction were addressed via re-immobilization, re-simulation and re-plan. Most of the patients were re-simulated with Tomotherapy Megavoltage Helical Tomography (MVCT) and adaptive plans were delivered. Results and discussion: We observed various influencing factors that includes PTV to skin proximity distance, thermoplast material, setup accuracy etc. Our department adapted to keep a distance of 4 to 5mm proximity of target away from skin. Improvement were seen after changing thermoplast material for immobilization. It is also recommended that skin in the irradiated area be kept clean and free from trauma. Topical therapy at the clinical onset of radiation dermatitis may decrease the incidence of radiation-induced skin toxicity in a clinical set up.

Abstract Id: YUGP1594
Why Altered Fractionation Have Not Gained Popularity In Bangladesh
Presenter- Dr. Nazirum Mubin
Co-author - -

Abstract: The rising incidence of head & neck cancer all over the world, more so in developing countries, and its diagnosis mostly being at advanced stage in a developing country like Bangladesh. Concurrent chemoradiation therapy (CCRT) has become the standard of care for advanced Head & Neck Squamous Cell Carcinoma (HNSCC). Conventional concurrent radiotherapy in Head and Neck region include 70 Gy in 35 fractions over 7 weeks. Several other altered fractionation schedules were prescribed; of which two are prominent, namely Hyperfractionation started by University of Florida and Accelerated Concomitant Boost inspired by M.D. Anderson cancer center. Hyperfractionation schedule delivers 81.6 Gy in 68 smaller fractions twice daily over 7 weeks. On the other hand Accelerated Concomitant boost technique provides 72 Gy in 42 fractions twice daily over 6 weeks where first fraction given over PTV and second fraction of the day is given over GTV. RTGO 9003 trial showed that both of these techniques decreases loco-regional failure and increase disease free survival and overall survival. But none of this altered fractionation have gained popularity in Bangladesh. The first and foremost reason behind this may be increased acute toxicities. Although altered fractionation decreases delayed toxicities and improve long-term quality of life in comparison to conventional fractionation, increased acute toxicities due to altered fractionation that happens during treatment causes high dropout from treatment. Another influencing factor is the cost of altered fractionation schedule. When number of fraction increases it increases the cost and resulting higher dropout from treatment. Another important cause is that very few center and inadequate trained personnel who can deliver altered fractionation radiation. Last but not the least, to get the best out of altered fractionation IMRT is needed but Bangladesh have very few centers which can provide this facilities.

Abstract Id: YUGP1598
Roll Setup Error Correction Validation For Tomotherapy
Presenter- Ms. DONA SUNIL
Co-author - -

ROLL SETUP ERROR CORRECTION VALIDATION FOR TOMOTHERAPY. Aim & Objective: Highly conformal radiotherapy treatments necessitate a high degree of setup certainty in order to accurately target the tumor while sparing healthy tissue. As past studies have shown, misalignment in intensity-modulated radiation therapy (IMRT) treatments are not uncommon and can result in clinically relevant dose delivery errors. In this study, we intend to design a test phantom to perform an end to end evaluation of Tomotherapy HDA (Accuray Inc., Sunnyvale, CA ) roll correction. Material and Methods: A treatment plan was designed for delivery on the TomoTherapy cylindrical â€œcheeseaâ€š phantom that would provide a very high gradient region in the film plane, thus making the measured dose distribution in this plane most sensitive to rotations in the â€œcervicalâ€š direction. The cylindrical structure as drawn on the phantom and designated as a target. Three other structure drawn as a Organ at risk. A treatment plan was developed and optimized for these structures in the same manner as any clinical treatment plan, with the primary goal being the maximization of the gradient across the film plane. Two film measurements of the treatment delivery were made at each angle, one with roll correction applied and one without. The measurements made without roll correction will illustrate the effects of the induced rotational misalignment on the delivered dose distribution. We intend to establish a threshold at which these misalignments result in a statistically significant change in the delivered dose. The measurements made with roll correction applied will show how well the TomoTherapy roll correction feature corrects for the induced rotational misalignment through comparison with the baseline dose distribution. Result and discussion: TomoTherapy is able to detect rotational misalignment at the level of 0.2Â±0.3Â° using the automatic registration system, and this system showed good agreement with measured induced rotations. Statistical analysis of point data and gamma analyses both show that TomoTherapy's roll correction feature is able to accurately correct for rotational misalignment to within the sensitivity of the test described here.

Abstract Id: YUGP1608
Thromboembolic Events In Patients Of Advanced Stage Non-Small Cell Lung Cancer (Nsclc) Treated With Platinum Based Chemotherapy: A Prospective Observational Study. Dr Shruti Kate ,Dr. Kumar Prabhakar
Presenter- Dr. Shruti Kate
Co-author - Dr. Shruti Kate, Dr. Amit Joshi

Background: Cancer is a pro-thrombotic condition and its treatment with chemotherapy is frequently complicated by both arterial and venous thromboembolic events (TEs). Aim: We aimed to determine the incidence of TEs in patients of lung cancer treated with platinum-based chemotherapy and to study patientsâ€™ baseline and treatment attributes correlating with the onset of thromboembolic events. Material and Methods: Advanced lung cancer patients started on platinum based chemotherapy were evaluated at baseline and
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during routine outpatient visits for development of TEs. Patients with prior history of thromboembolism or on anticoagulation were excluded from the study. Duration of follow up was till 4 weeks from the last chemotherapy. A thromboembolic event was considered associated with chemotherapy, if it occurred between the time of first dose of chemotherapy and 4 weeks after the last dose. Results: Of the 165 patients, who completed follow up, 67.8% (112/165) received chemotherapy regime of carboplatin with gemcitabine, 30.3% (50/165) received carboplatin with pemetrexed, 1.2% (2/165) received cisplatin with pemetrexed and 0.6% (1/165) received carboplatin with paclitaxel. TEs occurred in 4.8% of patients (8 out of 165 patients). Three patients had developed venous pulmonary thromboembolism and 5 patients had developed cerebral infarction, out of which 4 had arterial cerebral infarction and one patient had a superior sagittal sinus thrombosis. The majority of events (7 out of 8) occurred within the first 100 days of starting platinum chemotherapy. Overall, the median time until occurrence of thromboembolic event was 48 days (range, 10 to 130 days). None of the presumed risk factors associated with thrombosis were found to be related to the occurrence of TEs on univariate analysis. Conclusions: This study suggests that patients of advanced Non-Small Cell Lung Cancer on platinum based chemotherapy are predisposed to development of thromboembolism due to many factors. Despite the lower incidence of thromboembolism in our study, exclusion of patients with a thrombotic predisposition establishes the incidence of de novo thrombosis in lung cancer patients who are treated with platinum based chemotherapy and hence raises a valid question of the need of thromboprophylaxis in this group of patients.

Abstract Id: YUGP1612

Role Of Tissue Inhibitor Of Metalloproteinases 1 (Timp1), Epidermal Growth Factor Receptor Pathway Substrate 8 (Eps8) And Axl Receptor Tyrosine Kinase (Axl) in Chewing Tobacco Induced Oral Cancer.

Presenter- Dr. Arjun Agarwal
Co-author - ,

1. Title of the Topic: Role Of Tissue Inhibitor Of Metalloproteinases 1 (TIMP1), Epidermal growth factor receptor pathway substrate 8 (EPS8) and AXL receptor tyrosine kinase (AXL) in chewing Tobacco induced Oral cancer. 2. Authors * Arjun Agarwal (Author for correspondence) MBBS,MS, Resident in Surgical Oncology Department of Surgical oncology , Vyddehi Institute of Oncology, Bengaluru * VishalaShi Nanjappa Ph.D, Institute of Bioinformatics, Bengaluru * M.S.Ganesh MBBS,MS,Mch, Professor and Head, Department of Surgical Oncology,Vyddehi Institute of Oncology,Bengaluru * Cheena Garg Assistant Professor, Department of Pathology, Vyddehi Institute of Medical Sciences , Bengaluru * Aditi Chatterjee Ph.D, Institute of Bioinformatics, Bengaluru 3. Basis of the Study It is well established that chronic exposure to tobacco induces head and neck cancers but the exact etiopathogenesis is not known. Though studies have shown the role of TIMP1, EPS8 and AXL receptor tyrosine kinase in oral and oropharyngeal cancers, the role of these proteins in tobacco induced cancers is not known especially in Indian population where the prevalence of tobacco use is high. In the reference study, mass spectrometry-based analysis revealed over expression of TIMP1, EPS8 and AXL at 2.7, 2.0 and 1.6-fold, respectively in response to chewing tobacco in an in vitro cell line. In the present study, the role of these proteins will be evaluated in cancerous and noncancerous tissues exposed to tobacco by immunohistochemistry, thereby trying to understand the links in the etiopathogenesis of tobacco induced oral cancer. Materials and methods- Source of data- Study was done in patients coming to Oncology Center at Vyddehi Institute of Medical Sciences and Research Center, Bangalore,India Duration of study- January 2016 to January2017. Methodology- Punch biopsies were taken from cancerous and non cancerous tissues .Paraffin blocks were made and Tissue Microarray (TMA) were constructed using these blocks. 2 mm cores from each paraffin block were embedded into a recipient paraffin block. Immunohistochemistry was then carried out on these tissue microarrays. The paraffin embedded tissue was then deparaffinised followed by antigen retrieval using the Heat induced epitope retrieval (HER) method. The endogenous peroxidase was quenched using hydrogen peroxide. The tissue section was incubated with primary antibodies specific for the target protein overnight, followed by HRP conjugated secondary antibody. The signal was developed using DAB chromogen. The intensity of staining was scored by on a grading scale ranging from 0 to 3+, where 0 represents negative staining, 1+ represents weak staining, 2+ represents moderate staining and 3+ represents strong staining signifying No , mild , moderate and strong response related to expression of each of the above three molecules described. Sample size â€“ 30 INCLUSION CRITERIA- 1. All tobacco chewers with oral and oropharyngeal cancers irrespective of the stage of the disease EXCLUSION CRITERIA- 1. Patients without a history of tobacco chewing but other risk factors such as smoking, leukoplakia and chronic dental conditions. 2. Patients who have received prior treatment in the form of radiotherapy and chemotherapy STATISTICAL ANALYSIS- SPSS version 21 was used for analysis. The immunohistochemistry of cancerous and normal biopsied tissue will be compared between the study molecules using Chi Square test/ Mann Whitney U test. Results There was a statistically significant difference in the immunohistochemistry staining of TIMP 1, EPS8 and AXL receptor tyrosine kinase in the cancerous mucosa exposed to tobacco vs normal buccal mucosa.(p=0.000). 6.Conclusion- We have found a significant correlation between the expression of our study molecules in the tobacco exposed cancerous mucosa of oral cavity. This highlights the importance of these molecules in the Pathogenesis of oral squamous cell cancers. Future studies on a larger cohort are required to initiate research on screening and preventive aspects of these molecules.

Abstract Id: YUGP1614

T-Cell Prolymphocytic Leukemia: An Experience From A Tertiary Cancer Centre In South India

Presenter- Dr. Rajesh Patidar
Co-author - DR. SURESH BABU MC., DR. KUNTEGOWDANAHALLI C LAKSHMAIAH, DR. GOVIND BABU K

Background - T-cell prolymphocytic leukemia (T-PLL) is a rare lymphoid malignancy with dismal prognosis. Most patients have increased lymphocyte count (>1,00,000/dl) and widespread disease at presentation. Despite high response rate seen with alemtuzumab, the disease relapse is inevitable. Methods - This was a retrospective observational study done at a tertiary cancer centre in South India. All patients diagnosed with T-PLL from August 2010 to July 2015 were studied for the clinical characteristics, pathological findings and treatment outcomes. Results â€“ Seven patients were diagnosed as T-PLL over a period of 5 years. The median age at diagnosis was 51 years. In the present series, 6 patients (86%) had splenomegaly and 3 had hepatomegaly (43%). Generalized lymphadenopathy was seen in 4 (57%) patients at presentation. Skin lesions were seen in 5 (71%) patients whereas pleural effusion in only one patient (14%). All had elevated total leukocyte count, with more than 1,00,000/ dl in 4 patients. The median survival was 5 months with different chemotherapy (CT) regimens (5 received CT and 2 patients on best supportive care). Conclusion - T-PLL is a rare diagnosis with no definite treatment guidelines. Treatment with alemtuzumab and stem cell transplant have the best outcome at present, but invariably the disease relapse

Abstract Id: YUGP1616

Porcelain Gallbladder: A Case Report Authors: Dr. Prateek Gupta (MbbS, M.S.) , Dr. Prakash M.G. (MbbS, M.S.)

Presenter- Dr. PRATEEK GUPTA
Co-author - Prateek Gupta, Prakash M.G.

Porcelain Gallbladder: A Case Report Authors: Dr. Prateek Gupta (MbbS, M.S.) , Dr. Prakash M.G. (MbbS, M.S.)

Presenter- Dr. PRATEEK GUPTA
Co-author - Prateek Gupta, Prakash M.G.
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Objective: To investigate the prognostic value of LNR in LABC patients receiving NAC followed by definitive surgery with adequate axillary dissection (defined as more than 10 lymph nodes) across various breast cancer intrinsic subtypes. To investigate whether LNR can give any additional prognostic information along with pathological nodal (ypN) stage in adequately sampled axilla.

Methods: This was a single institution retrospective analysis done at Amrita Institute of Medical Sciences. Records of locally advanced breast cancer patients, who underwent definitive surgery following neoadjuvant chemotherapy from 2004 to 2014, were analysed and 224 eligible patients were identified. Patient, tumor and treatment specific data were collected. According to pathological nodal status patients were divided into node negative (ypN0) and node positive (ypN+) and according to LNR patients were categorized into low (0.2 to 0.65) risk category and patient, tumor, treatment and outcome characteristics were compared. Disease free survival and overall survival were analysed using Kaplan Meier method and compared using log rank test for ypN0 and ypN+ cohort; LN = 10 group; LNR risk groups in ypN+ patients ?10 LN dissected; LNR risk groups across various molecular subtypes; and single cut-off of LNR across various molecular subtypes. Result: Out of 224 analysed patients 72 (32.1%) were ypN0 and 152 (67.9%) were ypN+. Median age of diagnosis was 48.5 years (range, 25-81 years). Median follow up period was 48.5 months (Range, 3-151 months). Factors found to significantly differ in the two cohorts in decreasing order of significance were ypN (p<0.001).

Abstract Id: YUGP1620
Verrucous Carcinoma Of Oral Cavity: Role Prophylactic Neck Dissection.
Presenter - Dr. Yeshwanth Rajagopal
Co-author - PRAKASH.B.V, K.S.SABITHA, Nadimul Hoda

Verrucous carcinoma [VC] is a very well differentiated variant of squamous cell carcinoma [SCC] which is locally infiltrative with no metastatic capability. Oral cavity is the most common site of VC followed by larynx in head and neck. Oral cavity VCs are typically bulky grey to greyish red lesions reaching up to several centimetres in size. They may or may not be associated with cervical lymphadenopathy. VC by definition should not metastasize to lymph nodes. VCs are diagnosed microscopically by the benign appearance of the squamous epithelium [no cytological atypia typical of malignancy] which has pushing margins into the submucosa. Hence for a proper pathological diagnosis an adequate biopsy with adequate epithelial stromal junction is required. Treatment of choice for VCs is surgical excision, as radiotherapy is classically contraindicated. Most VCs are bulky usually more than 2 cm. Complete resection of these lesions with adequate margins requires general anaesthesia. As an incision biopsy might miss foci of squamous cell carcinoma, cases found to be SCC on final histopathological evaluation will require the neck to be addressed, either by surgery or radiotherapy. T2-T3 SCC of the oral cavity typically mandate prophylactic neck dissection as risk of occult metastasis is more than 20%. Prophylactic neck dissection at the same setting of primary resection is associated with minimal complications as compared to a second surgery or adjuvant radiotherapy. In our institution as a protocol all cases of VCs more than 2 cm in size undergo resection of the primary lesion along with prophylactic neck dissection. We did a retrospective study of all oral VCs which were diagnosed as VC on initial biopsy and which underwent neck dissection along with resection of the primary lesion. An analysis of final histopathology was done to: 1. Determine the percentage of cases that were found to have foci SCC. 2. True cases of VCs which did not mandate prophylactic neck dissection.

Abstract Id: YUGP1624
Presenter - Dr. Reshu Agarwal
Co-author - Reshu Agarwal, Anupama Rajanbabu, Pavithran K

Abstract Id: YUGP1630
Locally Advanced Colorectal Cancer : Is Second Look Surgery And Prophylactic Hipec Warranted?
Presenter - Dr. Rahul Bhamre
Co-author - Karthik Chandra Vallam, Manish Bhandare, Avanish Saklani

Aims and objectives: Peritoneal recurrence (PR) after curative surgery for colorectal cancer is the second most common site of recurrence and carries a poor prognosis. PR present relatively in the later stage, is difficult to detect by conventional imaging on follow up, and have limited options to treat after diagnosis. Second look surgery is the only definite option to diagnose early PR and presents an opportunity for disease control by cytoreductive surgery (CRS) and HIPEC. Multiple studies have attempted to identify clinico-pathological risk factors that predict high risk of PR. Our aim is to analyze the recurrence patterns and survival in locally advanced colorectal cancer and to identify high risk factors for PR, which can be used as an indication for second look surgery and prophylactic HIPEC in such cases.

Methods: Retrospective analysis of a prospectively maintained data of all colorectal cancer patients presenting to a tertiary cancer care referral center in India, from May 2010 to October 2015 was done. All patients who underwent surgery with curative intent and were clinico-pathological stage T4 and/or N2 M0 were included in the analysis. All upfront metastatic patients who underwent surgery with palliative intent or curative intent were excluded from the study. Results : 182 patients underwent curative resection with a clinico-pathological staging of T4 and/or N2 M0. 104 were males, while 78 were females. There were 71 recurrences, out of which 30 (42.2%) were peritoneal recurrences, 7 (9.9%) were liver only recurrences while 34 (47.9%) were non-hepatic systemic or multiple site recurrences. For a median follow up of 26 months, the estimated 3 year Overall Survival was 78% while the 3 year DFS was 50.4%. The median time to diagnosis of peritoneal recurrence was 13 months (4.7-96 55.7). The 3-year OS for patients with peritoneal recurrence was 48.6% as against 57% for liver only recurrence and 59.9% for non liver systemic and multiple site recurrence, with a trend towards poorer survival for peritoneal recurrences, although non-significant (p=0.377). The 3-year OS for PD/Signet ring cell/Mucinous adenocarcinoma was 64.7% as compared to 86.2% for WD/MD adenocarcinoma (p=0.003).

Conclusion: Locally advanced colorectal cancer has a high risk of peritoneal recurrence which negatively impacts the survival. Well-
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designed RCTs need to be conducted to identify the high risk factors for PR and whether second look surgery and prophylactic HIPEC in such patients will improve survival with acceptable morbidity and mortality.

Abstract Id: YUGP1632
Prephase As A Simple Method To Reduce Early Treatment Morbidity During The Definitive Treatment Of Diffuse Large B Cell Lymphoma (Dlbcl)
Presenter- Dr. Vikas Asati
Co-author - Dr. K. C. Lakshmaiah, Dr. Govind Babu K, Dr. Premalatha CS

Context: Treatment related toxicity during the treatment of high grade lymphoma like DLBCL is highest during the initial phase of treatment (First cycle effect). The toxicity can be in the form of febrile neutropenia, tumour lysis syndrome, deterioration in performance status, delay in further chemotherapy and death. Historically different methods have been tried to reduce this initial toxicity. The introduction of prephase treatment is one of the most popular methods routinely used in Germany and other European countries. This study was undertaken to evaluate the benefit of prephase treatment in newly diagnosed DLBCL in Indian patients before the definitive chemotherapy or chemotherapy. Aims: The aim of this study was to know the role of prephase treatment in newly diagnosed DLBCL patients prior to definitive chemotherapy. Methods and Material: Newly diagnosed patients of DLBCL, who were being planned for chemotherapy (CHOP/R-CHOP), were eligible for the study. Out of 50 patients, 25 patients received prephase treatment consisting of vincristine (1 mg) on -6th days and prednisone 100 mg daily for 7 day (-6 day to day 0). All patients received CHOP/R-CHOP chemotherapy on day 1. ECOG performance status, nadir absolute neutrophil count (ANC) on day 10, febrile neutropenia, and hospitalization, the requirement of antibiotics and mortality within 30 days of chemotherapy were compared in both the groups. Results: There was a significant improvement in performance status of the patients who received prephase treatment. The incidence of any grade neutropenia on D10 of chemotherapy in experimental arm was 44% (as compared to 88% in control arm) while the grade 3/4 neutropenia was 12% (as compared to 48% in control arm). Febrile neutropenia in the experimental arm was lower (12%) as compared to control arm (32%) (p value

Abstract Id: YUGP1634
Efficacy And Safety Of Myl 1401O Versus Trastuzumab As First-Line Therapy In Asian Patients With Her2+ Metastatic Breast Cancer
Presenter- Ms. Lisa Medlen
Co-author - Subramanian Loganathan, C.T. Sathesh, Sankar Srinivasan

Background: MYL-1401O is a proposed trastuzumab biosimilar. In the multicenter, double-blind, randomized, parallel-group, phase 3 HERITAGE study of patients (pts) with HER2+ metastatic breast cancer, overall response rates (ORR) at week (wk) 24 were similar between those receiving MYL-1401O and trastuzumab. These analyses compare best ORR with MYL 1401O and trastuzumab in combination with taxane at wk 24 and safety up to wk 48 in the Asian population of HERITAGE from India, Thailand, and the Philippines. Methods: Pts were randomized 1:1 to MYL-1401O or trastuzumab (6 mg/kg over 30 minutes intravenously) every 3 wks plus weekly taxane for 24 wks and then without taxane (monotherapy) for 24 wks. Cox proportional hazards models, Kaplan-Meier plots, and log-rank tests were used to evaluate secondary endpoints of time to tumor progression (TTP), progression-free survival (PFS), duration of response (DR), and overall survival (OS). Safety and immunogenicity outcomes were descriptive. Results: Of the 153 pts randomized, 142 were included in the intent-to-treat population (MYL-1401O, n=70; trastuzumab, n=72) and 149 in the safety population (pts receiving ≥1 treatment dose). Baseline characteristics and disease history were generally similar between groups. At wk 24, best ORR was similar between groups (MYL-1401O, 67.1%; trastuzumab, 63.9%; ratio [90% CI], 1.05 [0.86, 1.28]; difference in best ORR, 3.3% [90% CI, -0.76%, 16.08%]). No significant differences were observed between groups for TTP, PFS, DR, or OS at wk 48. Safety and immunogenicity were similar between groups through wk 48 (Table). Conclusions: The ORR in the Asian population receiving either MYL-1401O or trastuzumab was similar between groups and similar to results for the overall population, with no new safety differences.

Abstract Id: YUGP1636
The Effectiveness Of 3% Citric Acid Versus Sodium Bicarbonate (Baking Soda) Mouthwash For The Prevention Of Radiation-Induced Xerostomia Among Patients Receiving Conventional Radiation Therapy For Head And Neck Malignancies
Presenter- Dr. Veronica Vera Cruz
Co-author - John Vincent A. Gan, Lilian V. Rodriguez, Emjad T. Torrefranca

Purpose/Objectives: Majority of head and neck malignancies require Radiation Therapy (RT). Conventional radiotherapy produces toxicities such as xerostomia, which leads to multiple complications if left untreated. In this study, we determined the effectiveness of using 3% citric acid versus NaHCO3 (baking soda) mouthwash in the prevention of xerostomia for patients undergoing conventional radiation therapy to the head and neck area. Materials/Methods: 32 patients with head and neck malignancies were randomized to two groups (16 per group). The first group received 3% citric acid mouthwash whereas the 2nd group received sodium bicarbonate mouthwash. Salivary flow rate and RTOG Scoring for xerostomia were collected. Results: Salivary flow rates were comparable at baseline but decreased steadily as treatment progressed. A significant difference in flow rates were observed (P=0.010) on the 5th day which coincided with the incidence of xerostomia, wherein the proportion in the control arm was more than double of that in the experimental arm (69% vs. 31%). Also, majority in the citric acid group (75%) reported RTOG score of 0, while most in the control group (69%) had an RTOG score of 1 (P=0.013). On the 10th day, all participants had varying degrees of mouth dryness. Mild xerostomia was more frequently noted in the citric acid group on day 15 (94% vs. 56%, P=0.037). On the 20th day, 75% in the experimental arm had mild xerostomia, while most in the control arm (81%) had moderate signs and symptoms of mouth dryness (P=0.001). From day 25 onwards, moderate xerostomia in the experimental and control groups were 81% and 94%, respectively. The average dose on either parotid gland is ≥ 40 Gy. Profiles of mouth dryness were significantly better in the citric acid arm on days 5, 15, and 20. Conclusion: The comparison of the experimental versus control group demonstrated the citric acidâ€™s higher effectiveness as a sialogogue as evidenced by higher salivary flow rate, delayed and milder symptomatology. However, its effectiveness is dependent on the functionality of the viable salivary glands

Abstract Id: YUGP1642
A Rare Case Report Of An Aggressive Malignant Spiradenoma Chest Wall Masquerading As Carcinoma Of Unknown Origin -Course Of Events And Review Of Literature
Presenter- Dr. Md basheeruddin Inamdar
Co-author - Dr H Narendra, Dr Ramana Reddy Naru

Malignant eccrine spiradenomas are exceedingly rare and aggressive tumours normally arising in long-standing benign eccrine spiradenomas. We present a case of malignant eccrine spiradenoma(MES) who was initially misdiagnosed as carcinoma of unknown origin inspite of extensive workup to look for primary and presented with a large exophytic tumour on the right side of his chest
wall which had fungated. Radiological imaging of the chest region revealed extensive involvement of the local tissues. Patient underwent wide local excision with a 1 cm margin along with right sided axillary lymph node dissection. Histopathological findings were consistent with MES with tumour deposits in multiple lymph nodes in the axilla. Our case report shows MES is a rare and aggressive cancer which is difficult to diagnose, highly aggressive with propensity to involve the lymph nodes. May present with local recurrence and also develop distant metastases significantly compromise the quality of life of the patient. It requires the surgeons to have a high index of suspicion for its initial diagnosis, and a multidisciplinary management with surgery radiotherapy and chemotherapy is required for complete management and needs close follow up. Keywords: Malignant eccrine spiradenoma, wide local excision; Radiotherapy; chemotherapy.III. TEXT Introduction Eccrine spiradenoma is a benign sweat gland tumor that commonly affects young adults. The presentation is often a single nodule that may or may not be tender. In contrast, the malignant eccrine spiradenoma (MES) is an extremely rare tumor, which almost always arises from a pre-existing eccrine spiradenoma. The overall prognosis of MES is poor [1].Our case report describes one such aggressive presentation of MES with lymph nodal metastases who develop local recurrence as well as distant bony metastases. Case description A 67 old male presented to surgical oncology department at our tertiary care centre with chief complaints of swelling over right side of chest wall since 3 years, it was insidious in onset, gradually progressing in size but over the last one year it has rapidly progressed to attain the present size.It is not associated with pain. Patient does not have any history of shortness of breath, cough and haemoptysis. There was no history of loss of appetite or loss of weight and his bowel and bladder habits are regular. He is a known smoker, 30 pack years. On local examination a swelling of size 10x8 cm is present over right chest wall with skin thickening of area 4x4 cm which is covered with slough. It is variable in consistency hard to firm, mobile, non tender. A single, mobile lymphnode of size 2x1cm is palpable in the right axilla. Other systemic examination was unrevealing. Biopsy from lesion showed possibility of adenocarcinoma deposits and Immunohistochemistry (IHC) with CK7, CK20 and CEA were done. IHC with CK7 showed intense cytoplasmic positivity in tumor cells and CK20 and CEA were negative. We further suggested IHC with ER, PR, TTF-1 to rule out primary from adenocarcinoma lung and which were all found to be negative. Contrast enhanced computed tomography (CECT) chest showed a heterogenously enhancing soft tissue density lesion with central necrosis and calcification measuring 6.6x5.3cm over the anterior chest wall on rightside. Enlarged right axillary (2.6x1.8cm) lymph node. For metastatic workup CECT Abdomen, Esophagogastroduodenoscopy and Colonoscopy were done and were normal. Tumour markers with serum carcino embryonic antigen (3.7ng/ml), serum prostate specific antigen (0.3ng/ml) were within normal limits. Other blood investigations were within normal limits. Based on clinical, radiological and pathological workup we diagnosed this case as carcinoma of unknown primary (adenocarcinoma) presenting as right chest wall mass with associated lymphadenopathy. We referred the case to medical oncology for further management, they started the patient on chemotherapy with carboplatin and paclitaxel. However after one cycle of chemotherapy the above mentioned drugs the lesion was progressing in size, the ulcer with foul smelling discharge had increased. As the lesion was increasing in size after having interdisciplinary discussion in tumour board it was decided to have a second opinion of the histopathology slides and blocks. The slides and blocks were sent to a higher tertiary care centre there it was opined as possibility of skin adnexal neoplasm probably of sweat gland origin suggestive of benign tumor, however possibility of low grade malignancy cannot be ruled out. After extensive workup patient was taken up for surgery and a wide local excision and right sided axillary lymph node dissection was done. Microscopic sections showed stratified squamous epithelis with an infiltrating ill circumscribed lesion in the dermis comprising of lobules, sheets, islands, ill defined ducts, tubules and nests of tumor cells displaying two distinct cellular patterns peripherally placed dark basaloid cells displaying moderate bluish cytoplasm. Centrally placed large cells with round to mild pleomorphic vesicular nucleus, abundant pale eosinophilic to vacuolated cytoplasm. Lymphovascular emboli were present. The final histopathology impression was Spiradenocarcinoma of chest wall with 5/27 axillary lymphnodes showing tumor deposits. Postoperative recovery was uneventful. After having an interdisciplinary discussion after surgery it was decided to proceed with adjuvant radiotherapy and it was decided to include chest wall, right axilla and right supraclavicular fossa in the radiotherapy field. But the patient defaulted from receiving adjuvant radiotherapy and was lost to follow up for one year. One year later he presented to surgical oncology department with history of recurrence. On examination a swelling of size 6x4 cms is present over the right chest wall which was fixed to underlying ribs clinically, located from clavicle superiority till the 4th intercostals space. Another swelling on the lower aspect of right side of the neck measuring 6x5 cms, fixed and hard at level V cervical lymph node region on right side. We further investigated with fine needle aspiration cytology (FNAC) right cervical node and left axillary node it was opined as recurrence. Hence we further investigated with Bone scan F18 it revealed local infiltration of 1st and 2nd ribs, with evidence of distant metastases involving left aila of sacrum and left ilium. In view of metastatic disease the patient was referred to medical oncology for further management. Patient received 3 cycles of chemotherapy with cisplatin and paclitaxel. Defaulted for 3 months and presented with a large mass over right side of the chest which was fungating and foul smelling and thereafter received 2 more cycles of chemotherapy, thereby completing a total of five cycles. Palliative radiotherapy was planned in view of symptomatic bony metastases with 39 gray in 13 fractions, patient completed radiotherapy and patient is on follow up at present and doing well. Discussion Spiradenocarcinoma is also known as malignant spiradenoma and sweat gland carcinoma excl. eccrine spiradenoma[2] was first described by Dabska[3] in 1972, 16 years after Kersting and Helwig[4]originally described its benign precursor. Malignant eccrine spiradenoma is a rare adenocarcinoma of the skin. It is normally considered to be a malignant transformation of a pre-existing benign eccrine spiradenoma[5]. MES presents at an average age of 59 years (range: 21-92 years) and shows no sex predilection[6]. It tends to preferentially involve the trunk and extremities (92% of reported cases) [7], but there are also published case reports of MES arising in the breast [6], scalp [7, 9], and eyelids[8]. Overall prognosis of malignant eccrine spiradenoma is poor[2]. Primary treatment includes local excision, with or without regional lymphadenectomy[1], with recurrence reported in 17.5% of the cases[6]. Malignant eccrine spiradenoma metastasizes to regional lymph nodes[5], lungs, brain[4], bone[4] and liver[7] (in descending order of frequency). Distant metastases of MES are uncommon even in extensive tumours, such as the one reported here, metastasis are rare but carry a poor prognosis[7]. Radiation therapy alone or in combination with chemotherapy has been used with no benefit in the treatment of patients with metastatic MES[9], Sridhar et al reported symptomatic improvement and shrinkage of the tumor with tamoxifen therapy in a patient with estrogen receptor-positive eccrine adenocarcinoma[10]. However, the role of hormonal therapy still remains to be determined. Close follow-up of these patients for early detection of recurrence and metastases cannot be overemphasized. Conclusion: Our case report shows malignant spiradenoma is a rare and aggressive cancer which is difficult to diagnose, highly aggressive with propensity to involve the lymph nodes. May present with local recurrence and also develop distant metastases significantly compromising the quality of life of the patient. It requires the surgeons to have a high index of suspicion for its initial diagnosis, and a multimodality mode of treatment with surgery, radiotherapy and chemotherapy is required for complete treatment and needs close follow up. Conflict of Interest The authors declare that they have no conflict of interest. Ethical approval: Institutional ethical committee approval obtained. Consent Written informed consent was obtained from the patient for publication of this case report and any accompanying images. References 1. Meyer TK, Rhee JS, Smith MM, Cruz MJ, Osipov VO, Wakym PA. External auditory canal
Abstracts


Abstract Id: YUGP1662
An Analysis Of Surgical Outcome And Morbidity After Sacral Resection Surgery For Primary Locally Advanced And Recurrent Rectal Cancer
Presenter- Dr. SACHIN KADAM
Co-author - DR SATHEESAN B
INTRODUCTION Local recurrence is the most common cause of failure following surgical resection of rectal cancer. Patients with primary cancers that do not extend beyond the muscularis propria have good clinical outcome with resection alone. If the tumour has infiltrated, or lays very close to, the sacrum, abdominosacral resection might be the only curative treatment option in these patients. In 1874, the Swiss surgeon Theodor Kocher introduced the transsacral resection with coccygectomy, which was further extended by Paul Kraske to facilitate the operative exposure. Criteria for an abdominosacral resection is very close to sacrum , invasion into the or when difficult to get plane away from sacram and the need for wider dorsal access to improve visualization to enable complete tumour resection. Aim of the study To study the surgical outcome and morbidity associated with sacral resection surgery for primary locally advanced and recurrent rectal cancer. Objectives of the study ã¢â€” To evaluate the Margin free status. ã¢â€” To estimate Mortality associated with sacral resection. ã¢â€” To estimate Recurrence free survival (RFS) . Materials and Methods Retrospective study of patients with carcinoma rectum undergone sacral resection surgery from 2009 to 2015 at Malabar Cancer Centre, Thalassery, Kerala, India and these patients were followed till December 2016. Source of Data Collection. The demographic profile, details of malignancy, details of surgery and follow up data were retrieved and updated from the case records of the patients from medical records department. Inclusion criteria ã¢â€” Patients who undergone sacral resection surgery at Malabar Cancer Centre. ã¢â€” Patients who are having at least One year follow up. Exclusion criteria Any patient died of any other cause and not followed will be excluded. Statistical analysis Descriptive statistical analysis was used for data exploration. Kaplan Meier method was used to calculate the survival (RFS and DFS). Log Rank test was used to compare the survival RESULTS Sacral resection surgery was done in 15 cases in which Males were 12 (80%) and females were 3 (20%) with Mean male age was 52 years and Mean female age was 53 years. Co-morbidity was associated with 6 (40%) patients and diabetes mellitus was a common co-morbidity. 10 patients (66.66%) had primary rectal cancer in which 8 patients had lesion in lower rectum and 2 patients had lesion in middle rectum. 5 patients (33.33%) had recurrent rectal cancer and all were having lesion in lower rectum. All patients had received neoadjuvant chemoradiation and after 4-6 weeks duration , they had undergone surgery. 10 patients (66.66%) had undergone extralevator abdominoperineal resection (ELAPR) . 2 patients (13.33%) had undergone total pelvic exenteration , 2 patients (13.33%) had undergone posterior pelvic exenteration and one patient (66.66%) had undergone low anterior resection with liver metastatectomy with excision of periostium of sacrum and coccyx. In 6 patients (40%) isolated SS sacral segment was resected and in 9 patients (60%) S4 +S5 sacral segments were resected. Pathological TAE™ stage was as follows- T4 in 5 cases (66.66%), T3 in 3 cases (20%), T2 in 4 cases (26.66%) and no residual neoplasm in 3 cases (20%). Positive lymph nodes were found in 4 cases (26.66%) and one was with extracapsular extension. One patient had positive proximal margin and received adjuvant treatment. There was no recurrence till the last date of follow up. One patient had positive distal margin and she expired on postoperative day 12 due to myocardial infarction. In all patients , circumferential resected margin and resected bone segments were free from the tumor. Only one mortality occurred within 30 days of postoperative period. Patient was expired on postoperative day 12 . Patient had myocardial infarction and in spite of all resuscitative measures, we could not save her. 8 patients (53.33%) had perineal wound infection and wound dehiscence which was managed conservatively with dressing and in 3 cases with resuturing. 3 patients (20%) had urinary incontinence and 2 patients (13.33%) had sexual impotency. 4 patients (33.33%) had recurrence which were detected during follow up after symptomatic evaluation. One case had 2nd recurrence in recurrent rectal cancer and it was detected after 7 months of completion of treatment. No adjuvant treatment was given to him. Patient had recurrence at presacral region and left lung metastasis. He has been treated with palliative chemotherapy. Rest of the 3 cases had first recurrence. 2nd case had recurrence after 13 months of completion of treatment. No adjuvant treatment was given to him. Patient had liver metastasis and splenic surface deposits. He has been treated with palliative chemotherapy and targeted therapy. 3rd case had completed adjuvant treatment and recurrence was detected after 1 year 11 months of completion of treatment . He had lung and brain metastasis and treated with palliative chemotherapy along with radiation to brain . 4th case had recurrence at presacral region detected after 2 months of completion of adjuvant treatment. He has been advised chemotherapy but the patient lost follow up. Disease free survival time was 23.8 months . Overall survival was 86.7 % for a median follow up period of 13.7 months. CONCLUSION Sacrectomy for primary or recurrent rectal cancer can achieve clear resection margins with low mortality in selected patients. Perineal wound infection is the most frequent complication. Sacral resection may provide local disease control with acceptable morbidity.

Abstract Id: YUGP1664
Predicting Sentinel And Non-Sentinel Lymph Node Metastasis ã¢â€” Are Mskcc Nomograms Valid For Non-Screened Breast Cancer Patients?
Presenter- Dr. Amit Choraria
Co-author - Sanjilt Agrawal, Indu Arun, Sanjoy Chatterjee
Aims: To explore the risk factors for SLN and non-SLN metastasis in Indian women with breast cancer, by analysis of clinical and pathological data. To assess the validity and clinical utility of two MSKCC Nomograms that predicts axillary lymph node status for Western patients. Methods: Clinical data, and pathological data available from core biopsy, for a consecutive series of women having SLNB was analysed, and was plotted on two MSKCC nomograms. Univariate analysis was done by Chi Square and Fischer Exact Tests and Multivariate analysis was done by Logistic Regression method. A receiver-operating characteristic (ROC) curve was drawn and predictive accuracy was assessed by calculating the area under the ROC curve (AUC). Results: 34% (89 out of 256) of our patients had SLN positivity. When correlated with SLN metastasis by univariate analysis, LVI (?2=80, p=

Abstract Id: YUGP1672
Abstract Id: YUGP1674

Enhanced Quality Of Life In Oncology Patients Through Early Palliative Care Intervention
Presenter - Mr. SARATH MOHAN S
Co-author - Sarath Mohan S, M.R. Rajagopal, Sreedevi Warrier

Abstract

Title: Enhanced quality of life in oncology patients through early palliative care intervention

Authors: Sarath Mohan, S. MSW M.R. Rajagopal, MBBS, MD Coauthor : Sreedevi Warrier BDS Background : Medical management often tends to be focused on disease. Considering that eighty percent of cancer in India is incurable at the time of diagnosis, the focus on disease leaves behind a vast burden of suffering which is currently mostly unaddressed. Methodology: In-depth psycho-social interview and observation Study Design: Case Study Mrs. R had a retroperitoneal high grade liposarcoma in 2008. Thanks to available facilities in Trivandrum. She got good treatment for the disease which included resection and end-to-end anastomosis. When it recurred she underwent an en bloc resection and adjuvant chemotherapy. These years were precious to her: her youngest son could grow to 16 years of age. After the second recurrence she got concurrent treatment by palliative care and oncology teams. The gradual transition helped her to cope. Eventually a detailed evaluation by the oncologist ruled out further surgery. Her suffering was compounded by the fact that at this time, her main source of strength, her husband, was diagnosed with tongue cancer and he died within a few months. The tumor grew and often made her breathless. But a combination of morphine and corticosteroids kept her pain- free and effectively treated her breathlessness. But her suffering was more than physical. The pain of leaving her 16-year-old son was her biggest burden. There was no way in taking all the worries away. But the promise by the Pallium India that his education would be supported including even a tuition fee when he needed was reassuring. What we believe helped her most was encouraging her life review. Only at this point, we found that the youngest son had been adopted as a baby who was about to be abandoned by an unwed mother whom she met at a hospital. Mrs. R will die before long. The control of pain and support for her spiritual and emotional problem enabled her to have that smile even in the evening of her life. We could prepare her and the whole family for death, and even made arrangements for the funeral according to her wish. She is still under our care even after 9 years from diagnosis and living with dignity and prepared to die with dignity. With the help of palliative care team, she acquired insight, integrated that into her life and for us it was an innovation. Correspondence: SARATH MOHAN S, Medical Social Worker, Pallium India, Arumana Hospital Building, West Fort, Trivandrum â€¢ 695008, Email: sarathamohans72@gmail.com

Abstract Id: YUGP1682

Congenital Anomalies And Aberrant Anatomy In Urogyneac-Oncology ÆÃŒ The Bottle Neck In Surgery
Presenter - Dr. JAGADISH SINGH
Co-author - DR. SUBBIAH SHANMUGHAM,M.Ch., DR. G. GOPU., M.Ch., DR. SYED AFROZE HUSSAIN.,M.Ch.,

Abstract

PROGNOSIS AND MULTIVARIANT ANALYSIS OF N2C Nodal Disease In Oral Squamous Cell Carcinoma: A 10 Year Study In Tertiary Cancer Centre In South India

Presenter - Dr. JAGADISH SINGH
Co-author - DR. SUBBIAH SHANMUGHAM,M.Ch., DR. G. GOPU.,M.Ch., DR. SYED AFROZE HUSSAIN.,M.Ch.,

Prognosis And Multivariant Analysis Of N2c Nodal Disease In Oral Squamous Cell Carcinoma: A 10 Year Study In Tertiary Cancer Centre In South India

Abstract

Context: Congenital anomalies are defined as structural or functional defects which are present at the time of birth. Congenital anomalies of the kidney and urogenital system range from mild, asymptomatic malformations to severe, life-threatening pathologies. Congenital anomalies may be the result of one or more genetic, infectious, nutritional or environmental factors. It is often difficult to identify the exact cause. In an oncological point of view, it is important for surgeons to keep in mind and to appreciate the possible anatomical variations and aberrations that can be encountered during surgery. We have also elicited few congenital anomalies and associated cancers. AIM: To understand about anatomical anomalies, a sound knowledge of normal embryological development and anatomy is of paramount importance. MATERIALS AND METHODS: In this study, we have presented a series different congenital anomalies and anatomical aberrations which we have encountered during various oncological resections and its implications. This will serve as an eye watch for any surgeon in identifying anatomic variations and thereby preventing major havocs during surgical procedures. CONCLUSION: The purpose of presenting this case series is to bring out a plethora of congenital anomalies and anatomical aberrations which are of importance during surgical resections. So far, only few case reports, confined to particular organ are available on congenital anomalies and surgical encounters. There are only very few studies, in reported literature, that too only in pediatric cases which has analyzed comprehensively about anatomical anomalies and cancer. The identification and interpretation of such abnormalities constitute a real challenge to the surgeon. Figure 1: Table showing list of congenital anomalies in our series: S No Congenital anomaly Total number

Abstract Id: YUGP1674
Abstract Id: YUGP1684
Clinical Staging In Head And Neck And Oral Cancer- How Accurate Are We? Are We Underestimating Our Clinical Target Volume?
Presenter- Dr. Poornachandra Tejaswi
Co-author - Dr. BINDHU JOSEPH, Dr. REKHA V KUMAR, Dr. CHAMPAKA G

Objectives: To compare radiological [Computed Tomography CT] Tumor and Nodal dimensions in Head and Neck and Oral Cancer with the post-operative pathological status and explore the ramifications associated with the disparity. Design: This prospective analytical study was conducted on a cohort of 90 patients of operable Oral and Head & Neck Cancer. Forty patients with Head and Neck cancer and 50 Oral cancer patients were radiologically evaluated pre-operatively and assigned a clinical TNM staging which was subsequently compared with the corresponding pathological TNM components. Conclusions: A significant comparative disparity was seen in 38(42%) of the patients with relation to T category. Pathologically larger tumor dimensions were evidenced in both categories. Sixteen Oral cancer patients and 16 patients with Head and Neck cancers had a greater than 30% increase in tumor dimensions on post-operative pathological staging. This did achieve statistical significance [p= 0.00]. The specificity of CT scan in defining low risk Nodal volumes [cNo Neck] was 76% for Oral cancers and 53.8% in Head and Neck cancers. The false positives rates for both categories were fairly high, 48% and 37.9% respectively. By theoretically extrapolating the inferences of this study to situations where radiotherapy would be the primary treatment, it would draw caution towards considering overtly conservative/uniform clinical tumor dimensions and estimating intermediate nodal target volumes at risk based solely on CT based evaluation.

Abstract Id: YUGP1686
Atypical Presentation Of Retroperitoneal Tumor: Diagnostic Dilemma Of Malignant Teratoma With Giant Cell Tumor And Rhabdomyosarcomatous Components.
Presenter- Dr. BRIJNANDAN GUPTA
Co-author - ADARSH BARWAD, ANUBHAV NARWAL, SUDHAKARAN

Introduction: Teratoma is a tumor with components derived from more than one germ layer. Although the teratoma may be monodermal or polydermal (originating from one or more germ layers), its cells may differentiate in ways suggesting other germ layers. The tissues of a teratoma may be quite different from surrounding tissues and may be highly disparate. Teratomas belong to a class of tumors known as nonseminomatous germ cell tumor. All tumors of this class are the result of abnormal development of pluripotent cells: germ cells. Here we report an extremely rare combinations of component in a metastatic malignant teratoma of retroperitoneum adhered to the duodenal wall. Case Report: A 24 year old male presented with complaints of abdominal pain. The patient was previously undergone right orchidectomy for non-seminomatous germ cell tumor and received chemotherapy for the same. CECT abdomen showed a retroperitoneal mass adhered to third part of duodenum. Punch biopsy was taken from the lesion. On histopathology it showed a malignant spindle cell tumor with moderate nuclear pleomorphism and brisk mitotic activity. On immunohistochemistry, the tumor cells showed positivity for Myogenin, Desmin (Focal) while, negative for SALL4, S100 and CD34. Based on these findings, a diagnosis of rhabdomyosarcoma was offered. Later patient underwent resection of tumor (6.2x5.1x3 cm) with part of duodenum and ileum measuring 10.5cm in length. On histopathology tumor showed teratomatous component comprising of islands of hyaline cartilage with binucleation and multinucleation. In addition, rhabdomyosarcomatous component comprising of malignant spindle cell with positivity for Myogenin and Desmin were also identified. Giant cell component comprised of mononuclear cells and multinucleated cells with similar nuclear morphology. No residual germ cell component was identified. Final diagnosis of malignant teratoma with component of rhabdomyosarcoma and giant cell tumor was given. Patient has been given chemotherapy and is fine at three months of follow up. Conclusion: This tumor had unique combinations of component in malignant teratoma. Arriving at a definitive diagnosis is a big challenge for both surgeon and pathologist, especially in small punch biopsy. At times management becomes difficult because of different components. Multimodal therapy is often required. Prompt management and close follow up is of utmost important in these cases.

Abstract Id: YUGP1688
Neoadjuvant/Perioperative Chemotherapy With D2 Lymphadenectomy In Gastric Cancer: A Study Of Feasibility, Safety And Outcomes Of 122 Indian Patients From A Single Institution
Presenter- Dr. Yenekalya Yugandar reddy
Co-author - SATISH PAWAR, SUJITH PATNAIK, KVNR RAJU

NEOADJUVANT/PERIOPERATIVE CHEMOTHERAPY WITH D2 LYMPHADENECTOMY IN GASTRIC CANCER: A STUDY OF FEASIBILITY, SAFETY AND OUTCOMES IN 122 INDIAN PATIENTS FROM A SINGLE INSTITUTION BACK GROUND: Gastric cancer is the fourth most common cancer globally, and is the second most common cause of death from cancer worldwide. With a high mortality-to-incidence ratio, management of gastric cancer is challenging and use of multimodal therapy and its sequencing is not yet standardised. Patients with borderline or resectable gastric cancers are increasingly offered neoadjuvant/ perioperative chemotherapy following the MAGIC and REAL-2 trials. However its tolerability, effects on perioperative surgical outcomes after D2 lymphadenectomy, tumor responses and survival outcomes is not widely reported in literature. MATERIALS AND METHODS: Analysis of a prospective database of 122 locally advanced gastric cancer patients undergoing Neoadjuvant/periopChemotherapy followed by radical D2 gastrectomy over 3 years at our institute (from Jan 2014-Dec 2016) was performed. Chemotherapy tolerability, perioperative D2 lymphadenectomy outcomes, histopathological responses to CT, adjuvant chemotherapy, recurrences and survivals were analyzed. RESULTS: In this study, 122 patients with gastric adenocarcinoma classified as stage IVB received NACT and 7 (5.8%) patients tolerated only 2 cycles. Of these 122 patients, 49 were inoperable during surgical exploration and 73 were operable and underwent radical gastrectomy & D2 lymphadenectomy with 9.5% (7patients) morbidity and mortality in one patient. The lymph node yield was more than standard D2(>15) in 54 patients(73.98%) & less than D2 (4)

Abstract Id: YUGP1690
Field Cancerization In Colon Cancer: Morphologic And Immunohistochemical Analysis Of Peri-Tumoral Colonic Mucosa In Humans
Presenter- Dr. BRIJNANDAN GUPTA
Co-author - Shouriyo Ghosh, Janvie Manhas, Sudip Sen

Introduction: Colorectal cancer (CRC) is third most common cancer worldwide. Field cancerization is a phenomenon, in which the histologically normal tissue in an organ is primed to undergo malignant transformation in individuals with a personal history of colonic adenomas or cancer. In the present study, we studied changes of colonic mucosa in fresh colectomy specimens, up to a distance of 10 centimeters, both proximally and distally, from a tumor
Delhi Experience.

Neo-Adjuvant Chemotherapy – Surgical Oncology-Aiims-New Criteria For Pathological Complete Response (pCR) And Its Abstract Id: YUGP1698

also improve our understanding regarding pathogenesis of CRC. Future tumor recurrence. Understanding the field cancerization may be attributable to the cancer field effects. Findings of such microscopic pre-neoplastic lesions, nuclear beta-catenin localization, tumor, up to a distance of 10 centimeters, showed both evidences of microscopic neoplastic lesions, normal human colonic mucosa, adjacent to a tumor, up to a distance of 10 centimeters, showed both evidences of microscopic pre-neoplastic lesions, normal beta-catenin localization, as well as upregulation of CSC markers. All these changes, may be attributable to the cancer field effects. Findings of such microscopic change deserves awareness, as, if incompletely excised, may lead to future tumor recurrence. Understanding the field cancerization may also improve our understanding regarding pathogenesis of CRC.

Abstract Id: YUGP1698

Presenter - Dr. Manoj Gowda S Co-author - SVS Deo, NK Shukla, Ajay Gogia

INTRODUCTION: Pathological complete response (pCR) has been used as an endpoint in various neo-adjuvant trials for carcinoma breast. Till date, there is no universally accepted definition of pCR, which has made reporting and interpretation of data from neoadjuvant trials challenging. The objective of the study was to establish the association between different types of pCR and event free survival(EFS) in breast cancer patients undergoing Neo-Adjuvant chemotherapy (NACT). MATERIALS AND METHODS: A prospectively maintained computerized Breast Cancer database was accessed and clinical data of 504 Breast cancer patients undergoing NACT followed by surgery between 1995 to 2014 were included for analysis. Rates of pCR in primary only (ypTo) and pCR in both primary and axilla (ypToNo) were calculated and relapse rates during follow-up were documented. An analysis was performed to elucidate the relationship between relapse rates in pCR vs non pCR patients using 2 different pCR criteria. STRATA software was used to analyse the data. RESULTS: Out of 504 patients receiving NACT a total of 113 (22.42%) patients achieved pCR in primary (ypTo) and 68 (13.4%) patients had achieved pCR in both primary and axilla (ypToNo). Using pCR criteria 1 (ypTo) 35 patients had recurrence out of 113 patients (30%) in comparison 178 patients had recurrence among 390 patients (45.64%) who didnâ€™t achieve a pCR (p=0.007). When criteria 2 of pCR (ypToNo) was used 16 out of 68 patients had recurrence (23.53%) who had pCR in both primary and axilla, whereas 197 out of 436 patients (41.51%) had recurrence who didnâ€™t had pCR (p=0.02) CONCLUSION: pCR rates among breast cancer patients receiving NACT vary significantly using different pCR criteria . The frequency of pCR decreased with usage of increasingly stringent criteria (ypTo=22.42% vs ypToNo=13.4%). Overall Patients who achieved pCR had less recurrences in comparison to non pCR patients. While both ypTo and ypToNo were associated with relatively low rates of relapse ypTo has stronger association with decreased relapse rates.

Abstract Id: YUGP1700
Development Of Bifunctional Magnetic Nanostructures As Contrast For High Resolution Magnetic Resonance Imaging And Precision Based Hyperthermia/Thermoradiotherapy In Cancer Theranostics

Presenter- Dr. Bhaskar Vishwanathan Co-author - Pradipita Ranjan Rauta, .

Background Nanoparticle research involving cancer therapy, has limitation in targeting cancer cells and uniform distribution within the tumor. We propose combined use of iron oxide(IO) nanoparticles(NPs) and nonspecific extracellular lanthanides(gadolinium(Gd)) NPs in order to improve the sensitivity and specificity of tumor imaging and thermoradiotherapy application. Material and Methods Bifunctional magnetic nanostructures (MNS) were constructed by conjugating APTES-Gd2O3 NPs with OA-Fe3O4 NPs by EDC/NHS catalysis and characterized for size, zeta potential(DLS), morphology(electron microscopy), XRD(magnetite structure), FTIR(functionalization) and thermoradiotherapy activity. The final magnetic nanostructure(APTES-Gd2O3 NPs)-(OA-Fe3O4 NPs) were evaluated for high-resolution magnetic resonance imaging(MRI) and hyperthermia applications in cancer cells(MTT colorimetric assay). Results Iron oxide functionalized nanoparticles, size 10-20 nm synthesized by optimizing co-precipitation method, OA functionalization. The average size of the particles 15.45Å±5.4 nm, confirmed by DLS and SEM. Signature peaks of magnetite(Fe3O4) observed from XRD patterns and OA functionalization by FTIR analysis. Synthesis of bifunctional magnetic nanostructures(MNS) achieved through EDC/NHS catalysis. Gd2O3-OA-Fe3O4 NPs had average diameter of 75 Å± 12 nm (DLS analysis) and zeta potential of -27.2 ± 5.33 mV and nontoxic from MTT assay (up to 1000 Åµg/mL). MRI studies on NP samples showed excellent contrast uptake with temperature upto 45 degrees. In vivo study in tumor xenografted rabbits is currently on to evaluate the imaging potential(MRI) of MNS and hyperthermia. Conclusions The magnetic nanostructures reveal favorable properties e.g. size, structure, functionalization The ongoing invivo study on rabbits evaluate the functionality of the system, for imaging and treatment in cancer. Gd NPs specifically and uniformly disperse in cancer cells, since it is conjugated with iron oxide NPs cause cancer cell kill by induction hyperthermia with temp at 45 degrees.

Abstract Id: YUGP1704
Association Of Epstein Barr Virus With Mucosal Squamous Cell Cancers Of Head And Neck

Presenter - Dr. Saquib Zaffar Banday Co-author - .

ABSTRACT: Head and neck cancer is the commonest cancer in India and consists of about one-third of all cancers. Among viral infections, Epstein Barr virus (EBV) has been implicated in the association of many head and neck cancers. Role of EBV as etiological factor in our population remains unknown. AIMS & OBJECTIVES: To determine the EBV related etiology of mucosal Head and Neck Squamous Cell Carcinoma (HNSCC) in Kashmir Valley and if positive to define subtyping of EBV and to find a correlation between the burden of EBV and disease status. MATERIAL METHODS: Observational single centre retrospective â€œprospective study. The study included 53 tissue samples from patients with Squamous Cell carcinoma of Head and Neck region. An equal number of blood samples were taken from healthy volunteers as a control for the reaction process. Sample collection and storage was done as per standard protocol. DNA
amplification was done by Polymerase chain reaction. RESULTS: We did not observe any sample which tested positive for EBV. All samples were negative for EBV DNA. CONCLUSION: EBV has no role in the pathogenesis of Head and Neck Cancers in Kashmiri ethnic population of India. Different Genetic makeup of our population may be responsible for it. Further studies are needed to elucidate the etiology of head and neck Carcinoma in our population. KEYWORDS: EBV, Head and Neck Carcinoma, Kashmiri population.

Abstract Id: YUGP1710
Surgical Management Of Sacral Tumours -Perspectives And Outcome Analysis For 15 Years Period Â€“ A Single Institutional Experience
Presenter- Dr. Bharathiraja Kalyanam
Co-author - Prof Subbiah Shanmugam, Prof Gopu Govindasamy, Dr Syed Afroz Hussein

Objective: Sacral tumours are rare pathologies. Their management generates a complex medical problem, as they usually are diagnosed in advanced stages. The evaluation and complex treatment of these rare tumours require a multidisciplinary approach, optimally at institutions with comprehensive care and experience. Aim of this study is to analyse the perspectives and outcome after surgical management of sacral tumours over the period of 15 years from our institution. Methods & Materials: A retrospective study of the patients who underwent sacrectomy between 2002 and 2016 in our institution. Patients underwent one of the three types of following sacrectomy: Total, subtotal or partial. Sacrectomy was performed by either one of the following approaches: posterior, abdomino lateral, abdominosacral - either as sequential or staged approach. Spino-pelvic reconstruction was not performed in any of the patients. Patients were analysed for morbidity, functional outcome (MSTS score) and survival (Kaplan Meier method). Results: Twenty seven patients underwent sacrectomy of which 12 were partial, 8 were subtotal and 7 were total sacrectomy. Most common histology was Giant cell tumour followed by chordoma. There were fourteen males and thirteen females. 51.8% of patients had bowel and bladder disturbances post operatively. 70.3% had wound complications. Median follow up was 36 months (range 6-180 months). Five year OS was 72.1%. Distant metastasis occurred in 1 patient (3.71%). Mortality rate (n=6) was 22.22%. Based on MSTS Score 11 patients (40.7%) had excellent outcome, 10(37.03%) had good outcome and 6(22.22%) had poor outcome. Staged approach had reduced morbidity. Conclusion: Sacral tumours are locally aggressive and rarely metastasizing lesions. En bloc resection with adequate margin can achieve long term local oncological control. sacrectomy, once considered as a morbid procedure, can now be safely performed with improved surgical techniques. Our experience in sacrectomy with staged approach despite deferring spino pelvic reconstruction has shown to achieve lesser perioperative morbidity, better functional outcome and comparable long term survival.

Abstract Id: YUGP1711
Mr Imaging Features Of Brain Metastases In Nsclc Patients And Its Correlation With Molecular Alterations In Driver Oncogenes: Potential Targetable Imaging Biomarker For Egfr Status.
Presenter- Dr. Abhishek Mahajan
Co-author - Kumar Prabhash, Vanilta Noronha, Amit Joshi

BACKGROUND Brain is a common site of metastases with EGFR mutated lung cancer. Oral targeted therapies have broadened the treatment options in the advanced setting with the potential for periods of long term response. Literature on MR imaging metrics or feature analysis of brain metastasis as a biomarker for predicting driver oncogenic mutation in patients with NSCLC is limited and less investigated.Â The purpose of the study was to study MRI imaging biomarkers of brain metastases in patient with NSCLC and their correlation with molecular subtyping (EGFR status). To correlate these imaging features with response to therapy and clinical outcomes. METHODS We analyzed clinical data on 75 patients who were tested for EGFR mutation and underwent brain magnetic resonance imaging at diagnosis. Multiparametric MRI was performed in all cases.Â The associations between EGFR mutation status and clinical features, specifically age, sex, smoking, TNM stage, and imaging variables, as well as brain metastasis, were analyzed using logistic regression analysis. Clinical factors known to be associated with EGFR mutation status in NSCLC patients and staging factors of TNM were included in the logistic regression mutlivariate analysis. RESULTS 38 patients were EGFR positive and 37 were EGFR negative. EGFR positive cases showed early development of brain metastasis (within 6 months after 1st presentation). Compared with wild-type tumors, EGFR-mutated tumors showed wide spread of brain lesions (p < 0.00). Â Statistically significant difference (p < 0.00) was observed in border/ margins of metastatic lesions on T2W images. Metastases in EGFR positive cases showed fuzzy and infiltrative borders while in EGFR negative cases, metastatic lesions were well defined. Statistically significant number of metastatic lesions in EGFR wild group showed focal restriction on DW images (p<0.001). In EGFR wild cases, metastatic lesions showed good response to WBRT with most of the cases showing response on follow up scan and clinical examination (p<0.00). Incidence of recurrent metastatic disease was also higher in EGFR positive cases (p < 0.00). Incidence of meningeal involvement in the form of Patchy or leptomeningeal carcinomatosis was significantly higher in EGFR positive cases (p < 0.04). On multivariate analysis, statistically significant association was found between T2 border, number, restricted diffusion, meningeal positivity and time from diagnosis to development of metastasis (p < 0.05).Â CONCLUSIONS EGFR positive brain metastases have characteristic MR imaging features that can be potential non-invasive diagnostic, predictive and prognostic imaging biomarkers. These MR based Radiogenomic imaging biomarkers have potential role in personalized therapy of EGFR positive brain metastasis in lung cancer patients.Â

Abstract Id: YUGP1714
Optimising Morbidity In Re-do Surgery For Thyroid Cancer Â€“ Quality And Quantity Of Surgery Matters
Presenter- Dr. SEEMA SINGH
Co-author - S.V.S Deo, N.K. Shukla, Seema Singh

Abstract for ICC 2017 Optimising Morbidity In Re-do surgery for Thyroid cancer Â€“ Quality and quantity of Surgery matters S.V.S Deo, Shukla NK, Seema Singh, Sunil Kumar, Bal CS, Sushma Bhatnagar. Introduction; Thyroid cancer is the most common endocrine cancer. Surgery is the mainstay of therapy for differentiated thyroid cancers with long-term survival in a significant proportion of patients. Surgical Morbidity is a major determinant of outcomes especially in patients undergoing Re-do thyroid surgery. Volumes and surgical expertise can affect surgical outcomes . We present our experience of re-do thyroid surgery for cancer with specific reference to surgical morbidity. Material & Methods; All the records of recurrent carcinoma thyroid who underwent revision surgeries in the department of surgical oncology between 2009 to 2016 were analysed for clinical spectrum, prior surgical intervention pattern, morbidity during first surgery, revision surgery details and morbidity data at our centre. Majority of the surgeries were performed by one senior consultant surgeon. Results ; A total of 132 patients had re-do surgery for thyroid cancer during the study period. Median age at presentation was 40 years ( mean ;39.59 +/- 14.15) and 52.27% were females and 47.73% were males ( M:F = 1: 1.15). Histopathologically 83 % were Papillary carcinoma thyroid (PTC), 8 % Medullary carcinoma thyroid, 7 % Follicular carcinoma thyroid and 2 % Hurthle cell carcinoma. The spectrum of surgery prior to referral was (i)Lobectomy 29.54%, (ii) Total thyroidectomy(TT) 59.09% (iii) Near total thyroidectomy (NTT) 5.20% (iv) Subtotal thyroidectomy (STT) in 2.27%. Neck nodes were addressed in 56 cases ( 42.43%). Documented postoperative
Sarcopenia is described as severe skeletal muscle wasting, classified based on the skeletal muscle index (SMI). Combined sarcopenia and obesity have been shown to be both predictive and prognostic marker in patients cancer. Objectives: a) To evaluate the role of sarcopenia and skeletal muscle density in predicting clinical outcomes in advanced NSCLC b) To determine the correlation between sarcopenia index and skeletal muscle density, with diabetes and smoking. METHODS A total of 100 patients who had baseline CECT or PET-CT and underwent treatment for advanced NSCLC were included. The morphometric parameters such as Skeletal Muscle Density (SMD), Skeletal Muscle Index (SMI/ Sarcopenia), Fat mass (FM), fat-free mass (FFM), subcutaneous fat to muscle ratio (FMR) and visceral to subcutaneous adipose tissue ratio (VA/SA) were measured by CT at the L3 vertebra and were correlated to clinical parameters and chemotherapy response. The factors contributing to Progression free (PFS) and overall survival (OS) were analyzed by univariate and multivariate analysis. RESULTS Prevalence of sarcopenia was 57 (57%) with male preponderance. The mean sarcopenia index was 49.9 cm²/m² for males 51.8 cm²/ m² and females 44.98 cm²/ m² with p 0.001. 

Abstract Id: YUGP1722

Epidemiological Profile Of Head And Neck Cancers At A Tertiary Care Hospital

Presenter - Dr. Saquib Zaffar Banday
Co-author - , ,

ABSTRACT: INTRODUCTION: Head and neck cancer is the fifth most common malignancy globally among adults and comprises 5% of all malignancies worldwide. There is scarcity of data regarding the clinico epidemiological profile of head and neck carcinomas in our population. The demographic presentation & exact prevalence of these malignancies in our population is not known. AIM & OBJECTIVES: To study the clinico- epidemiological profile of head and Neck carcinoma in Kashmiri ethnic population of India. MATERIAL & METHODS: This study was conducted at Cancer center at SMHS Srinagar, J & K, India from 2012 to 2014. The study included total of 106 patients with Head and Neck Squamous Cell Carcinoma (HNSCC) registered with the department from 2012 to 2014. It was a prospective and retrospective study. Patients having histopathological (HPE) confirmation of the disease were enrolled for the study. All the demographic & clinical details of the recruited patients were studied thoroughly including history, physical examination, investigations and mode of treatment. RESULTS: Male to female ratio was 2.7:1. The mean age was 55.3 years. Among both males and females, the highest incidence of HNSCC was seen within the age group of 51-60 years. The most common primary site of disease was Oral Cavity=36(33.96%), Larynx=28 (26.41%), Pharynx in 16(15.09%), Nasopharynx in 10(9.43%), Sinonasal in 10(9.43%), and Tonsil in 6 cases(5.66%). Patients usually presented with advanced stage of disease (Stage III, IV-(64.15%) 68 versus stage I, II-(35.84%) 38). Tobacco consumption in any form was present in 89% of our population. Lack of balanced diet (28%) and poor dental hygiene (50%) and belonging to low socioeconomic class (57%) were also thought to be significant factors for the disease burden. Most of our patients were treated with surgery followed by adjuvant chemo-radiotherapy (37.73%), chemo and radiotherapy (28.31%), radiotherapy alone (16.98%) & surgery alone (9.4%). CONCLUSION: Cancers of oral cavity and larynx are most common head & neck carcinoma in our population. Male Sex, tobacco consumption, lack of balanced diet & poor orodental hygiene are significantly associated with head and neck carcinoma in our population. KEYWORDS: Head and neck carcinoma, Kashmiri population
Abstract Id: YUGP1739

Cancer Screening Beliefs And Barriers Assessment

Presenter: “Dr. Ajay Vidyarthi
Co-author - Braj Kishore Sinha, Shruti Choudhary,

ABSTRACT A study was undertaken to explore the beliefs, barriers and acceptance of educated people in Ranchi district, Jharkhand towards screening for common cancers. These psychological constructs were studied using a vignette-based self administered questionnaire developed in the form of a factorial survey. Responses were designed to vary in content from strong agreement to strong disagreement on a 5-point Likert scale. The questionnaire was administered to all volunteers who could fluently read and write English. The questionnaire was validated in 339 volunteers using Principle Component Analysis and Cronbach alpha. Beliefs and barriers were tested by extending the sample size to 535 volunteers. The subjects were tested for their “attitude towards cancer acceptance” (A), “attitude towards screening” (B), and “acceptance of screening” (H). Using these three psychological constructs the authors were able to derive an equation giving the probability of a respondent accepting cancer prevention and screening activities.

Abstract Id: YUGP1743

Nivolumab in Sorafenib-De Naïve And -Experienced Patients With Advanced Hepatocellular Carcinoma (Hcc): Checkmate 040 Study

Presenter - “Dr. Akhil Chopra
Co-author - Todd S. Crocenzi, Anthony B. El-Khoueiry, Thomas Yau

Akhil Chopra,1 Todd S. Crocenzi,2 Anthony B. El-Khoueiry,3 Thomas Yau,4 Ignacio Melero,5,6 Bruno Sangro,7 Masatoshi Kudo,8 Chiun Hsu,9 Jaffer Trojan,10 Tae-You Kim,11 Su-Pin Choo,12 Tim Meyer,13 Yoon-Koo Kang,14 Winnie Yeo,15 Adby Baakali,16 Christine dela Cruz,16 Liz Xin Lang,16 Jaclyn Neely,16 Theodore H. Welling,17 IllI17 Jhonsh Hopkins Singapore International Medical Centre, Singapore; 2Providence Cancer Center, Portland, OR, USA; 3SUSC Norris Comprehensive Cancer Center, Los Angeles, CA, USA; 4University of Hong Kong, Hong Kong, China; 5CiAnica Universidad de Navarra and CIBERONC, Pamplona, Spain; 6Center for Applied Medical Research (CIMA), Pamplona, Spain; 7CiAnica Universidad de Navarra and CIBEREHD, Pamplona, Spain; 8Kindai University Faculty of Medicine, Osaka, Japan; 9National Taiwan University Hospital, Taipei, Taiwan; 10Goethe University Hospital and Cancer Center, Frankfurt, Germany; 11Seoul National University Hospital, Seoul, Korea; 12National Cancer Center, Singapore; 13Royal Free Hospital, London, UK; 14Asan Medical Center, University of Ulsan, Seoul, Korea; 15Chinese University of Hong Kong, Hong Kong, China; 16Bristol-Myers Squibb, Princeton, NJ, USA; 17University of Michigan School of Medicine, Ann Arbor, MI, USA Background: Many patients with advanced HCC progress on standard-of-care therapy. Nivolumab is a fully human anti PD-1 IgG4 monoclonal antibody that demonstrated durable responses (objective response rate [ORR], 20%; median duration of response [DOR], 9.9 mo; 9-mo overall survival [OS] rate, 74%) in patients with advanced HCC in the dose-expansion (EXP) phase of the CheckMate 040 study (NCT01688878; El-Khoueiry, Sangro et al. 2017). Here we present survival and durability of response data in both sorafenib-naïve and -experienced patients with advanced HCC in CheckMate 040. Methods: Patients naïve to or previously treated with sorafenib received nivolumab in phase 1/2 dose-escalation (ESC; 0.15-10 mg/kg) and EXP (3 mg/kg) cohorts every 2 weeks regardless of PD-1 ligand 1 (PD-L1) status. Primary endpoints were safety/ tolerability (ESC) and ORR (EXP: ORR was reported by investigator [IV] and blinded independent central review) using RECIST v1.1. Secondary endpoints included DOR, disease control rate (DCR), and OS. Biomarkers were assessed using pretreatment tumor samples. Results: Patients (N=262) had median follow-up durations of 14±16 mo across the cohorts. Overall, 98% of patients (258/262) had Child-

Abstract Id: YUGP1734

Spectrum Of Cutaneous Metastasis From Internal Malignancies In 63 Patients

Presenter - Dr. VEENITA YOGI
Co-author - Veenita Yogi, O. P.Singh,

Cutaneous metastasis from internal malignancy are relatively uncommon and account for 0.7% to 9%. Cutaneous metastasis may herald the diagnosis of internal malignancy and early recognition can lead to accurate and prompt diagnosis and timely treatment. The most common cancer metastasizing to the skin are breast, lung, colorectal and melanoma. Material and Methods: This study retrospectively assessed 63 patients of cutaneous metastasis registered in the Department between year 2009 to 2016. All patients were histopathologically proven primary and cutaneous lesions both. Cutaneous metastases were analyzed on the basis of type and site of presentation, associated distant and visceral metastasis, time interval between primary malignancy and development of cutaneous metastasis and prognosis. Results: Our study included 83 patients of cutaneous metastasis (25 males and 38 females), median age was 46.5 years (range 16-80 years). In descending order primary malignancy sites were breast (24%), gastrointestinal tract (20%), genitourinary (16%), head and neck (14%), lung (7%) and others (13%). Histological distribution were infiltrating ductal carcinoma breast (24%), adenocarcinomas (21%), sarcomas (21%), malignant melanomas (14%), squamous cell carcinoma (11%) and others (9%). The common clinical presentation was cutaneous nodule in 93% patients. The cutaneous site of metastatic presentation was abdomen, chest, extremities, face scalp and incisional scar in decreasing order. 95% of the patients presented with other distant and visceral metastasis. In this study the time taken to development of cutaneous metastasis from primary malignancy, varies as a first clinical manifestation of internal malignancy to 36 months in follow up duration. Poor survival was noticed in the patients presented with cutaneous metastasis as a first clinical feature. Conclusion: In this study we have noticed some rare presentations of cutaneous metastasis. Cutaneous metastasis is important to recognize early, they often dramatically alters treatment plan. The appearance of these cutaneous metastasis signals widespread distant and systemic metastatic internal malignancy, resulting in poor outcome and patient survival.
Abstract Id: YUGP1750
Bilateral Breast Cancer â€“Incidence, Clinical Spectrum And Challenges In The Management
Presenter - Dr. Ashutosh Mishra
Co-author - SVS Deo, NK Shukla, Ajay Gogia

Background:- Bilateral Breast cancer (BBC) is a rare entity with incidence of 1-2% in reported literature. There are conflicting and inadequate data regarding the incidence, behaviour, molecular subtypes, management policies and their outcomes. We present our experience of treating 87 BBC with multimodality management.

Materials and Methods:- An audit of prospectively maintained computerized breast cancer database of the department of surgical oncology, AIIMS, New Delhi was performed. The medical records of patients with histo-pathologically proven Bilateral Breast Cancer (synchronous or metachronous) were analyzed to assess the clinical profile, molecular sub-types, treatment patterns and outcomes.

Results: A total 87 (2.68%) patients presented with BBC out of 3235 breast cancer patients treated between January 1996 and December 2016. Out of 87 BBC patients 67 had metachronous (MBBC) and 20 had synchronous breast cancer (SBBC). Family history of breast cancer was present in 13 patients (15%). Similar Molecular types were found in 56 BBC patients (64%) while this pattern was relatively higher in SBBC group (70%). Screen detected Contralateral breast cancer (CBC) was detected in 16 patients only and rest all presented with breast mass. Most contralateral breast cancer patients had early stage breast cancer in comparison to the index side cancer (64% versus 36%). Among 20 SBBC patients 3 had B/L BCS and 13 had B/L mastectomy where as in 67 MBBC group majority had B/L mastectomy. All patients undergoing BCS and LABC were given postoperative radiotherapy. All patients received adjuvant chemo and or hormonal therapy both for index and CBC based on the stage and hormone receptor status.

Conclusion:- BBC is an uncommon clinical entity and with effective therapeutic interventions and improving survival we are likely to see more BBC in future. Majority present with MBBC during follow-up and positive family history is present in a small proportion of BBC patients. Treatment of BBC is challenging including choice of surgery, issues of bilateral breast irradiation and re-chemotherapy and hormonal therapy decisions for MBBC. BBC patients require individualized treatment planning in a multidisciplinary treatment setting.

Abstract Id: YUGP1754
Co-Relation Of Clinico-Pathological Analysis Of Oral Squamous Cell Carcinoma Among The Younger Age Group And Overall Survival.
Presenter - Dr. Saini Mondal
Co-author - Dr. Rishna K.,

First author- Dr. Saini Mondal Qualification- Post Graduate Trainee in Oral and Maxillofacial Pathology Institute â€“ Yenepoya Dental College and Hospital Address- Derlakatte, Mangalore, Karnataka â€“ 575018 Email- mondal.saini@gmail.com ABSTRACT- Objectives: Oral squamous cell carcinoma (OSCC) primarily occurs in older age group. An alarming increase in the incidence of oral cancer in young people is being observed worldwide in the recent years. The objective of this study is to make a descriptive analysis of the clinical and histopathological characteristics of oral squamous cell carcinoma in patients less than 45 years of age. Methods: The retrospective records of patients diagnosed with oral squamous cell carcinoma in the Department of Oral Pathology and Microbiology, Yenepoya Dental College hospital, Mangalore, India, between 2001- 2017 will be reviewed. The clinical and histological features of patients with 45 years and younger age group will be analysed and considered as target group. The overall prognosis of this target group will be correlated by comparing TNM staging, histopathological grading and survival rate. Results and Conclusion: All patients who were treated for oral squamous cell carcinoma in the 16-year period (2001-2017) were considered and younger group patients under 45 years of age will be further categorized on the basis of their primary site of occurrence, clinical staging, histological grading and risk habits. The most common site involved will be evaluated from various sites of occurrence of oral squamous cell carcinoma from the target group and clinical grading will be evaluated using TNM staging criteria. Histopathological grading of the cases will be done under three broad categories; well, moderate and poorly differentiated squamous cell carcinoma. The smoking history, tobacco chewers, alcohol consumers and a combination of these habits will be evaluated under risk category.

Abstract Id: YUGP1758
Incidence And Predictors Of Ccr & Pcr And Validation Of Neo! Adjuvantt (Igr / Mdacc Nomogram ) In Patients Undergoing Surgery For Breast Cancer After Neo Adjuvant Chemotherapy
Presenter - Dr. Manikandan Murugesan
Co-author - Dr.Madhur Muralee, ,

Incidence and predictors of cCR & pCR and validation of NEO! ADJUVANT( IGR / MDACC Nomogram ) in patients undergoing surgery for breast cancer after neo adjuvant chemotherapy

Abstract Id: YUGP1757
Presenter- Dr. Ashutosh Mishra
Co-author - SVS Deo, NK Shukla, Ajay Gogia

Background:- The smoking history, tobacco chewers, alcohol consumers and a combination of these habits will be evaluated under risk category. An overall correlation among the males and females with or without habit history will also be analysed. The overall survival rate of this target group is analysed from the follow up and feedback system and this result will be compared with the clinico-pathological data.

The following table provides the detailed overview of the analysis of the different parameters in oral squamous cell carcinoma as found. PRIMARY SITE TNM STAGING GRADING HABITS SURVIVAL Tongue Stage 0 Well Differentiated Chewing tobacco only Below 2 years Buccal Mucosa Stage I Moderately Smoking only Within 2-5 years Differentiated Mandibular alveolar Stage II Poorly Differentiated Smoking Above 5 years ridge and Alcohol Floor of the mouth Stage III Smoking and Chewing Retromolar Region Stage IV Chewing and alcohol Palate Smoking, Chewing and alcohol Maxillary alveolar ridge

No habits Gingiva Unknown Lip

Abstract Id: YUGP1759
Presenter - Dr. Ashutosh Mishra
Co-author - SVS Deo, NK Shukla, Ajay Gogia

Background:- In the management of breast cancer (BC) patients, there are several options available. There are conflicting reports regarding the optimal therapy in patients with early stage BC (T1-2, N0-1, M0). In this study, we have analyzed the clinical features of patients with early stage BC treated with surgery alone and compared the outcomes and survival between the two groups.

Materials and Methods:- A retrospective review of the medical records of patients with early stage BC treated with surgery alone at our institute between 2010 and 2017 was performed. The medical records of patients with early stage BC treated with surgery alone were included in the study. The clinical features, tumor characteristics, and treatment outcomes were recorded. The patients were divided into two groups: group A (treated with surgery alone) and group B (treated with adjuvant chemotherapy and/or radiation therapy).

Results: A total of 100 patients were included in the study. The median age of the patients was 50 years (range 30-75 years). The majority of the patients were females (95%). The most common tumor characteristics were T1 tumors (60%) and N0 tumors (70%). The median follow-up time was 5 years. The overall survival rate was 85% at 5 years. The survival rate for patients treated with surgery alone was 88%, whereas the survival rate for patients treated with adjuvant chemotherapy and/or radiation therapy was 82%.

Conclusion: Surgery alone is a safe and effective treatment option for early stage BC patients. The survival rate for patients treated with surgery alone was higher than that for patients treated with adjuvant chemotherapy and/or radiation therapy. The study suggests that surgery alone is a reasonable option for patients with early stage BC.
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Co-relation Of Clinico-pathological Analysis Of Oral Squamous Cell Carcinoma Among The Younger Age Group And Overall Survival.

Presenter- Dr. Saini Mondal
Co-author - Rishna K, Dr. Riaz Abdullah, Dr. Sonia Adyanthaya

First author- Dr. Saini Mondal Qualification- Post Graduate Trainee in Oral and Maxillofacial Pathology Institution â€“ Yenepoya Dental College and Hospital Address- Derlakatte, Mangalore, Karnataka â€“ 575018 Email- mondai.saini@gmail.com ABSTRACT- Objectives: Oral squamous cell carcinoma (OSCC) primarily occurs in older age group. An alarming increase in the incidence of oral cancer in young people is being observed worldwide in the recent years. The objective of this study is to make a descriptive analysis of the clinical and histopathological characteristics of oral squamous cell carcinoma in patients less than 45 years of age. Methods: The retrospective records of patients diagnosed with oral squamous cell carcinoma in the Department of Oral Pathology and Microbiology, Yenepoya Dental College hospital, Mangalore, India, between 2001- 2017 will be reviewed. The clinical and histological features of patients within the age group of 18-45 years and younger age group will be analysed and considered as target group. The overall prognosis of this target group will be correlated by comparing TNM staging, histopathological grading and survival rate. Results and Conclusion: All patients who were treated for oral squamous cell carcinoma in the 16-year period (2001-2017) are considered and younger group patients under 45 years of age will be further categorized on the basis of their primary site of occurrence, clinical staging, histological grading and risk habits. The most common site involved will be evaluated from various sites of occurrence of oral squamous cell carcinoma from the target group and clinical grading will be evaluated using TNM staging criteria. Histopathological grading of the cases will be done under three broad categories: well, moderate and poorly differentiated squamous cell carcinoma. The smoking history, tobacco chewers, alcohol consumers and a combination of these habits will be evaluated under risk category . An overall correlation among the males and females with or without habit history will also be analysed. The overall survival rate of this target group is analysed from the follow up and feedback system and this result will be compared with the clinico-pathological data. The following table provides the detailed overview of the analysis of the different parameters in oral squamous cell carcinoma as found. PRIMARY SITE TNM STAGING GRADING HABITS SURVIVAL Tongue Stage 0 Well Differentiated Chewing tobacco only Below 2 years Buccal Mucosa Stage I Moderately Smoking only Within 2-5 years Differentiated Mandibular alveolar Stage II Poorly Differentiated Smoking Above 5 years ridge and Alcohol Floor of the mouth Stage III Smoking and Chewing Retromolar Region Stage IV Chewing and alcohol Palate Smoking, Chewing and alcohol Maxillary alveolar ridge No habits Gingiva Unknown Lip

Abstract Id: YUGP17670

Craniofacial Resection For Orbital Tumours â€“ Results Of A Multidisciplinary Surgical Approach

Presenter- Dr. PARAMESH SHIVANNA
Co-author - Dr SVS Deo, Dr N K Shukla, Dr S S Kale

INTRODUCTION- Orbital tumours comprise a rare and heterogenous group of tumors. The complex anatomy of orbit poses a challenge to surgical resection and reconstruction. A subset of patients with advanced orbital tumours require craniofacial resection. Craniofacial resection using a multidisciplinary approach offers the advantage of optimal oncologic and functional outcomes. We performed an audit of our experience with orbital tumours requiring craniofacial resections and present the outcomes. MATERIALS AND METHODS- A prospectively maintained database in the Department of Surgical Oncology, BRA IRCH, AIIMS, New Delhi from 2012 to 2017 was accessed and all patients undergoing craniofacial resection for orbital tumours were analysed. A two team multidisciplinary surgical approach involving Surgical oncology and neurosurgery was adopted in all cases. RESULTS - A total of 5 out of 31 patients undergoing orbital exenteration for orbital tumours required craniofacial resection. Mean age of presentation was 53 years (18 â€“ 69) with a male preponderance ( M:F= 3:2). The tumours were of varied histopathologic sub-types- Adenoid cystic carcinoma, Pleomorphic adenoma, mesenchymal Chondrosarcoma, Apcrine carcinoma, sebaceous cell carcinoma. Four out of 5 patients presented with recurrent/ residual disease after...
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a prior sub-optimal surgical intervention. Craniofacial resection was performed by trans-facial followed by trans-cranial approach in 4 patients and in 2 patients dura was resected. R-0 resection could be achieved in all patients with no significant post operative morbidity. Temporalis muscle flap was used in all patients for soft tissue reconstruction and in 2 patients each titanium mesh and cranioplasty using calvarial graft was used. Four patients received adjuvant radiotherapy. One patient relapsed and four patients were disease free at last follow-up. CONCLUSION-A subset of orbital tumours with varied histologies can present with intracraniel extension creating challenges in management. A multidisciplinary aggressive surgical approach for resection and expertise for soft tissue and rigid reconstruction is necessary for optimal outcomes.

Abstract Id: YUGP1770

A Study Of Role Of Change In Ca 125 And Molecular Biomarkers P53 And Ki 67 Index As Predictors Of Optimal Cytoreduction Following Neoadjuvant Chemotherapy In Stage Iii And Iv Ovarian Cancer
Preseor- "Dr. Suneel Kaushik Komanduri
Co-author - SUNEEL KAUSHIK, PRASANTH PENUMADU, LATHA CHATURVEDULA

A STUDY OF ROLE OF CHANGE IN CA 125 AND MOLECULAR BIOMARKERS p53 AND KI 67 INDEX AS PREDICTORS OF OPTIMAL CYTOREDUCTION FOLLOWING NEOADJUVANT CHEMOTHERAPY IN STAGE III AND IV OVARIAN CANCER BACKGROUND: Ovarian cancer that constitutes a heterogeneous group is the most lethal of gynecologic malignancies. With a major portion of patients diagnosed in advanced stage, it poses a surgical challenge, with high morbidity associated with primary cytoreduction and on occasion an incomplete surgery that merits no surgical advantage. The concept of neoadjuvant chemotherapy (NACT) in such potentially unresectable cases is gaining significance with few randomized studies demonstrating improved PFS and reduced surgical morbidity. In this study, we aimed to assess the optimal cytoreduction rate following NACT and also to predict the response to chemotherapy using CA125, Ki 67 and p53. MATERIALS AND METHODS: Study design: Prospective interventional study Site: Department of Surgical Oncology, JIPMER Duration: January 2015 to December 2016 Sample size: 60 patients with advanced ovarian cancer. Aim of the study: It was aimed at identifying optimal cytoreduction rates following NACT-IDS protocol and clinicoradiological and immunohistochemical markers that could predict response to chemotherapy. Inclusion criteria: I. Age Group (18 â€“ 70 yrs.) ii. FIGO stage IIIC and IV where optimal cytoreduction is not feasible as decided by multidisciplinary team (MDT) discussion (based on imaging or intraoperative findings at laparotomy) iii. Histologically proven epithelial ovarian cancers Exclusion criteria: â€“ I. Patients not fit to receive chemotherapy ii. Limited lifespan 8 (25%;p=0.02). The initial CA125 at presentation cannot be used as a predictor of optimal cytoreduction thereupon. However, rate of change in CA125 with each cycle of chemotherapy and proportional reduction in initial CA125 at the end of chemotherapy predicted complete response and optimal cytoreduction with reasonable accuracy. There was a significant difference in the final CA125 among those who had a clinical complete response compared to those who did not (82.94 U/ ml vs 171.1 U/ml; p=0.001). The rate of change of CA 125 was an indicator of response as 82.9% of patients who had >80% reduction in initial CA125 following NACT had an optimal cytoreduction compared to 26.3% among those who had 40% have a higher chance of achieving complete response and optimal cytoreduction following NACT. A statistically significant difference was observed in the mean Ki67 index of patients who had clinical complete response (60 vs. 39.09)(p=0.000), pathological complete response (71.42 vs. 41) (p=0.000) and optimal cytoreduction (53.72 vs. 41.13) (p=0.000) compared to those who did not. CONCLUSION: Neoadjuvant chemotherapy in advanced ovarian cancer patients is a well-tolerated treatment protocol. NACT followed by IDS reduces surgical morbidity associated with cytoreduction with non-inferior optimal cytoreduction rates. The CA125 levels post NACT, proportional reduction in CA125 levels and high proliferative index predict with reasonable accuracy the optimal cytoreduction and complete pathological response. The lower surgical morbidity and non-inferior optimal cytoreduction rates with NACT-IDS defends its place in the treatment algorithm.

Abstract Id: YUGP1772

Chemo-Radiation After Upfront Rectal Resections â€“ A Clinical Dilemma
Preseor- "Dr. Pavan Sugoor
Co-author - Ashish Pokharkar, Manish Bhandare, Reena Engineer

Abstract Aim To compare the impact of adjuvant chemo-radiotherapy (ACRT) versus adjuvant chemotherapy (ACT) alone on recurrence and survival in patients with stage II and III rectal adenocarcinoma undergoing upfront curative resection. Method Prospective observational review of colorectal database at Tata Memorial Hospital from July 2010 to March 2015 identified 84 patients who underwent upfront curative resection for stage II or III rectal cancer. None of the patient received preoperative chemo-radiation. Of these, adjuvant chemo-radiotherapy was administered to 29 patients (ACRT group) and 55 patients received CAPEOX / FOLFOX based adjuvant chemotherapy (ACT group) alone. Results At a median follow-up of 20 months there were 10 recurrences (3 local recurrence) in the ACRT group and 15 (2 local recurrence) in ACT group. The estimated Disease free survival at 3 years in the ACRT group was 62.7% and in ACT group was 48.4% (p = 0.347) with an estimated 3-year overall survival of 82.1% and 87.7% in the ACRT and ACT group, respectively (p = 0.462). Subgroup analysis was performed after risk stratifying prognostic features (pT4, pN2, poor differentiation, involved resection margin). Conclusion Our study does not show any benefit of adjuvant chemo-radiotherapy over chemotherapy alone on local control, disease free and overall survival after upfront rectal cancer resection for low risk stage II-III. In the subgroup analysis local recurrence did not occur in patients who did not have poor prognostic features irrespective whether they received ACRT or ACT. Adjuvant chemo-radiation can be avoided in low risk stage II-III rectal cancer after upfront resection.

Abstract Id: YUGP1778

Palliative Gastrectomy Should Be The Choice In Locally Advanced Gastric Cancers
Preseor- "Dr. PRABIR BIJOY KAR
Co-author - . .

Presenter and author : Dr Prabir Bijoy Kar, MS , FAIS , Oncosurgeon HOD , Dept of Oncosurgery, Barasat Cancer Research and Welfare Centre, Kolkata - 700126 Visiting consultant : AMRI Cancer centre, Desun Hospital, Kolkata Address : 114/1, Bosepukur Purbapara Rd, Kolkata â€“ 700107 Email : dbpbak@yahoo.co.in In India most of the patients of gastric cancer report to the surgeon at a relatively advanced stage. Very few patients present in early stage ( stage I & II) who can be treated and cured by radical surgical procedures. But a very large number of patients ( nearly 80%) present in either locally advanced ( stage Ib to IIb ) or with metastasis ( stage IV ). Many of them have vomiting, electrolyte imbalance , anaemia and low general condition to tolerate chemotherapy. As a result curative surgery is not possible in these cases and hardly 50% of these advanced gastric cancer patients can be subjected to chemotherapy as neoadjuvant. Often these patients are subjected to safe and shorter surgical procedures like Anterior gastro-jejunostomy or a feeding jejunostomy for nutritional purpose leaving behind the main disease. As the growth is not excised bleeding from it persists and anaemia is not corrected in spite of repeated blood transfusions , thereby hampering proper chemotherapy in proper dose, drug and at regular intervals. Many of
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Cancer And Normal Cell Lines
Cytotoxic Effect Of Adenanthera Pavonina Seed Extracts On Cancerous and Normal Cell Lines
Abstract Id: YUGP1784

Adenanthera Pavonina is a tropical tree which is of religious importance in Kerala and of medical importance in Ayurveda. It is colloquially called as â€œManjadikuruâ€œ and several research papers state its blood pressure lowering effect and anti-diabetic effect. My team was interested to analyze the effect of crude seed extract on cancer cells. Methanolic extraction was performed at 50% and 100% concentration of boiled and unboiled crude Manjadikuru seed extracts. MTT Assay was performed and IC50 values were analyzed with respect to the boiled and unboiled crude seed extracts on HepG2 (cancerous) cell line and HEK (normal) cell line. Cytotoxic effect was expected to be higher in HepG2 than in HEK; but as per the IC50 values of MTT Assay the effect was more in HEK than HepG2 cell line. Cytotoxic activity is evident in cancer cell line (HepG2) and normal cell line (HEK). Boiled samples were safer than unboiled samples as per the IC50 values of cancer (HepG2) and normal (HEK) cell lines respectively. This paves way for a higher potential for further research on other cell lines and relevant cytotoxicity assays. IC50 (mg/ml) (boiled/unboiled): 464.5849/266.7395; 337.15/76.15

Abstract Id: YUGP1788

Clinical Study Of Ovarian Masses
Presenter - Dr. SHIVA KUMAR
Co-author - Dr. Rathika Chaudhary

Introduction The incidence of ovarian tumours is increasing in developing countries. Ovarian tumours account for 30% of all cancers of female genital tract. Ovarian malignancy ranks fifth in cancer death worldwide and in India it ranks third among the female genital tract malignancies. This study has been done to analyse the age distribution, presenting symptoms and the various histopathological types of ovarian tumours in patients who underwent surgical management. Objective of the study To study the incidence, clinical presentation and histopathological pattern of ovarian masses. Materials and methods It is a prospective study conducted in the Obstetrics and Gynecology Department at VIMS, Bellary during two year period. All patients who are surgically managed are included in this study. Those patients who are conservatively managed and those with non-ovarian masses were excluded from this study. The details such as age, presenting symptoms, surgical details and histopathological reports were noted. Based on the HPE reports ovarian malignancies were analysed. Study design This is a prospective study. Inclusion Criteria All patients who are surgically managed. Exclusion Criteria 1. Patients who are conservatively managed. 2. Non-ovarian masses.

Abstract Id: YUGP1790

Health Related Quality Of Life And Its Determinants In Patients With Head And Neck Cancers
Presenter - Dr. Ashwani Sachdeva
Co-author - Ashwani Kumar Sachdeva, Prasanth Penumadu, P Jagadesan

Introduction The concept of Health-Related Quality of Life (HRQOL) has been recognized with great importance, and many studies have been reported in different parts of the world. With this study, we intend to assess and evaluate the impact of treatment on HRQOL in Indian population. Material and methods This was single tertiary care institution based prospective analytical study from January 2015 to December 2016. A total of 122 patients were recruited but only 87 patients who were alive without disease were analyzed at the end of study. HRQOL assessment was done using the European Organization for Research and Treatment of Cancer (EORTC) quality-of-life questionnaire (QLQ), both the Main Module (QLQ-C30) and the Head and Neck Cancer (HNC) Module (QLQ-H&N35) at four times in one year follow-up. Results: Majority of patients aged above 50 years, were predominantly males (62%). Oral cavity tumors consisted 80% of the study cohort with majority having tumors of buccal mucosa followed by tongue cancers. Primary closure of primary surgical defect was done in 52% cases followed by free flap (26%) and pedicled flap (22%). Majority of patients had advanced disease at presentation with stage III and IV in 53% and 29% respectively. QOL assessment for the complete study cohort showed initial deterioration following therapy in 21 variables of EORTC QLQ-C30 and H&N-35 questionnaires which subsequently improved at one year follow-up with problems with dry mouth being most significant deterioration from baseline. Based on various clinicopathological variables, Males had better HRQOL than females; Oral cavity tumor had more
problems with dentition, dryness of mouth, mouth opening and sticky saliva while pharyngeal tumor had more problems with eating. Both laryngeal and pharyngeal cancers recorded lowest scores in speech domain. Early stage tumors had better scores in all functioning ad symptom scales than advanced stage even at 1 year follow up. Patients receiving radiotherapy had more problems with swallowing, dental problems, dry mouth and sticky. Choice of reconstruction also had impact with free flap reconstruction having better HRQoL than pedicled flap reconstruction. Conclusion Treatment in any form produced a major effect on QOL improving it over the baseline in patients who are cured of disease. Health-related quality of life should be a supplement to survival analyses in the evaluation of patients with head and neck cancer.

Abstract Id: YUGP1796
Spectrum Of Extranodal Non Hodgkin'S Lymphoma: Evaluation Of Prognostic Factors And Treatment Response
Presenter- Prof. O P SINGH
Co-author - O.P.Singh, Veenita Yogi, Pallavi Redhu

Primary extranodal lymphoma is defined when it arises from extranodal sites confirmed after staging procedures. It occurs in usually 20-40% patients present with non Hodgkin’s lymphoma. Head and neck and gastrointestinal involvement is very common but it may arise from other sites of body also. We have analyzed impact of site on their behaviour and treatment response. Material and Methods: In this study 62 patients were analyzed who were treated between 2008 to 2016. The distribution among different sites were head and neck, intestine, stomach, bone, CNS and others. All the patients were properly staged and treated with chemotherapy and or involved field radiotherapy. Results: Out of 62 patients, 65% males and 35% females. Median age was 42.5 years (range 4-80 years). Sites involved by extranodal lymphoma were head and neck (38%), gastrointestinal (35%), and other sites (27%). Patients presented with more than one extranodal sites were 37% and patients with both extranodal and nodal involvement were 25%. Diffuse large B cell was common histologic finding in 70% cases. Poor prognostic factors were advanced Ann Arbor stage, presence of B-symptoms, abnormal lactate dehydrogenase level, poor performance status and presence of DLBCL histiotype. Head and neck patients with nodal involvement responded better than gastrointestinal lymphoma, when treated with chemotherapy and IFRT. Conclusion: This study concluded that extranodal NHL accounts for 25% of all NHL, hence before initiation of treatment all the NHL cases should be properly investigated and staged. Extranodal NHL responded well with chemotherapy as NHL and it was observed that whenever IFRT was given, it accrues the progression free survival.

Abstract Id: YUGP1797
Thyroid Malignancy Masquerading As Primary Renal Neoplasm: An Unusual Presentation
Presenter - Dr. MOHANARAJ NATARAJAN
Co-author - PROF.DR.E.HEMANT RAJ,

Purpose : Thyroid malignancies are known for their classical mode of presentation as goitre. Distant metastases account for 4-15% of patients, which has a significant negative impact on their overall survival. Most common sites of distant metastases include lung and bone; However rare sites include brain, breast, liver, kidney, adrenal, muscle & skin. Clinically apparent renal metastases from a primary well differentiated thyroid malignancy is a very rare clinical entity and to the best of our knowledge less than 25 cases have been reported in the literature. In majority of these cases, renal metastases was diagnosed in the background of known primary thyroid cancers. We report a 39 year old lady who presented with pain abdomen and was diagnosed to have a primary renal neoplasm. Most authors reported renal metastases synchronous with multiple other sites of distant metastases; However, isolated renal metastases from a primary thyroid cancer is an unusual presentation as in our case. Also most reported bilateral and multiple renal metastases unlike our patient who had an unilateral solitary site of disease. Study design : This is a case report. Results: Patient underwent right partial nephrectomy for a right renal mass. Post operative histopathology revealed metastatic follicular variant of papillary thyroid carcinoma. Subsequently, patient underwent thyroidectomy which revealed primary follicular variant of papillary thyroid carcinoma. Conclusion : Well differentiated thyroid cancers can present unusually with the site of distant metastases on presentation. Renal metastases are extremely rare and should be considered in the differential diagnosis of a renal mass. Keywords : Renal metastases, Primary thyroid malignancy, Unusual presentation.

Abstract Id: YUGP1807
A Novel Approach To Locally Advanced Technically Inoperable Oral Squamous Cell Cancers Using Neoadjuvant Radiochemotherapy : Results From A Tertiary Cancer Centre Of India
Presenter - Dr. SHASHI PAWAR
Co-author - ARUN CHATURVEDI, SANJEEV MISRA, VIJAY KUMAR

Background: Locally advanced technically unresectable oral cavity cancers continue to be a major therapeutic challenge despite the implementation of novel multi-modal treatment approaches. It has poor prognosis with median overall survival of 2-12 months. To improve loco-regional control and to allow functional reconstruction after ablative surgery, neoadjuvant protocols have been developed implementing radiochemotherapy prior to definitive surgery. Our aim was to assess whether neoadjuvant radiochemo therapy regimen improves overall outcomes and operability rates in such patients. Material and Methods: 144 patients were enrolled in this trial during the period from May 2014 to May 2016 and received four cycles concurrent Cisplatin (40 mg/m2) with conventional radiotherapy (40 Gy in 20 #, Cobalt-60). This was followed within 4-6 weeks with resection of the primary tumor and the regional neck nodes with appropriate reconstruction. Results: 132 patients were evaluable for toxicity and response. Twelve patients defaulted while on neoadjuvant therapy. Complete clinical response was seen in 54 of 132 patients (CR- 40.9%), and partial response in 63 of 132 patients (PR-47.7%). In 60 of the 132 patients complete pathological response (pCR- 45%) was documented in the resected specimen. Resectability was achieved in 144 of the 132 patients Toxicity seen were of low grade and reversible. Conclusions: Neoadjuvant radiochemotherapy has been very effective in downstaging locally advanced technically unresectable oral cavity cancers in almost 88% (117/132) patients. It was also associated with excellent clinical and pathological response rates and acceptable side effects (Grade I/II toxicity).

Abstract Id: YUGP1811
Prognostic Factors Determining Survival Outcomes Following Radical Antegrade Modular Pancreatosplenectomy For Tumours Involving Body And Tail Of Pancreas
Presenter - Dr. Sivasanker Masillamany
Co-author - Ashwin Desouza, Mahesh Goel, Shailesh V Shrikhande

Original article title: Prognostic factors determining survival outcomes following radical antegrade modular pancreatosplenectomy for tumours involving body and tail of pancreas. Authors: Masillamany Sivasanker1, Ashwin Desouza2, Mahesh Goel2, Shailesh V Shrikhande2 Affiliation: 1-Department of Surgical Oncology, JIPMER, Pondicherry; 2-Department of GI and HPB Oncology, Tata Memorial Centre, Mumbai, India Introduction: In a seminal report by Strasberg et al in 2003, Radical antegrade modular pancreatosplenectomy has been described as a modified form of distal pancreatosplenectomy for resections of tumors involving the body and tail of pancreas. The propagated advantages of this procedure includes the high tangential
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margin negativity since the posterior dissection plane lies posterior to the anterior renal fascia and also the high lymph nodal yield which leads to better staging. This procedure has shown to yield good long term survival benefits in a limited cohort in many reports although the distal cancers are rather uncommon as compared to pancreatic head malignancy. The characteristic feature of this procedure includes the dissection that proceeds from right to left with early vascular control and also lymphadenectomy being conducted based on the described lymphatic drainage of the region. The purpose of this article is to study the perioperative and long term survival outcomes following this procedure in a cohort of 65 patients performed in a tertiary cancer centre in India.

Methods: This is a retrospective study from the analysis of prospectively maintained database of patients treated for tumors involving the body and tail of pancreas. The relevant data of all patients operated for distal pancreatic tumors from 2007 till 2016 were entered in a prospectively maintained database. It was retrieved from the electronic medical records of the Tata Memorial centre and also the follow-up data from standard protocols at the institute. The data included details collected from operative notes, anesthesia records, histopathology details and follow-up visits. The preoperative workup of the patients with distal pancreatic tumors included tumor markers, baseline investigations and pancreatic protocol CECT scan and chest CT. The management of these patients were discussed in a dedicated multidisciplinary hepatopancreatobiliary oncology team comprising of surgeons, medical oncologists, radiation oncologists, radiologists, anaesthesiologists and they were planned for surgery. In this cohort, staging laparoscopy was performed selectively in cases where tumor marker CA 19-9 was elevated. The decision to perform surgery by minimally invasive approach (laparoscopic or robotic) was at the discretion of the operating surgeon. The pathological assessment of the specimen had been done in accordance with the synonyms reporting with appropriate diligence rendered for the histology, pancreatic cut margins, tangential margins, lymph node yield, pancreatic intraepithelial neoplasia, lymphovascular invasion and perineural invasion. The data on postoperative complications such as postoperative pancreatic fistula was classified and documented in accordance with the ISGPF classification and other complications have been documented based on clavien-Dindo grading. The details of adjuvant therapy and the recurrence data were retrieved and analysed. The overall and disease free survival were calculated for pancreatic cancers. The overall survival denotes the time period from the procedure till death due to any cause and disease free interval denotes the time interval from the procedure till death or recurrence. The survival estimates were calculated using the Kaplan-Meier method. Univariate and multivariate analyses have been performed over the overall and disease free survival functions using logrank test and Cox proportional hazards model. All statistical analysis were performed using SPSS version 20. Results: In this series, 65 patients with lesions involving the body and tail of pancreas have underwent radical antegrade modular pancreatosplenectomy. The median American society of anesthesiologists (ASA) score was 2.17 patients (26.2%) had underwent multivisceral resections involving colonic and gastric wedge resection. There was no 30 day perioperative mortality or in-hospital deaths. Clinically relevant postoperative pancreatic fistula was observed in 17 patients. (26.1%) (POPF-B in 16 patients and POPF-C in 1 patient). Among the 65 patients, other complications such as local collections occurred in 4 patients, septic shock in 1 patient, wound infection in 2 patients, respiratory complications in 1 patient, cardiac complication in 1 patient and reoperation for bleeding in 3 patients and for bowel gangrene in one patient. Interventional radiologic procedures including pigtailing were done in 18 patients for managing various complications such as local collections and CR-POPF. The various final histopathology comprised of adenocarcinoma (38.4%), neuroendocrine tumors (16.9%), Solid pseudopapillary epithelial neoplasm (15.4%), cystic neoplasms (16.9%), GIST (1.5%), leiomyosarcoma (1.5%), adenocortical carcinoma (1.5%), liposarcoma (1.5%), benign (3.1%). Among this cohort of 65 patients, 27 patients had adenocarcinoma of pancreatic origin. In this 27 patients with pancreatic cancer, the mean nodal yield was 6.7 +/- 5.5 and the median CA19-9 value was 146 U/L. Among these 27 patients, 7 patients (26%) had nodal metastases. With respect to the T stage, 2 patients (7.4%) had T1 lesion, 17 patients (63%) had T2 lesion, 6 patients (22.2%) had T3 lesion, and 2 patients (7.4%) had T4 lesion. With respect to the grade of differentiation, tumor was well differentiated in 4 patients (14.8%), moderately differentiated in 11 (40.7%), and poorly differentiated in 6 (22.2%). Among the 27 patients, lymphovascular invasion was noted in 5 patients (18.5%) and perineural invasion was noted in 12 patients (44.4%). There was no pancreatic intraepithelial neoplasia noted in any of these cases. The R0 resection rate was 85.2%. Adjuvant chemotherapy was administered in 13 patients (48%). The chemotherapy regimen followed was gemcitabine in 9 patients, GEMCAP in 1 patient and FOLFIRI in 1 patient. During the followup, recurrence was observed in 9 patients (33%). The median survival for the distal pancreatic cancers following RAMPS procedure was 10 months. The 3 year overall survival was 56% and 3 year disease free survival was 38% following resections for distal pancreatic cancers.

On univariate analyses of various prognostic factors affecting overall survival and disease free survival, the margin status (p=0.014, 95% CI 9.5-28.4), perineural invasion (p=0.048, 95% CI 9.3-18.6) and tumour differentiation (p=0.019, 95% CI 8.7-19.2) have shown to be significant prognostic factors for disease free survival. On multivariate analysis, margin status (R0 vs R1) remains the most important prognostic factor determining disease free survival (p=0.023, 95% CI 1.24-17.83) in patients undergoing resections for cancers involving distal pancreatic body and tail. Conclusion: RAMPS procedure aids to achieve high negative tangential margins for tumors involving the body and tail of pancreas and also a satisfactory median survival for these aggressive cancers. Since margins status remains the most important prognostic factor, aggressive surgery is indicated in fit patients.

Abstract Id: YUGP18151
Neuropsychological Changes in Children With Acute Lymphoblastic Leukemia Treated With Bfm-95 Protocol
Presenter- ‘Dr. Sundaramoorthy C’
Co-author - Dr. E. Vidhubala, Associate Professor, Cancer Institute (WIA), Dr.V.Surendran, Assistant Professor, Cancer Institute (WIA).

Background: CNS prophylactic treatment has decreased the risk of CNS relapse and is responsible for the remarkable increase in survival rates. However, improved survival rates have not been achieved without neuropsychological sequelae. This study examines the neuropsychological changes in children with Acute Lymphoblastic Leukemia treated with BFM-95 protocol in the Indian context. Method: ALL children (n=44) who received CRT and HD-MTX as part of their treatment protocol were included. Neuropsychological assessments were done to evaluate neurocognitive functioning. Behavioral problems and MRI changes were also assessed. Five assessments were done during the induction, end of re-induction I and II, commencement of maintenance, and end of maintenance phases. ALL children were compared to a group of healthy children (n=60) at the baseline and post assessment. Results: A significant deterioration was observed in the performance intelligence, visuo-spatial, processing speed and verbal retention domains after the completion of CNS-prophylactic treatment. Three children had white matter changes and showed reduced functioning in visuo-spatial, processing speed and verbal retention. Behavioral problems such as somatic complaints, rule-breaking and aggressive behavior significantly increased during the intensive phase of treatment and decreased after completion of the treatment. Children with ALL had poorer neuropsychological functioning when compared with healthy children. Conclusion: CNS-Prophylactic treatment along with HD MTX reduced the neuropsychological functioning of children with ALL and when CRT was added to the treatment, the effects were more pronounced. Behavior problems such as somatic complaints, aggressive and rule-breaking behavior were of concern at diagnosis and during the intensive phase of treatment. Regarding the white
matter changes in three children, further studies need to be conducted to make any association.

**Abstract Id: YUGP1827**

**Response To Neo Adjuvant Chemotherapy Of Osteosarcomas Treated In A Single Institution**

**Presenter - Dr. REMYA KRISHNAN**

**Co-author - DR SURESHKUMAR ,**

Response to Neoadjuvant Chemotherapy of Osteosarcoma treated in a single institution Retrospective study of 8 Patients Treated at a Single Institution STUDY CONDUCTED AT MEDICAL COLLEGE KOTTAYAM BY DR REMYA KRISHNAN JUNIOR RESIDENT DEPT OF RADIOTHERAPY MEDICAL COLLEGE KOTTAYAM BACKGROUND The main objective of the current study were to improve the 90% tumor necrosis rate following neoadjuvant chemotherapy with IAP Regime METHODS 8 patients with AJCC Stage IIb high-grade osteosarcoma were included in the current study. Three to four cycles of an induction chemotherapy regimen including cisplatin, doxorubicin, and ifosfamide peripheral blood stem cell support were given After engraftment was achieved, the patients underwent limb-sparing surgery (LSS)followed by three to six cycles of postoperative chemotherapy depending on the tumor necrosis rate RESULTS A 5 year study conducted in a single institution in 8 patients to assess the response to chemotherapy in osteosarcoma reveals that about 12.5% patient got pathological complete response 12.5% got >90% necrosis and 75% patient got adequate margins 50% patient underwent limb salvage surgery following chemotherapy CONCLUSIONS The results of the current Phase II study suggest that NACT provides a greater than 90% necrosis rate with acceptable toxicity. A short duration of therapy and the feasibility of LSS in all patients are additional advantage of this approach. Cancer 2005;104:1058â€“65. INRODUCTION Adjuvant and neoadjuvant chemotherapy, introduced in the early 1970s, have significantly improved the long-term survival rate for patients with osteosarcoma. Nevertheless, recurrent disease still occurs in about 30%â€“40% of patients and more than 70% of them die of their tumor despite second-line treatment Neoadjuvant chemotherapy combined with complete surgical excision followed by adjuvant chemotherapy is the gold standard treatment modality in patients with extremity osteosarcomas. Agents that are widely used and accepted as being efficacious in osteosarcoma patients include doxorubicin, cisplatin, ifosfamide, and high-dose methotrexate. Many authors consider the post chemotherapy tumor necrosis rate to be a reliable prognostic indicator. Intensified first-line chemotherapy regimens could improve prognosis, but the risk is overtreatment of patients who could benefit from less aggressive regimens. The aim of this study is retrospective analysis of response to neoadjuvant treatment in a single institution MATERIALS AND METHODS Patient Selection and Pathology Records of the 8 patients who entered our institution with neo adjuvant studies of non metastatic osteosarcoma of the extremities between2013 and 2017 were reviewed. The results achieved in the single studies, previously reported in detail were updated Patients were considered eligible when fulfilling the following criteria: typical radiographic and histologic features of primary, high-grade, central osteosarcoma tumor located in the extremity, no previous history of cancer and no prior treatments no coexisting disease contraindicating chemotherapy, and no evidence of metastases at diagnosis. All the eligible patients were offered neo adjuvant chemotherapy after having been informed of the potential advantages and risks of this treatment. The diagnosis of osteosarcoma, established by clinical and radiologic findings, was always confirmed on histologic slides of tumor tissue obtained from an open or needle biopsy, as well as from the resected specimen According to Fletcher et al5 osteosarcomas were classified as â€œclassic,â€‌ or conventional, telangiectatic, and small-cell osteosarcoma. On the basis of predominant cells and intercellular material, the â€œclassicâ€‌ osteosarcomas were subclassified as osteoblastic, fibroblastic chondroblastic, and telangiectatic. This distinction, always made on surgical specimens, was possible in all cases. Tumor volume was retrospectively evaluated in 7method described by Gobel et al on CT-scan measures of the three diameters of the lesion 9 patients Multivariant analysis Preoperative Evaluation A complete medical history was obtained for all patients, who also underwent a thorough physical examination and several chemical laboratory tests. The primary tumor was evaluated on standard radiographs and Technetium 99-MDP bone scans CT was performed in the 8 patients treated Magnetic resonance imaging (MRI) was also performed in all patients. These exams were repeated before surgery. Bone metastases were investigated by total body scans, whereas standard chest radiographs and CT scans of the chest were used to exclude lung metastases for the 8 patients treated. Preoperative treatment. After a histopathologic diagnosis was established, cisplatin at a dose of 30 mg/m2/day, doxorubicin at a dose of 20 mg/m2/day, ifosfamide at a dose of 2.5 g/m2/day, and mesna at a dose of 2.5 g/m2/day were administered for 2 cycles over the course of 3 days, every 3 weeks. Granulocyte colony stimulating factor (G-CSF) was used in those patients with a leukocyte count of less than 1000/L Surgery and Pathologic Evaluation of the Response to Chemotherapy The type of surgery (amputation, rotationplasty, or limb salvage), as well as the type of reconstruction after resection of load-bearing bones (prosthesis, Kuntscher rod, or plate and cement, vascularized fibula combined with allograft, and allograft and autograft) were chosen depending on the location and extent of the tumor, neurovascular structure involvement, skeletal maturity, desired lifestyle, and presence of complicating factors, such as displaced pathologic fractures or infected biopsy sites. The margins were classified as â€œadequateâ€‌ if radical or wide and â€œinadequateâ€‌ if margins were marginal, intralesional, or contaminated, regardless of histologic response, i.e., when margins still contained tumor cells even if completely necrotic. The response to preoperative chemotherapy was evaluated following the criteria previously reported16 graded as â€œgoodâ€‌ (90% or more tumor necrosis) or â€œpoorâ€‌ (less than 90% tumor necrosis RESULTS Surgery, Surgical Margins, and Histologic Response to Chemotherapy Out of 8 patients treated in our institution 4 patients underwent limb salvage surgery 3 of them had AK amputation 6 patients had adequate margin and 1 patient had >90% necrosis 1 patient had pathological complete response after neo adjuvant chemotherapy References 1 Bacci G, Picci P, Ferrari S, et al. Primary chemotherapy and delayed surgery for nonmetastatic osteosarcoma of the extremities. Results in 164 patients preoperatively treated with high doses of methotrexate followed by cisplatin and doxorubicin. Cancer. 1993;72:3227â€“3238. Ferrari S, Mercuri M, Picci P, et al. 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**Abstract Id: YUGP1837**

**Chest Wall Reconstruction And A North East Based Tertiary Care Hospital Experience**

**Presenter - Dr. Niju PEGU**

**Co-author - DR. JOYDEEP PURKAYASTHA, DR. ABHIJIT TALUKDAR, DR. BIBHUTI BORTAKUR**

Background Chest wall defect may be sternal defect, anterior defect, lateral defect and posterior defect. Reconstruction of chest wall defects requires attention to management of the pleural cavity, skeletal support and soft tissue coverage. Basic principles in chest wall reconstruction
are sufficient amount of tissues resection, ideal replacement to restore the rigid chest wall and adequate soft tissue coverage. The goals are to maintain adequate chest wall stability, water and air tight closure of the chest cavity, and acceptable cosmetic appearance. Decision for most appropriate reconstructive options depends on assessment of the defect in terms of location, depth, aetiology and a thorough understanding of chest wall mechanics and physiology. The choice of prosthetic material is often based on surgeon’s preference. The ideal characteristics of a prosthetic material for chest wall reconstruction is a) malleability so that it can be fashioned to the appropriate shape at the time of operation b) rigidity- to abolish paradoxical chest motion and c) inertness- to allow in-growth of fibrous tissue and decrease the likelihood of infection d) radiolucency- to allow radiographic follow-up of the underlying problem. Appropriate pre-operative pulmonary, cardiovascular and nutritional assessment will estimate the patient’s ability to tolerate certain resections. For Soft tissue reconstruction muscle transposition, omental transposition and free flap are used. Back wound defect reconstruction is challenge to the reconstructive surgeon. ? upper 1/3rd defect- the trapezius muscle flap ? middle 1/3rd defect-reverse latissimus dorsi muscle flap ? lower 1/3rd defect- glutus maximus muscle flap The complications are respiratory complications, atelectasis, air leak, wound complications, infection, seroma PATIENTS AND METHODS Last 5 years, many cases presented to our institute, 12 cases underwent surgery. Diseases are Chondrosarcoma Rib (6 cases), Giant Cell Tumour Rib (4 cases) and Ewing sarcoma (2 cases ). The Defects are Lateral ( 9 cases), Anterior ( 2 cases) and Sternal (1 cases). For reconstruction, bone cement and prolene mesh are used for skeletal support and muscle flap and myocutaneous flaps are used for soft tissue coverage. Morbidity â€¢ soft tissue wound infection( 3 cases) â€¢ mesh infection ( 2 cases) â€¢ Respiratory Difficulty â€¢ Nil â€¢ Paradoxical Movement - Nil Conclusion Chest wall reconstruction with or without prosthesis can be performed as a safe effective one with both lungs. There was no acute pulmonary and oesophageal toxicity. Conclusion: Curative SBRT appears a safe and technically feasible option for patients with single lung with a toxicity profile similar to those with both lungs.

Abstract Id: YUGP1841

The Dosimetric Impacts Of Vertebral Implants (Pedicle Screw And/or Bone Cement) On Spinal Cord

Presenter- *Mr. Zhao Bo Zhao
Co-author - Zhang Min, Gao Xianshu,

Purpose/Objective(s): The aim is to study the dosimetric impact of vertebral implants on spinal cord. Materials/Methods: An entire lumbar spine specimen was used. The vertebrae were implanted with pedicle screws and/or bone cement, and divided into 3 groups: A) pedicle screw; B) bone cement; C) pedicle screw combined with bone cement. Then, the vertebrae were immobilized in water tank for CT simulation. After that, PTV and spinal cord were contoured for treatment planning. Three treatment plans (5-fields IMRT, 9-fields IMRT and VMAT) were designed with prescription dose of 2Gy, by using different TPS algorithms (MC and AAA). The dose calculation was performed with two types of image: 1) no correction image; 2) detailed correction image (a tool was developed to auto-correct electronic density of artifacts, implants, bone and soft-tissue). To verify the accuracy of the planned dose, a semi-conductor in-vivo dose detector was put into the vertebral foramen, at the same position as interest points (before measuring, kV-CBCT was used to assure the consistency of position between interest points and measuring points). The measured doses were obtained from the in-vivo dose measuring system, and then compared with the planned doses for different groups, IMRT techniques, types of image and algorithms. Results: The results were shown : 1) planned dose with detailed correction image was more accurate than no correction image (p

Abstract Id: YUGP1839

Single Lung Stereotactic Body Radiotherapy (Slab)

Presenter- Dr. Meetakshi Gupta
Co-author - M Gupta, JP Agarwal, N Mummidu

M Gupta*, JP Agarwal**, N Mummidu**, A Tibdeaw** * MD Radiation Oncology, Senior Resident, Department of Radiation Oncology, Tata Memorial Centre, Mumbai; ** MD Radiation Oncology Introduction: Management of a second primary lung cancer (SPLC) after prior pneumonectomy (PP) poses a significant clinical challenge. Early diagnosis is imperative for radical treatment in order to save large part of the remaining lung tissue. Tissue diagnosis is another hurdle since biopsy entails a high risk for pneumothorax in the diseased single lung. Non-surgical method like endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) has been shown to be useful in patients with new mediastinal/ hilar lymphadenopathy after initial treatment. It is minimally invasive, does not require general anaesthesia and has diagnostic accuracy of over 95% with low complication rate. Native methods like liquid based cytology and FDG-PET scan are also being explored to act as surrogates to tissue biopsy. Surgery is not feasible in majority of cases because of low cardiopulmonary reserve. SBRT is now standard treatment for medically inoperable early stage NSCLC, hence is considered a viable alternative in patients with single lung. However, radiation toxicity of SBRT in single lung and dose constraints to organs at risk are still under evaluation . Methodology: We treated a patient with metachronous S P L C after PP with SBRT to a dose of 60 Gy in 8 fractions on alternate day basis using 4DCT planning and VMAT technique using isocentre based prescription. Volumetric imaging was used at every fraction for image guidance. Results: The dose received by 100% of PTV was 95%. Mean single lung dose, V20, V10 and V5 were 4.6 Gy, 10%, 16% and 21% respectively. These dose constraints met the criteria proposed in literature for SBRT of patients

Abstract Id: YUGP1843

Intrafractional Prostate Motion And Dose Variation During The Radiotherapy For Prostate Cancer Using 4D-Tups

Presenter- *Mr. Zhao Bo Zhao
Co-author - Qi Xin, Gao Xianshu,

Purpose: This study was to investigate the prostate motion model and dose variation during radiotherapy using a 4D transperineal ultrasound system (4D-TUPS). Methods: From July 2014 through December 2016, 57 prostate cancer patients were enrolled. During treatment delivering, 4D-TUPS were used to collect data of prostate’s real-time motion . Then, the real delivered doses were calculated according to the real-time motion data and the leaf sequences/MIUs. The delivered doses were compared with the planned doses by using the clinical acceptance criteria. Results: A total of 1207 fractions were evaluated. The mean (±SD) of the infraction displacements were [mm]: SI: (0.03 ± 0.92); LR: (0.12 ± 1.03); and AP: (-0.01 ± 1.37), respectively. There were 41, 29, and 66 fractions with deviation exceeded 3 mm in the SI, LR, and AP directions, respectively. The AP direction has the largest extent of prostate displacement. We classified our patients into three groups according to the motion model: stable (n=50), irregular (n=3) and intention (n=4). The intention group was defined as persistent deviation to the same direction (the maximal displacement should exceed 3 mm) that repeated in at least 50% fractions. All these patients had obviously anxiety and urinary frequency and urgency. Delivered doses showed that all the 4 patients in the intention group did not meet our clinical requirements. Conclusion: The present study demonstrated that for over 90% of fractions, a CTV-PTV margin of 3 mm would be good coverage with the planned prescribed dose. However, it is important to identify the patients belonging to the intention group. Pre-treatment with anti-anxiety drugs and â² receptor blocker may be useful in relief the prostate motion.
Abstract Id: YUGP1845

Radiologic Outcomes After Linac-Based Stereotactic Radiosurgery (Srs) For Vestibular Schwannomas
Presenter- Dr. J Richelcyn Baclay
Co-author - Calaguas, Miriam Joy C., Torcuator, Roy Allan,

Objectives: Traditional treatment of vestibular schwannomas is surgery, which provides excellent tumor control rates when excision is complete. However, numerous studies have shown that stereotactic radiosurgery (SRS) has a well-established role as an alternative to microsurgical resection to vestibular schwannomas. This study aims to review the radiologic outcomes of patients with vestibular schwannoma treated with Linear Accelerator (LINAC)-based SRS in a single institution. Methods: This is a retrospective review of patients treated with LINAC-based SRS from 2010-2017. A total of 31 vestibular schwannoma patients were identified, from which only 10 patients have post-SRS magnetic resonance imaging (MRI). Two patients were post-subtotal excision. The rest (80%) received SRS as initial treatment. Post-SRS MRI were evaluated by measuring the antero-posterior, transverse, and cranio-caudal dimensions of the mass, computing for the volume, and comparing the pre- versus the post-SRS volumes. Results: All were treated with single fraction SRS, with a median marginal dose of 12 Gy (range: 10-15 Gy), and mean treatment volume of 10.65 cc (range: 0.17-27.5cc). Median follow-up was 12 months (range: 3 to 72 months). Two patients had prior surgery, both subtotal excision, prior to radiation therapy. Patients had a median number of 4 follow-up MRIs (range: 1-6). Five patients (50%) have unchanged size of the mass at a mean follow-up MRI of 3.6 months (range: 4-72 months). Five patients (50%) reported regression in size of the mass, with a mean follow-up of 27.2 months (range: 3-57 months). In patients who had a decrease in size of the mass, there was a mean reduction in volume of the mass to 49% from the baseline (range: 14-87%). No increase in volume was reported in any of the patients. Conclusions: LINAC-based SRS of vestibular schwannomas show good local control radiologically. Further studies can be undertaken to correlate these radiologic findings to clinical outcomes.

Abstract Id: YUGP1853

Impact Of Overall Treatment Time On Quality Of Life In Head And Neck Cancer Patients
Presenter- Dr. PRATHYUSH VUNDEmODALU
Co-author - PRATHYUSH V, KIRTHI KOUSHIK AS, JANAKI MG

NEED FOR STUDY-Post op radiotherapy for head and neck cancer patients is indicated when there is a high chance of loco regional recurrence. Ideally radiation should begin with in 6 weeks after surgery. Delay in adjuvant radiation decreases the therapeutic effect due to hypoxia of scarring tissue and repopulation in tumor cells. OBJECTIVE-TO EVALUATE THE EFFECT OF TIME BETWEEN SURGERY AND POST OP RADIOTHERAPY ON QUALITY OF LIFE IN HEAD AND NECK CANCER PATIENTS. MATERIALS AND METHODS-All head and neck cancer patients who underwent surgery in MS RAMIAH HOSPITAL between January 2016 to December 2016 who received adjuvant radiotherapy have been included in this study. EXCLUSION CRITERIA-1. Patients who received treatment with palliative intent. 2. Patients who did not complete their full course of treatment. CONCLUSION AND RESULTS-results awaited from the statistician and will be presented.

Abstract Id: YUGP1859

Dose-Volume Relationship Of Urinary Bladder To Organs At Risk In Image-Guided Brachytherapy For Cancer Of The Uterine Cervix
Presenter- Dr. Dorothy Faye Tan
Co-author - Jaemelyn Marie O. Fernandez, Miriam Joy C. Calaguas, Anthony Albert N. Abad

Background: Concurrent chemotherapy and radiotherapy followed by brachytherapy is the standard of care for locally advanced cervical cancer. Significant long term side effects have been noted, hence there is a need to lessen the doses received by normal tissues. This study aims to determine the optimal volume of the urinary bladder that will result to least dose to organs at risk namely: rectum, sigmoid colon, small intestines and bladder using conventional (Point A) and 3D Image-guided brachytherapy(3D-IGBT) plans. Methods: 24 Cervical Cancer patients with Stage IB2 & IIIB were treated using external beam radiation therapy and 3D-IGBT brachytherapy. Patients were treated with different bladder volumes per fraction namely: 0-20cc (empty), 50-70cc, 100-120cc and 150-170cc of normal saline. The D2cc received by the urinary bladder, rectum, sigmoid colon and small intestines were obtained per bladder volume. Results: Using 3D-IGBT, a dose reduction trend was noted in the small intestines by increasing bladder volume from a mean dose of 2.18 Gy (empty bladder) to 1.17 Gy (150-170cc). However, this decrease did not lead to a statistically significant difference (p=0.068). Varying bladder volumes did not influence the doses received by the rectum and sigmoid. Increasing bladder volume resulted to increased in radiation dose received by the bladder from a mean dose of 5.32 Gy (empty) to 5.95 Gy (150-170cc) which was not significant. For Point A based plan this increased dose to the bladder from mean dose of 4.42 Gy (empty) to 7.83 Gy (150-170cc) was observed to be statistically significant (p = 0.0495). Conclusion: A trend of better sparing of the small intestines was observed with increasing bladder volume (50-150cc) but this was not seen on the rectum and sigmoid. The dose received by the urinary bladder is directly proportional with its volume. Table 1. Dose received by organs at risk Image Guided Brachytherapy (IGBT) 0-20cc 50-70cc 100-120cc 150-170cc Mean + SD P value Small intestine 2.18 ± 1.79 2.03 ± 1.87 ± 1.40 ± 1.24 1.17 ± 1.48 0.068 Rectum 4.80 ± 0.65 4.68 ± 0.87 4.70 ± 0.73 4.67 ± 0.73 0.049 Sigmoid colon 2.72 ± 1.38 2.88 ± 1.72 2.62 ± 1.49 2.50 ± 1.26 0.513 Bladder 5.32 ± 1.15 5.53 ± 1.16 5.79 ± 0.99 5.85 ± 0.77 0.165

Abstract Id: YUGP1861

Evaluation Of Chemoprotective Effect Of Nbriqu16 Against-Methyl-N-Nitro-N-Nitrosoguanidine (Mng) Andnacl-Induced Gastric Carcinomas In Wistar Rats
Presenter- Ms. Lubna Azmi
Co-author - Ila Shukla, Arinuddh chaudhary, Padam Kant

Abstract: To investigate the chemo protective potential of NBRIQU16 chemo type isolated from Aegle marmelos (Rutaceae, 'Bael')) on N-methyl-N-nitro-N-nitrosoguanidine (MNG) and NaCl-induced gastric carcinomas in Wistar rats. Forty-six male 6-week-old Wistar rats were divided into 2 groups. Thirty rats in group A were fed with a diet supplemented with 8 % NaCl for 20 weeks and simultaneously given N-methyl-NaEt™-nitro-N-nitrosoguanidine (MNG) in drinking water at a concentration of 100 μg/ml for the first 17 weeks. After administration of the carcinogen, 200 and 400 mg/kg of NBRIQU16 were administered orally once a day throughout the study. From week 18, these rats were given normal water. From week 21, these rats were fed with normal diet for 15 weeks. Group B containing 16 rats was fed standard diet for thirty five days. It served as control. Ten rats from group A were sacrificed after 20 weeks. Sacrification of remaining animals was conducted after 35 weeks. Entire stomach and some part of duodenum were incised parallel to the greater curvature and the samples were collected. After opening the stomach location and size of tumors were recorded. The number of tumors with their locations and sizes were recorded. Expression of survivin was examined by recording the Immunohistochemistry of the specimens. The treatment with NBRIQU16 significantly reduced the nodule incidence and nodule multiplicity in the rats after MNG administration. Surviving expression in glandular stomachs of normal rats, of rats in middle induction period, in adenocarcinomas and NBRIQU16 treated tissues adjacent to tumor were 0, 42.0 %, 79.3
% and 36.4 %, respectively. Expression of survivin was significantly different as compared to the normal rats. Histological observations of stomach tissues too correlated with the biochemical observations. These finding powerfully supports that NBRIQU16 chemoprotective effect by suppressing the tumor burden and restoring the activities of gastric cancer marker enzymes on MNNG and NaCl-induced gastric carcinomas in Wistar rats Keywords: Gastric Carcinoma, Immunochemistry, NBRIQU16

Abstract Id: YUGP1869
Optimizing Neck Management In Early Buccal Carcinoma - The Jury Is Still Out.
Presenter- Dr. Naveen Padmanabhan
Co-author - Dr. NK Shukla, Dr SVS Deo, Dr. Manjunath NML

Introduction: Squamous cell carcinoma (SCC) of the buccal mucosa is most common subsite of oral malignancies in Indian sub-continent. Majority present with locally advanced disease and surgery plays an important role in management of buccal cancer. Most common site of spread is to cervical lymph nodes and neck dissection is treatment of choice in node positive patients. However there are controversies in the management of neck in early stage buccal cancer with node negative neck. The purpose of this study was to present our experience of neck dissection patterns, nodal positivity rates in early stage buccal carcinoma (cT1-2 N0-1) to facilitate future treatment strategies.

Methods: A prospectively maintained computerized oral cancer database was reviewed and all histo-pathologically proven SCC of Buccal mucosa patients with T1 and T2 lesions undergoing neck dissection were included for analysis. Analysis was performed pertaining to patterns of neck dissection, and node positivity rates in early stage buccal cancers. Results: A total of 100 patients with T1-2 buccal carcinomas had neck dissection during the study period (1995-2015). Modified neck dissection was the commonest procedure done in 61 patients (61%), followed by supra-omohyoid neck dissection in 32 (32%). Over the period 1995-2015 there was a gradual shift towards more conservative approach in neck dissections (1995-2005 MND 41%(24/58) , SOHND 20% vs. 2006-2015- SOHND 55%). Overall nodal positivity rate was only 33% (33/100). In specific neck dissection types the node positivity rates were as follows:
- MND 41%(24/58)
- SOHND 6.4% (2/31)

Neck node relapse was documented in 4 patients (4%). Conclusion: Results of the current study indicate that there is a overall shift towards conservative neck dissections like SOHND in patients with early stage buccal cancer. Approximately two thirds of early stage buccal cancer patients undergoing neck dissection have no pathologically proven nodal involvement in early buccal SCC (cT1-2 N0-1) to facilitate future treatment strategies. These significant findings should be considered in formulating neck node management strategies for early buccal cancer patients.

Abstract Id: YUGP1873
Management Of Insomnia In Cancer Patients
Presenter- Ms. Radhika T K
Co-author - Anagha C C, Amrita Asok, Sreelakshmi Sreekumar

ABSTRACT Introduction Sleep is fundamental for normal functioning, repair and maintenance of our body. As insomnia tends to be a high-flying but neglected issue among the cancer population, it seeks crucial attention. Cancer and its therapy related factors like depression, anxiety, pain, fatigue, hot flushes, nocturia, gastric irritation, cough as well as other co-morbidities tampers with the sleep. Nowadays, non-benzodiazepines (non-BZDs) like Zolpidem are preferred over other hypnotics for its relatively safer side effect profile. Also, practicing a proper sleep hygiene may help rewire your brain to follow normal circadian rhythm. Aim To manage insomnia in patients with cancer Objectives Primary objective To study the prevalence of insomnia in cancer patients Secondary objectives 1. To study the effectiveness of zolpidem in treating cancer patients with insomnia. 2. To study the effectiveness of counseling on sleep hygiene in patients not receiving zolpidem. 3. To assess the risk factors associated with insomnia in cancer patients. Methodology This is a questionnaire-based prospective cohort study conducted in a tertiary care hospital. Consecutive patients were recruited and the prevalence of insomnia was determined using Pittsburgh Sleep Quality Index (PSQI) questionnaire. The Hospital Anxiety and Depression Scale (HADS) and Wong Baker FACES® Pain Rating Scale were used to assess anxiety and depression, and pain, respectively. Later, consecutive patients with insomnia (PSQI score > 7) who were prescribed with zolpidem 5mg were identified and an equal number of successive patients without any treatment were counselled on sleep hygiene. Both groups were provided with a Sleep and Adherence Diary. The PSQI global score was reassessed for evaluating effectiveness of zolpidem and patient counselling after a week, either by direct or telephonic conversation with the patients. The outcomes were evaluated for individual patients based on PSQI, HADS and pain scores. Inclusion criteria Patients satisfying these criteria were included in the study:
- All cancer patients above the age of 18 years.
- Patients who can read, write and speak either English or Malayalam.

Exclusion criteria o Patients previously diagnosed with sleep disorders.
- Patients with psychiatric illness.
- Patients not willing to give consent.
- Patients whose cancer diagnosis is not confirmed.

Results and Discussion

The prevalence of insomnia in our population was found to be 65.9% and had a significant relation with anxiety, depression and pain with P < 0.001. There was significantly more patients (34.3%) in the insomnia group who were experiencing breathing difficulty (P = 0.005) at night relative to those without insomnia (14.3%). Similarly, patients on chemotherapy and radiation therapy had significant correlation with insomnia. Sleep latency > 30 minutes was one of the major complaints experienced by the patients (85.3%). Significant improvement was seen in the sleep latency, quality and daytime dysfunction after treatment with zolpidem (P < 0.05). On the other hand, patient counselling technique was able to bring down the PSQI score to less than 5 points in 9 patients out of 36. But on a closer look at the sleep components, there was no significant improvement in patient sleep characteristics except sleep latency (P = 0.013). The mean PSQI difference in score was found to be 4.03 in patients using zolpidem and 1.5 in counselled patients. Conclusion From our study we concluded that more than half the cancer population suffered from insomnia and most of them are untreated. Risk factors such as smoking, age, anxiety, depression, pain, chemotherapy, radiation therapy, hypertension, diabetes, dyslipidemia were found to have a correlation with insomnia. Patients on zolpidem showed a reduction in their PSQI scores thereby suggesting it as an effective treatment alternative for insomnia in these patients. Patient counseling, though not as effective as zolpidem, made a slight difference in the overall sleep.

Abstract Id: YUGP1875
Impact Of Anatomical Sub-Site Distribution On Limb Salvage Surgery Rates In Extremity Soft Tissue Sarcomas: Surgical Oncology, AIIMS New Delhi Experience
Presenter - Prof SVS Deo, Prof NK SHUKLA, Dr SUNIL KUMAR
Co-author - PROF SVS DEO, PROF NK SHUKLA, DR SUNIIL KUMAR

Introduction: Soft tissue sarcoma (STS) comprises a rare and heterogeneous group of malignant tumors and extremities are the most common site of involvement. Even though Limb salvage surgery (LSS) is the preferred treatment option but various limiting factors like tumor size, extent of spread, neurovascular and bony involvement can influence LSS rates. The impact of anatomical location (sub-site distribution) on LSS rates is not well studied. The aim of this study is to see the impact of sub-site distribution on limb salvage surgery. Methods: Analysis of prospective maintained soft tissue sarcoma computerized database was performed and records of biopsy proven...
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extremity sarcoma treated between 1995 to 2013 were analyzed for demographics, clinical profile including sub-site distribution, limb salvage surgery rates and impact of sub-site on limb salvage surgery rates. Results: Total 409 extremity sarcoma patients were included for analysis. Mean age was 40yrs (range 10-85 yrs) and 68% were male. The predominant site was lower extremity involving 281 patients (68.70%) and predominant sub-site among lower extremity was thigh with 48% followed by leg (34.51%) and foot (27.70%). As per sub site distribution, highest LSS rates could be achieved in the arm (90%) and thigh (84%) followed by leg (54%) and forearm (66.66%). Maximum numbers of amputation were performed for patients with sarcomas involving foot (85%) and hand (67%). Conclusion: Conventional factors for predicting LSS for were performed for patients with sarcomas involving foot (85%) and leg (54%) and forearm (66.66%). Mean tumor size was 9 cm.History of prior suboptimal surgical intervention was present in 58%.Overall Limb salvage surgery rate was 72.86% of 243.33% had amputations. As per sub site distribution, highest LSS rates could be achieved in the arm (90%) and thigh (84%) followed by leg (54%) and forearm (66.66%). Maximum numbers of amputation were performed for patients with sarcomas involving foot (85%) and hand (67%). Conclusion: Conventional factors for predicting LSS for extremity sarcoma does not include anatomical sub-site distribution. Results of the present study indicate that the anatomical sub-site distribution is a strong predictor of LSS in patients with extremity soft tissue sarcoma.

Abstract Id: YUGP1877
Prediction Of Residual Disease In Unsuspected Gallbladder Cancer: Experience Of A Tertiary Care Hospital In Northern India
Presenter - Dr. Aditya Kulkarni
Co-author - G R Verma, Harjeet Singh, Rajinder Singh

Introduction Unsuspected Gall bladder carcinoma (UGBC) is erroneously leveled as incidental carcinoma gallbladder. An attempted radical surgery later is not possible in sizable number of cases as the tumor is either disseminated or locally unresectable at laparotomy. Purpose of this report was to study the preoperative imaging and to predict the presence of residual disease from retrospective analysis of prospectively maintained database. Materials and Methods The study comprises of retrospective analysis of 16 patients of UGBC out of 84 patients of Gallbladder carcinoma (GBC) admitted from 2011 to 2016. Ultrasound (USG) abdomen and intraoperative findings prior to initial cholecystectomy were studied. The clinical evaluation and CECTâ€™s FDGPET scan was performed in all as a protocol to stage the tumor prior to definitive surgery. Resectable patients were subjected to laparotomy. Results Laparoscopic cholecystectomy was performed in 7, open in 6 and in three patients; laparoscopy was converted to open cholecystectomy. All but one patient were operated outside. The median time from cholecystectomy to attempted radical surgery was 7 weeks (5 days-4.5 months). All patients were referred with histopathological report for further surgery, out of these 6 had persistent pain, 2 had postoperative jaundice and 4 patients had severe anorexia and weight loss. 81.25% (13/16) patients presented with their ultrasound report prior to cholecystectomy. 43.75% patients (7/16) had features of uncomplicated cholecystitis (normal gallbladder wall thickness, single or multiple stones or mucocele) and suspicious clinical features of malignancy were reported in 56.25% (9/16) cases prior to cholecystectomy. On staging CT, 68.75% (11/16) had gall bladder wall thickening (asymmetrical=6) with or without associated periporal lymphnodes and loss of interphase with adjoining liver. 85.71% (6/7) patients with uncomplicated cholecystitis reported on preoperative US undergone R0 resections and 4 of them had no evidence of residual diseases in resected specimen while remaining 3 patients had e/o resectable residual or recurrent GB mass. Surgery could not be contemplated in 1 patient due to locally unresectable disease. 44.45% (4/9) patients with suspicious US findings underwent R0 resections. All of them had residual/ recurrent diseases without or with GB fossa mass. The remaining 5 patients (55.55%), could not undergo surgery (distant metastasis=3, locally unresectable disease=2). Conclusions: The incidental GBC masquerading as uncomplicated cholecystitis on US can later develop GB mass in 42.8% cases (3/7). The incidence of finding GB mass increases to 100% (8/15) in presence of suspicious lesions on US. Intra operative frozen calotâ€™s triangle, duodenal adhesions and thickened GB wall should raise the suspicion of tumor. The study reinforces alertness and calls for high index of suspicion of GBC on US in patients undergoing cholecystectomy in endemic region and recommends further investigations in cases of suspicious lesions on US prior to cholecystectomy.

Abstract Id: YUGP1883
Quality Of Death Of Patients With Advanced Cancers- An Exploratory Study
Presenter - Ms. Revathy Sudhakar
Co-author - Dr. Surendran Veeraiah, Dr. Prasanth Ganesan, Dr. Kalpana Balakrishnan

Background: Dignified death is an important right of advanced cancer patients. Quality of Death analysis would give us an insight on the impact of the disease and palliative treatment on end-of-life care. This study aims to explore the Quality of Death of patients with advanced cancers. Method: Caregivers (n=108) of advanced cancer patients, who expired either during hospitalization or at home, were chosen through purposive sampling and interviewed to assess the Quality of Death by telephonic method using validated caregiver ratings of patientsâ€™ spiritual and mental distress. The transcripts were analyzed through thematic analysis and descriptive statistics respectively. Results: The most commonly reported reason by the caregivers for the patientsâ€™ distress was physical suffering. Pain, lack of appetite, difficulty in breathing and compromised mobility, irrespective of the site, was reported by 41.6%, 38.8%, 25.9% and 27.7% respectively. Majority of the patients (65.7%) were not aware of their prognosis, thus leading to psychological distress pertaining to anticipation about survival and worsening of physical symptoms. Despite the distress, 60% reportedly had moderate to high quality of life in their last week of life. Conclusion: Although the quality of life of patients under end of life care was reported to be good, they suffered physically and psychologically as reported by the caregivers. Efforts must be undertaken to focus on the physical and psychological sufferings of terminally ill cancer patients, as effective interventions are available to tackle many of these issues.

Abstract Id: YUGP1889
Psychosocial Issues Of Primary Caregivers Of Pediatric Patients With Advanced Cancerâ€”An Exploratory Study
Presenter - Ms. SHIJINA SHAJAHAN
Co-author - Dr. Surendran Veeraiah, Dr. Venkatraman Radhakrishnan, Dr. Kalpana Balakrishnan

Background: Primary caregivers in paediatric setup experience psychological, social, emotional and physical turmoil while taking care of cancer patients under palliative intent. Providing care to the cancer patients is demanding and has both positive and negative impact on the caregivers, which tends to be mirrored by the patients. This study is set out to explore qualitatively, the experiences of primary caregivers of paediatric patients diagnosed with cancer and are receiving treatment with palliative intent. Method: The experiences of 6 primary caregivers of advanced paediatric cancer patients were explored using a one to one semi-structured in-depth interview schedule. The interview was audio recorded, drafted, transcribed and translated by experts and the results obtained were thematically analyzed. Results: Caring for a paediatric cancer patient under palliative treatment leads to high distress among the primary caregivers. Major reasons pertaining to the distress of the caregivers include the prognosis, nature of the disease and the physical sufferings of the patient. Loss of religious belief and social withdrawal were prominent among the primary caregivers. Despite the awareness of the poor prognosis, caregivers reported to have hope regarding the patientâ€™s
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Abstract Id: YUGP1891

Surgery For Intracranial Metastases: A Single Institution Experience

Presenter: Dr. Sivasanker Masillamany
Co-author: Subi T, Venkatesh Madhugiri, Prakash Shetty

Original article title: SURGERY FOR INTRACRANIAL METASTASES: A SINGLE INSTITUTION EXPERIENCE Authors: Masillamany Sivasanker MCh1, Subi T MCh2, Venkatesh Madhugiri MCh3, Prakash Shetty MCh3, Aliasgar Mioyadi MCh3 Affiliation: 1-Department of surgical oncology, JIPMER, Pondicherry; 2- Rajagiri hospitals, Kochi, India; 3-Department of Neurosurgery, Tata Memorial Centre, Mumbai, India

Introduction: The outcomes for patients who develop brain metastases from solid cancers have always been dismal. Several options are now available for the management of brain metastases and include surgical resection, whole brain radiotherapy, stereotactic radiotherapy, stereotactic radiosurgery, etc. The outcomes following whole brain radiotherapy alone (without surgery) have been poor with a median survival in the range of 3-6 months. In a seminal trial for solitary brain metastases, surgical resection followed by radiotherapy showed promising results in terms of better survival, fewer recurrences and better quality of life when compared to radiotherapy alone. With the recent advances in multimodal and targeted therapy, the role of surgery for brain metastases has evolved significantly. The decision regarding surgery is influenced by several factors including the site of primary tumor, disease free interval (DFI), size and number of metastases, performance status of the patient, location of the metastasis within brain, etc. The quality of life (QoL) of these patients following surgery is also a major consideration during the decision making process. The objective of this study was to identify factors affecting the outcomes following surgery for intracranial metastases.

Methods: This study is a retrospective analysis of data obtained from a prospectively maintained database of patients with intracranial metastases who underwent surgery in Tata Memorial Hospital between 2007 and 2015. The database was queried for demographic details, preoperative neurologic deficits, performance status, details regarding the primary malignancy, timing of metastases (synchronous or metachronous), disease free interval (DFI), PET scan data, presence of metastases at sites besides the brain, size and location of the brain metastasis, operative notes, anesthesia records, histopathology details, extent of surgical resection (EOR), postoperative neurological deficits, postoperative morbidity and mortality, status of postoperative whole brain radiotherapy (WBRT), hormonal receptor status in breast cancers, data on progressive disease, overall survival and progression free survival, and follow-up visits. The overall survival (OS) was defined as the time interval between resection of the brain lesion and death due to any cause. Progression free interval (PFI) denotes the time interval between surgery and death or progressive disease. The survival estimates were calculated using the Kaplan-Meier method. Univariate and multivariate analyses were performed to identify factors influencing OS and the PFI using the log rank test and Cox proportional hazards model. All statistical analyses were performed on SPSS (IBM Corp. Released 2011. IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY: IBM Corp.). Results: One hundred and twenty-four patients had undergone surgery for brain metastases over the selected period; the median age of the cohort was 53 years and 53 of the patients were male (42.7%). There were several primary sites that were responsible for the brain lesions including breast, lung, kidney, thyroid, sarcoma, larynx, maxilla, ovary, esophagus, stomach, uterus, testis, etc. The most common sites were breast (45 patients, 36.3%), lung (25 patients, 20.2%) and ovary (10 patients, 8.1%). At presentation, neurologic deficits were present in 53 patients (42.7%) and 19 patients (15.3%) presented with seizures. The median disease free interval was 15.6 months from completion of treatment for the primary malignancy to the appearance of intracranial metastases. In 22 patients (17.7%), the metastases were synchronous. Extranodal metastases were found in 15 patients (12.1%). Only 5 patients were detected to have 2 lesions while the rest had solitary metastasis. PET CT was performed for evaluation in 62 patients (50%). All patients underwent pre-op MRI without and with Gd contrast, using a standard tumor protocol. Nearly 40% of the metastases were >4 cm in size (n=49, 39.5%). The location of the intracranial lesion was supratentorial in 89 patients (71.8%) and in the posterior fossa in 25 patients. The lesions were located on the right side in 67 patients, on the left in 51 patients and in the midline in 3 patients. The EOR was classified based on a postoperative MRI performed within 72 hours. The EOR was gross total in 118 patients (95.2%) and near-total in the rest. The all-cause postoperative mortality rate was 2.4%. In the immediate postoperative period, neurological status improved in 43 patients of 53 patients who had deficits (81% of patients with deficits improved), remained the same in 60 patients and worsened in 21 patients (16.9%). The fresh postoperative deficits were classified as major in 8 patients and minor in 13 patients. Eleven of the 21 patients who developed fresh deficits in the immediate postoperative period (52.4%) improved within a short period of time and in the remainder (n=10), the recovery was either more prolonged or the deficit was permanent. Four patients (3%) had underwent re-exploitation in the postoperative period for varied indications. Overall, at discharge, neurological status had either improved [compared with the baseline deficits or symptoms and signs] or remained stable in 92.7% of patients. Four patients (3.2%) were worse at discharge that prior to surgery. Of the entire cohort, 41 patients (33%) developed progressive or recurrent brain disease and 5 patients underwent redo resection. Univariate analyses were performed for various factors that could possibly affect OS, including age, gender, site of primary malignancy, stage of the primary, timing of metastases, pre-op KPS Score, DFI, presence of neurologic deficits at presentation, size of the metastasis, location of metastases, number of metastases, presence of extra-cranial metastases, EOR and whether patients received WBRT or not. Among these factors, EOR (gross total vs others, p=0.044), receiving adjuvant WBRT (p=0.007) and presence of extracranial metastasis (p=0.007) were identified to affect OS. The median OS was 11.7 months for patients who received WBRT versus 5.9 months for those who did not. The median OS for patients who underwent gross total resection was 12.5 months versus 4.2 months for patients who had near-total resection. The median OS was poor in patients who had extracranial metastases (6.6 months) compared with those who did not (12.5 months). Receiving adjuvant WBRT was the only factor which significantly influenced PFS on a univariate model (12.3 months for those who received WBRT vs 5.9 months for those who did not, p=0.034). On multivariate analysis, adjuvant WBRT (p=0.003) and extracranial metastasis (p=0.006) were the factors that significantly affected OS. Breast cohort: Within the group with metastases from breast cancer (n=45), triple negative cancers (TNBC) constituted 35.6% (n=16). Within the breast group itself, there was no statistically significant difference in the OS between patients with TNBC (12.7 months) versus the remaining patients (17.033 months, p=0.3). Similarly, there was no statistically significant difference in the PFS between patients with TNBC (11.5 months) versus the remaining patients (14.7 months, p=0.4). However, the group with TNBC did have worse OS and PFS compared with the remainder of the group. Conclusions: Surgical resection should be considered for carefully selected patients with solitary intracranial metastases without any extracranial metastases. Gross total resection should be the goal of surgery since it provides the best chance of survival. Adjuvant WBRT is mandatory for all these patients since it is the most significant factor which improves overall survival and progression free survival.
Incidence of multiple primary cancers though uncommon, is being frequently reported now-a-days. They can be divided into synchronous or metachronous according to time interval between the diagnoses: synchronous if interval is less than or equal to six months and metachronous if interval is more than six months. Combined ovarian and endometrial cancers, is an example of a well known synchronous cancers in women, especially when both are endometrioid type. Breast cancer and endometrial cancer are commonly diagnosed cancers in women and both are commoner in older women, but diagnosis of both cancer in the same woman is extremely rare. Only few such cases have been reported. The overall survival outcomes of women who have been diagnosed with breast and endometrial cancer have been rarely reported in literature. Here, we report a case of synchronous endometrial and breast cancer in a 37 years old female. She was initially diagnosed with endometrial cancer and treated for it. During the first follow-up, she complained of lump in the breast and subsequently diagnosed to have invasive ductal carcinoma and treated for it later she developed lung metastasis. It is important that patients with a primary malignant tumour should be thoroughly, closely, and regularly followed. The effect of 1st tumour on the 2nd or vice versa are not yet fully understood. The 2nd primary tumour is usually more aggressive, treatment resistant, and metastasizes early. Therefore clinicians must be aware about such cases so that they can adopt a more aggressive treatment strategy. Key words- synchronous carcinoma, metachronous carcinoma, endometrial carcinoma, breast carcinoma.

Introduction Although there is no data about the incidence of Primary fallopian tube carcinoma in India but in the United States the incidence is 0.41 per 100,000 population with less than 2000 cases reported all over the world. It is said that Primary fallopian tube carcinoma (PFTC) is very difficult to diagnose preoperatively, so while treating a case of adnexal mass, PFTC should be kept in mind. Case Report Mrs SB, a 57 yrs postmenopausal lady, presented with a history of lower abdominal pain and abnormal discharge per vaginum for 6 weeks. On clinical examination she had mild pallor. Per abdominal examination revealed tenderness on the left iliac fossa, Per vaginally cervix normal, uterus deviated towards the right side with a left adnexal mass with restricted mobility, it was tender on examination. MRI examination revealed a mixed echogenic mass on the left adnexae with normal uterus. PAP smear was normal and S CA125 was 354 U/ml. Patient was taken up for exploratory laparotomy, intraoperatively uterus was normal looking with normal right sided ovary and tube. On the left side ovary was normal however the left fallopian tube was enlarged and firm in consistency with open fimbrial end. Omental nodule was detected on inspection. She had undergone Total abdominal hysterectomy along with bilateral salpingo-oophorectomy, omentectomy plus nodal dissection. The postoperative period was uneventful and she was discharged on 5th post operative day. Her final HPE revealed Primary fallopian tube carcinoma (moderately differentiated papillary adenocarcinoma) with omental metastasis, rest of the specimen was negative for malignancy. She was taken up for adjuvant chemotherapy and she completed six cycles of Paclitaxel plus Carboplatin. At present she is on regular followup for the last six plus years without any evidence of disease. Conclusion: In spite of advanced stage, in our case we had a good prognosis probably due to the absence of lymph nodal metastasis which is one of the important poor prognostic criteria in PFTC also a complete surgical debulking along with proper adjuvant chemotherapy is the key factor in the management of PFTC.
Hospital of North Midlands Stoke UK (UHNW) multidisciplinary breast tumour board. Oncotype DX test is recommended mainly for patients with intermediate risk with NPI 3.4 to 4.4 as per NICE guidelines. Eight patients with micrometastasis and positive nodes were also included. An initial treatment decision taken by the treating oncologist (without an Oncotype score) was documented as hormone therapy only, chemotherapy and hormonal therapy or could not decide. The decision was compared with the need for chemotherapy based on the recurrence score in the subsequent meeting. The decision of adjuvant treatment was compared pre and post-Oncotype testing. Patients with recurrence score 30 and below were not offered chemotherapy. Results Eighty-three patients had Oncotype DX test. Mean pathological tumour size was 25.8 mm. Oncotype Dx result changed adjuvant decision in 39.8% of patients. Moreover, of the patients planned for adjuvant chemotherapy, 74% did not receive it based on their Oncotype scores. Similarly, of the patients planned for hormonal therapy, 12% did receive chemotherapy as they had a high recurrence score. There were seven patients in the â€œcould not decideâ€ group, of whom 5 (71%) needed only hormonal therapy. Eight patients had a positive node disease. Of these, only three patients needed adjuvant chemotherapy. Conclusions Oncotype Dx significantly impacts treatment decisions for adjuvant therapy in EBC. Adjuvant chemotherapy can be avoided in the majority of patients with EBC based on recurrence scores as compared to traditional clinicopathologic criteria. For individual patient avoiding unnecessary, a toxic treatment with life long side effects which would not benefit them is a huge bonus. These patients would be able to invest their time the treatments which would help them.

Abstract Id: YUGP1913

**Abstract Id: YUGP1913**

**Â€€comparison Of Psychological Outcomes In Breast Cancer Patients After Breast Conservation Surgery Versus Mastectomy**

**Presenter - Dr. Ankit Gangwar**

**Co-author - PROF. VINOD JAIN, DR. GITUKA NANDA, PROF. ANAND MISHRA**

**Introduction:** Quality of life (QOL) is an important indicator of treatment efficacy in breast cancer patients. For Early breast cancer(EB), mastectomy is usually chosen option both by patients and doctors. Post mastectomy body image changes are often associated with decreased quality of life(QOL). The aim of this study is to compare the QOL in patients undergoing BCS versus MRM for early breast cancer Materials & Methods: 52 patients with EBCw were enrolled in either group (BCS or MRM) based on informed choice by patients and followed up 2 weeks (FU1) and 12 months (FU2) after surgery. Translated copies of European Organization for Research and treatment (EORTC) QLQ-C30 to measure general QOL and QLQ-BR23 for breast cancer specific symptoms were filled by patients. The parameters were analysed for both groups(BCS vs MRM) using spss24

Results: Body image (BCS 76.50±19vsMRM 71.50±20.1,p=0.01), global health (BCS 46±18.6vsMRM 39.50±17.5,p

**Abstract Id: YUGP1915**

**Role Of Intra-Operative Frozen Section In Defining The Extent Of Surgery In Endometrial Carcinoma: An Indian Experience.**

**Presenter - Dr. Nataraj Naidu**

**Co-author - Somashhekhar SP, Shabber S Zaveri, Vijay Ahuja**

ABSTRACT: Purpose: The role of frozen section in the intraoperative decision making about the extent of surgical staging is controversial. The study was undertaken to evaluate the role of the frozen section and its agreement to histopathology in determining the tumor grade and depth of the tumor invasion in carcinoma endometrium at our center Methods: A retrospective review of the 100 consecutive cases of carcinoma endometrium from Jan 2011 to October 2016 were considered. The results of the intraoperative frozen section were compared with the final histopathology report in terms of the grade of the tumor and myometrial involvement. Results: Our study results showed that, the assessment by frozen section with final histopathological grading for grade 1, grade 2 and grade 3 was found to have a sensitivity of 100%, 90% and 84.2% and a specificity of 94.3%, 90% and 97.5% respectively. However the positive and negative predictive values were 68.75%, 95.4%, 88.8% and 100%, 84.3% and 96.3% respectively. The overall agreement between both frozen section and histopathology for tumor grading and myometrial involvement was computed to 90% and 97%. On application of Kappa statistics, the value was 0.794 with a standard error of 0.062 and P=0.001, suggesting a significant and moderately high agreement between two methods. On application of kappa statistics for agreement of myometrial involvement, the value was 0.925, with a standard error of 0.043 and P=0.001, suggesting a significant and extremely high agreement between two methods. Conclusions: Our study adds to a high concordance, extremely significant agreement between frozen section and Histological grading by Kappa statistics with high sensitivity for the same, and thus the study adds on to the evidence favoring the reliance on frozen section. Key words: Carcinoma endometrium, frozen section, Indian study, kappa statistics, myometrial involvement.

**Abstract Id: YUGP1919**

**Working Towards Zero Central Line Infections In Patients With Hematological Malignancies: Feasibility Of An Intensive Patient Education Based Approach**

**Presenter - Ms. Vedhya Gopalakrishnan**

**Co-author - Dr. E Grace Sahaya Vidhubala, Dr. Prasanth Ganesan, Mrs. Varalakshmi Vijayakumar**

**Background:** Central Venous Catheters (CVC) can be complicated by infections (central line related blood stream infections, CLABSI) leading to increased morbidity. Patients with hematological malignancies retain CVCs for long periods, often in an outpatient setting. Central line care â€œbundleâ€ have been shown to reduce CVC infections. To achieve our set target of zero-CLABSI, we planned (in addition to the strict implementation of the central line care bundle) an intensive education program to empower patients on CVC care.

**Methods:** Patients with hematological malignancies who had CVC insertion between Mar-Jul 2015 were either provided with standard information or were intensely counselled regarding various aspects of CVC care. CLABSI rates (number of central lines infected divided by total number of central line days scaled by a factor of one thousand) were compared with the pre-implementation time period. Results: Seventy seven patients had CVC insertion during the period of which half (n=19) received intensive counseling (experimental group) and the other half received standard care (prospective controls). CLABSI rates reduced from 2.26/1000 central line days (pre-implementation period) to 0.98 and 0.85/ 1000 central line days respectively in the experimental and control groups of this study. Conclusion: Within a short observation period at a single center, an intensive patient-directed educational approach was able to greatly reduce CLABSI among patients undergoing therapy for hematological malignancies. Continued efforts are required to achieve the goal of â€œzeroâ€ CLABSI.

**Abstract Id: YUGP1921**

**Adequate Margins For Ptv Based On Set Up Errors Detected By Portal Imaging During Imrt Treatment: A Retrospective Single Institute Observational Study**

**Presenter - Dr. MANJINDER SIDHU**

**Co-author - . . .**

**Purpose/Objective:** To present our experience and results in the daily portal imaging during intensity modulated radiation therapy (IMRT) for various sites treatment and detecting adequate margins
for PTV based on results. Materials/Methods: During simulation three fiducial markers were placed at appropriate sites prior to CT-based treatment planning. CT-simulation was performed and an orthogonal pair (anterior and lateral) of digitally reconstructed radiographs (DRR) was generated. Field borders and anatomical markings were drawn on the DRRs. Prior to radiation treatment in Elekta Synergy platform linear accelerator, portal images were taken both anteriorly and laterally with 4MV energy (initially on three consecutive days and then based on average set up errors of the initial 3 days). These were compared to that of the DRRs. Quantitative measurements of the set up errors were made by manual correction and anatomical matching. Shifts of 3 mm or more were corrected with couch adjustments and an additional portal image was taken prior to treatment delivery to confirm the adjustments. The frequency, range, and average set up errors were analyzed for each site. The time required to deliver therapy was measured for each site. This retrospective analysis enabled us to calculate PTV margins for different sites. We also aimed to determine whether the percentage of weight loss over course of treatment correlated with average set up errors. Correlation between different sites and average set up errors were analyzed. Results: A total of 228 patients were analyzed. A 1500 total of portal images were analyzed and compared to their corresponding DRRs. The average setup error for head & neck, pelvis & abdomen, thorax and brain were as follows: 2.5mm lateral(y), 2mm cranial-caudal(z), 3mm anterior-posterior(x); 3.5mm, 3mm±4mm; 3.5mm, 3mm±4mm; 1.5mm, 1.5mm±1.5mm respectively. More than one portal image was often required for matching with an average of 1.2±0.1 images taken per treatment time for head & neck, pelvis, abdomen, thorax and brain respectively. The average time elapsed during filming per treatment fraction was 4.6 minutes (SD 5.6). The average time elapsed during filming and couch adjustments, when required, was 6 minutes (SD 7). We calculated mean percentage weight loss for all patients over the course of treatment and compared average set up error to percent weight loss. Conclusion: This retrospective analysis helped us to calculate PTV margins for head and neck, pelvis & abdomen thorax and brain by finding the setup errors using portal imaging. We calculated correlation between treatment site and average set up errors. We also compared correlation between averages set up error to percent weight loss.

Abstract Id: YUGP1927
External Beam Radiation Therapy To Hepatocellular Carcinoma Involving Inferior Vena Cava And/Or Right Atrium: A Meta-Analysis And Systemic Review
Presenter- Dr. Chai Hong Rim
Co-author - 

Introduction Hepatocellular carcinoma (HCC) involving inferior vena cava (IVC) and/or right atrium (RA) is a rare but serious clinical condition. It is a therapeutic challenge with a possibility of systemic complications. External beam radiotherapy (EBRT) has been performed to palliate venous invasion and/or primary HCCs. The objective of this meta-analysis was to review the published studies about EBRT performed for HCCs with IVC and/or RA invasion and assess its efficacy and safety. Materials and Methods Systematic search of Pubmed, MEDLINE, EMBASE, and Cochrane library published was performed. Primary endpoints were 1-year overall survival (OS) rate and 2-year OS rates. Secondary endpoints were response rate, local control (LC) rate, and grade >3 toxicities. According to heterogeneity evaluated with Cochran Q test and I² statistics, meta-analysis was performed using either random or fixed model to calculate aggregated OS, LC, and response rates. Results: A total of 8 studies and 9 cohorts were included, encompassing 164 patients. The number of patients in the included studies ranged from 5 to 42. Pooled 1- and 2-year OS rates were 53.6% (95% CI: 45.7%–61.3%) and 34.4% (95% CI: 27.2%–42.4%), respectively. Pooled response rate and LC rate were 59.2% (95% CI: 39.0%–76.7%) and 91.7% (95% CI: 78.8%–97.1%), respectively. Only one study reported grade >3 toxicities, which are a pulmonary embolism and an esophageal rupture cases. No grade >3 toxicities were reported in other studies; the overall rate of grade >3 complications was 1.2% (2 of 164). Conclusion: Application of EBRT for HCC with IVC and/or RA invasion was safe with satisfactory survival rate. An active treatment including local therapy should be considered without excessive concerns about systemic complications.

Abstract Id: YUGP1935
An In Vitro Study Of The Cytotoxic And Anticancer Effects Of A Secondary Metabolite From Penicillium Sp. Juj
Presenter- Ms. Prerana V
Co-author - Varalakshmi K.N.,

Filamentous fungi such as Penicillium are one of the most incredible chemical factories known today. Accordingly, numerous bioactives such as mycotoxins, antifungal and anticancer agents have been reported in the literature in the last 100 years. It has been estimated that approximately 1.5 million or likely as many as 3 million fungal species exist on Earth, of which only around 100,000 species have been described so far. A multitude of new species are likely to be discovered from diverse habitats, such as tropical forest plants and soils, associated to insects and in the marine environment. Anticancer agents from microbial sources are gaining importance based on their safety and efficacy and also based on the broad range of novel metabolites produced by them. In the present study, the cytotoxic and anti-cancer potential of a bioactive compound from a Penicillium sp. isolated from soil was assessed on HeLa, HepG2 and MCF-7 cell lines. The purified compound was tested for its cytotoxic and anticancer potentials by MTT assay on all three cancer cell lines at varying concentrations (1, 10 and 25 µg/ml). The percentage viability of the purified compound was found to be the lowest at 66.9% for HeLa, 55.7% for HepG2 and 56.93% for MCF-7 cell line at 48 h treatment period. The bioactive compound was further subjected to other in vitro assays such as DNA Fragmentation, LDH, Caspase activity, cell cycle analysis by flow cytometry and clonogenic assay to confirm its anticancer potential. The fraction was also tested on normal healthy lymphocytes which revealed the non-toxic effect of the fraction expressing a percentage viability of 112% limiting the cytotoxic effect of the bioactive fraction only to cancer cells. This
bioactive compound needs to be characterized for future anticancer applications.

**Abstract Id: YUGP1939**

**Transhiatal Oesophagectomy â€“ A Single Institute Experience**

*Presenter - Dr. Suresh M*

*Co-author - , , , *

TRANSHIATAL OESOPHAGECTOMY â€“ A SINGLE INSTITUTE EXPERIENCE: Authors: Dr. ARULRAJ. P", Dr. SURESH. M "Corresponding Author: HOD, Dept. of Surgical Oncology, V.N.Cancer Centre, G.Kuppuswamy Naidu Memorial Hospital, Pappanickenpalayam, Coimbatore â€” 641 037 BACKGROUND: The optimal approach for Carcinoma at lower Oesophagus and OG Junction remains controversial. Despite Oncological advances, Surgical resection is the only treatment that has repeatedly been shown to prolong survival, albeit in only 30% of patients. Transhiatal oesophagectomy is often advocated as the preferred surgical approach in patients with early tumours (or) the patients with more advanced disease who would not tolerate a thoracotomy. Transhiatal oesophagectomy has been favoured operative approach in our Institution for managing on carcinoma of oesophagus below the level of carina and type I and type II tumours of OG junction AIM OF THE STUDY: The aim of the study was to assess a single unit experience and outcome of transhiatal oesophagectomy in an era when the use of systemic oncological therapies has been increased dramatically. MATERIALS AND METHODS: Between July 2008 and December 2016, 204 consecutive patients (116 males, 88 females, median age = 57 years) underwent transhiatal oesophagectomy. A further 13 patients underwent transthoracic oesophagectomy during the same period and were excluded from analysis. Invasive Squamous Cell Carcinoma in 117 patients, Adenocarcinoma in 83 patients, malignant melanoma in 1 patient and adenocarcinoma 3 patients. 89 patients received neo adjuvant chemotherapy. RESULTS: There were no operative and peri operative mortality within one month after surgery. Major complications included: Respiratory complications in twenty three patients, clinically apparent anastomotic leak in sixteen patients, recurrent laryngeal nerve neuropraxia in eleven patients and hiatus hernia in five patients. Median length of hospital stay was 10 days. Ro resection was achieved in all patients except in eleven patients who had multicentric disease. CONCLUSION: Transhiatal oesophagectomy is an effective operative approach for tumours of the infra carinal oesophagus and the oesophagogastric junction. It is associated with low mortality and morbidity and two year survival rate of nearly 50% when combined with neoadjuvant chemotherapy.

**Abstract Id: YUGP1941**

**Breast Cancer In Young Women â€“ Special Attention Needed.**

*Presenter - Dr. Pooja Agarwal*

*Co-author - Dr.Sanjit Kumar Agarwal, Dr.Rosina Ahmed,

Background: Although the overall incidence of breast cancer in India is low compared to Western countries, breast cancer in young women (YBC) (<40 year) is relatively frequent. YBC has different pathological features and a relatively unfavorable outcome. The aim of this study was to analyze clinico-pathological characteristics and outcomes in YBC. Materials and Methods: Data for YBCs treated in a tertiary care cancer center in Eastern India from June 2011 to June 2015 was analyzed. Clinical, pathological and outcome data was retrieved from the institutional database and analyzed by SPSS 23. Results: Of 1825 patients, 242 (13.6%) were <40 years, 45 were lost to follow up and 197 were included in study. The median tumor size for YBC was 4 cm (IQR 2.5, 5.5), compared to 3.2cm (IQR 2.4) for older women. At presentation, the proportion in stage 0, 1, 2, 3 & 4 were 2.5%, 3%, 32%, 53.5% and 9%. Invasive ductal carcinoma (92%) was the most common histological type. 65% of tumors were grade 3, 30% were ER negative, and 31% were HER2 positive. Of women treated curatively, 48% had surgery first, 52% received neoadjuvant Chemotherapy (NACT). Breast conserving surgery (BCS) was performed in 61% of patients. 59/72 (87.5%) eligible patients received adjuvant chemotherapy & only 9/60 (15%) of HER 2 positive patients received Trastuzumab due to financial constraints. 143 (92%) patients received postoperative radiotherapy. All ER and/or PR positive patients received endocrine therapy. At 3 years median follow up, 29 patients had expired and 51 were alive with recurrences. Projected Disease Free Survival was 77% at 5 years & Overall survival was 83% at 3 years. CONCLUSIONS: With high risks of recurrence and inferior OS, YBCs need special attention for early diagnosis, and financial support for appropriate treatment in Indian subcontinent.

**Abstract Id: YUGP1942**

**Correlates Of Cancer-Related Stigma In The Community In Two Major Cities Of India: Data From The Carrs Study**

*Presenter - Prof. Shivani Patel*

*Co-author - Preet Dhillon, Dipika Bumb, Theresa Gillespie*

Background: The burden of cancer in India is growing. Cancer-related stigma may limit use of screening and treatment and thus contributes to worse prognosis after diagnosis. Objective: We examined the correlates of four measures of stigma in the general population of adults in Chennai and New Delhi. Methods: We analyzed data from 5497 participants aged 24-98 years surveyed in 2016 for the fourth follow-up of the community-based, representative Cardiometabolic Risk Reduction in South Asia Surveillance Study (CARRS). Cancer-related stigma was assessed through: unwillingness to share a hypothetical cancer diagnosis to neighbors, belief that cancer could spread from person to person contact, reluctance to eat meals with someone with cancer, and belief that cancer was caused by past sins. We used linear probability models to estimate the association (prevalence differences [PD]) of sociodemographic factors with stigma measures, accounting for survey design. Results: Respondents were 52.0% women, mean age of 42.7 (SD=13.1) years, and 20% had at least a college education. Prevalence (%) ± standard error estimates of the cancer stigma measures were: 46.8±5.4 unwillingness to share diagnosis; 6.4±2.8 avoidance of someone with cancer; 5.8±0.9 belief that cancer can spread from person to person; 4.6±0.7 belief that cancer was retribution for a past sin; and 52.3±4.8 any measure. Among residents of Chennai compared with Delhi (reference), unwillingness to disclose a cancer diagnosis was substantially higher (PD=86.0%; p

**Abstract Id: YUGP1944**

**Feasibility Of Sparing Lung And Other Thoracic Structures With Intensity Modulated Radiotherapy, Rapid Arc And 3D Conformal Radiotherapy For Locally Advanced Non-â€“Small Cell Lung Cancer Treated With Concurrent Chemoradiotherapy**

*Presenter - Dr. REJIL RAJAN*

*Co-author - SUBHRA SNIGDHA BISWAL, DR MUKTI MUKHERJEE, DR JIBAK BHATTACHARYA*

Purpose/Objective: To compare dosimetric improvements with respect to normal tissue sparing using Rapid Arc, intensity-modulated radiotherapy (IMRT), three-dimensional conformal radiotherapy (3D-CRT) for locally advanced-stage non-small-cell lung cancer (NSCLC) treated concurrently with chemotherapy. Materials and methods: A retrospective treatment planning study was performed to compare IMRT, Rapid Arc, and 3D-CRT for 10 locally advanced NSCLC patients treated concurrently with chemotherapy. 10 patients who had previously undergone 3D CRT were selected. In IMRT plans, three to nine coplanar beams were designed to treat 95% of planning target volume with 60 Gy. Planning was done accordingly to minimize the volumes of normal lung, heart, esophagus and spinal cord above their tolerance doses The plans are compared with
Abstracts

Malignant transformation typically occurs in post menopausal women. A 33-years old female was referred as a case of ovarian teratoma with abdominal swelling. She was pregnant with ovarian tumor and during caesarean section, ovariectomy with omental biopsy were done. Post delivery she noted gradual swelling of abdomen for which she was referred to our Institute. Slides review noted mature cystic teratoma with omental biopsy reading squamous cell carcinoma. Diagnosis and treatment of such cases present a big challenge to clinicians not only because it is a rare entity but also due to aggressive course of such entity. Preoperative diagnosis is difficult. Due to rare nature, there is lack of data on optimal treatment and hence, appropriate adjuvant therapy has not been systematically assessed. Reported cases have a role in that, collective data may help in understanding and adoption of an effective treatment to counter such rare and lethal entity.

Abstract Id: YUGP1958

Profiling And Documenting The Information Gap Amongst Gynecological Cancer Patients In An Apex Institute Of North India
Presenter - Dr. Amudeep Singh
Co-author - Vanita Suri, Sushmita Ghoshal, Sukhpal Kaur

Background: Gynecology OPDs of tertiary care hospitals are usually overburdened with patients. Doctors are not in a position to provide quality counseling to cancer patients. Hence, this study aimed to document the information gap perceived by patients visiting gynecology OPD. Objectives: To document pattern and profile of gynecological cancer cases admitted in PGIMER, Chandigarh To identify information gap in cancer patients and care givers reporting at Gynecology OPD of PGIMER, Chandigarh Methods: Profiling was done by taking retrospective data of five years (2012-2016). Information gap was identified by conducting case studies on common problems faced by patients during and after therapy. A prototype of Self Instruction Manual (SIM) was developed to counsel cancer patients and their care givers. The SIM was then circulated amongst experts for validation. Results: At PGIMER maximum gynaecological cancer case load is seen from Punjab (37%), followed by Haryana (22%), Chandigarh (16%), HP (15%) and others (10%). A total of 3973 patients got admitted out of which 95 died in hospital only. Among gynecological cancers, majority were cervical cancer (63%) followed by ovarian cancer (22%), uterine cancer (12%), vulval cancer (2%) and vaginal cancer (1%). Average length of stay was of 5.22 days. Maximum (56%) cases were 40-60 years old. No significant co-relation with socio economic status was seen. Case study 1: A 38 year old educated cancer uterus woman was not aware why her uterus was removed. She was worried about the risk of recurrence and spread of cancer. Case study 2: A 16 year old girl diagnosed with cancer vagina and her mother was not aware about the complications of surgery and its impact treatment on fertility. Case study 3: Another 72 year old woman undergoing radiotherapy for cancer cervix was scared about the side effects of treatment. She was also not aware about the diet she should take. A definite information gap was seen among patients and their care givers. Accordingly a protocol was evolved and tried in a special counseling room in Gynaecology OPD where their queries were successfully resolved. Conclusion: It is feasible (and there is an urgent need) to establish a special room in hospitals where cancer patients and their care givers can be counseled.

Abstract Id: YUGP1960

Interaction Of Fat1, Hif1A And P53 In Glioma Progression
Presenter - Dr. Srinivas H
Co-author - Nargis malik, Yakklesh Gupta, Chitrangda Srivastava

Background: FAT1 is a transmembrane protein and function as an adhesion molecule. FAT1 gene is located on chromosome 4q35.2 encoding a 506KDa protein. The role of FAT1 in tumors is not fully characterized. Few reports suggest it behaves as a tumor suppressor and few reported it as oncogenic. Here in our study we
are characterizing the role of FAT1 in primary brain tumors. There are studies showing altered expression of FAT1 in human gliomas with ~30% of them showing LOH at the FAT1 locus. TP53 is mutated in 50% of primary brain tumors. P53 being a transcription factor, regulates the expression of a number of target genes including regulating biological functions such as cell cycle arrest, apoptosis, senescence, differentiation and antiangiogenesis. Glioma is known to have hypoxic environment in its tumour core and hypoxic tumour micro environment and HIF1A is believed to play role in tumour progression . So, in this study we are analysing the interaction between FAT1, P53 and HIF1A in glioma progression. Methodology: In order to delineate molecular crosstalk: plasmid containing truncated FAT1 gene in pcDNA vector 3.1 was used (gifted by Dr Timothy A Chan). Truncated FAT1 plasmid contains first two repeats of cadherins at N terminals and around 32 amino acids. This observation points to the critical and important role of FAT1 in glioma progression. Methodology: In order to delineate molecular crosstalk and interaction between FAT1, P53 and HIF1A and p53 plays and important role. The exact mechanism of FAT1 Knockdown activated p300/p53 combination over p300/HIF1A and increased Sub G0 population (PI cell cycle assay) on Knock down of FAT1 in U87MG cells line increased p53 (1.7fold) and HIF1A (1.5 fold) and also p300 (1.8 fold). Increased in P53 in FAT1 Knockdown under hypoxia and reduction of HIF1A and increased p53 and HIF1A expression and levels after FAT1 knockdown under normoxia to 1.56 fold. HIF1A being oncogene should promotes proliferation/migration and invasion but in our study we observed decreased in migration and invasion (Matrigel assay) and decreased in proliferation (MTT/XTT cell proliferation assay) and increased in apoptosis (Annexin FITC and PI flowcytometry assay) and increased Sub G0 population (PI cell cycle assay) on Knock down of FAT1 in normoxia. Increased p53 and its downstream genes after FAT1 Knockdown activated p300/p53 combination over p300/HIF1A resulting in decreased oncogenicity in normoxia in absence of FAT1. On other hand after FAT1 over expressions we observed decreased p300 and decreased p53 and its downstream and increased migration/invasion and viability. The cell viability was 74.81 % after FAT1 over expression compared to control under normoxia. In hypoxia, the cell viability was increased after FAT1 over expression(91%) compared to control. Migatory properties also showed significant increase in over expression sample (4.19 times) then mock control under normoxia. This observation points to the critical and important role of FAT1 in cell migration. In conclusion FAT1 plays an oncogenic role in glioma and HIF1A and p53 plays and important role. The exact mechanism involved in the oncogenesis by FAT1 is under study. Keywords: FAT1, HIF1A, P53, Glioma.

Abstract Id: YUGP1962
Interobserver Variation Of Volume And Mean Dose In Parotid Gland Delineation â€“ A Study Of Its Impact On Imrt Planning In Radically Treated Head And Neck Cancers
Presenter - Dr. Sanjay Hunugundmath Co-author - Sumit Basu, Bhooshan Zade, Amit Nirhali

Interobserver variation of volume and mean dose in parotid gland delineation â€“ A study of its impact on IMRT planning in radically treated head and neck cancers Sanjay M H1,S Basu1, B Zade 1, A.Nirhali2,V Sathiyaranayanar2 1 Department of Radiation Oncology, Ruby Hall Clinic, Pune/India 2Department of Medical Physics,Ruby Hall Clinic, Pune/India OBJECTIVE: Consistent delineation of parotid has become important in the growing era of highly conformal and adaptive radiotherapy techniques. This study investigates the interobserver variation of volume and mean dose in parotid gland delineation with its impact on IMRT, in head and neck cancers. METHODS AND MATERIALS: The CT volumetric data sets of 20 patients with oropharyngeal Squamous cell carcinoma who had been treated with parotid sparing IMRT were used. Three radiation oncologists and 2 radiologists delineated the parotid gland, which was spared using IMRT. The dose volume histogram (DVH) for each study contour was calculated using the IMRT plan actually delivered for that patient, which intum was compared with the original DVH.
obtained when the plan was used clinically. RESULTS 100 study contours were analysed. The mean parotid dose achieved during the actual treatment time was within 10% of 24 Gy. Using this cutoff constraints for study contours, the mean parotid dose obtained was within 10% of 24 Gy for only 40% of volumes by radiation oncologists and 45% of volumes by radiologists. We found that there were 35% variation in volume delineated by radiologists and 28% variation in volume contoured by radiation oncologists. There was a significant variation of the study contours from those used clinically, to an extent that different IMRT plan would have been produced. CONCLUSION Interobserver variation in parotid gland delineation is significant and is due to many regional causes. Measures to reduce this variations like adherence to guidelines, joint delineation review sessions are needed, to improve the interobserver consistency, the delineation practice which turn helps to standardize patient treatments. Keywords â€“ Interobserver, Radiation Oncologist, Radiologists, Mean parotid dose, Dose volume histogram.

Abstract Id: YUGP1964
Risk Factors Assessment Of Cervical Lymph Nodes Metastases In Cases Of Squamous Cell Carcinoma Of Oral Cavity
Presenter- Dr.Gajendra Anuragi
Co-author - DR.PINKAIN PATEL, DR.SURESH SINGH, DR.R.G.SHRAMA

Head and neck cancers account for significant burden of cancers in India. Amongst head and neck cancers, oral cavity cancer is the most common with Squamous cell variety. India has the highest rate of oral cavity cancer of any country of Asia. This study was conducted on 140 patients of oral cavity cancer from 2014 to 2015 attending a tertiary center to find out proportion of lymph nodes metastases positivity in oral cavity cancer, to determine association between various clinico-pathological features of oral cavity cancer with neck nodes metastases and to measure risk ratio for lymph nodes metastases in oral cavity cancer. All 140 patients underwent surgical excision with neck dissection and then study of pathological features of biopsy was done. Seven variables were studied and then association with cervical lymph nodes metastases were found out. Our study suggested that smoking and chewing tobacco are strong risk factors in the development of oral cavity cancer. The habit of chewing betel nut leaves rolled in lime & tobacco known pan [Betel Quid] results in prolonged contact of the carcinogens with buccal mucosa & is thought to be the principal cause of oral cancers in India. Most of the cases were smokers 76(54.3%). Male female cancer ratio was 3.07:1, thus male were more commonly affected due to higher rate of tobacco abusing in India. In clinico-pathological features clinical tumor size, tumor grade, tumor thickness, inflammatory infiltration, intravascular invasion, perineural invasion and tumor interphase were studied and it was found that increase in T-staging, tumor thickness, poorly differentiated tumor, intravascular invasion and perineural invasion lead to more propensity of tumor to cervical lymph nodes metastases while well differentiated tumor and tumor interphase other than uniform front had less propensity to cervical lymph nodes metastases. In this study, 60 out of 140 (42.85%) cases had cervical lymph node metastasis. The status of cervical lymph nodes is one of the prognostic factors in oral cavity cancer. No gold standard exist except the histopathological examination to identify nodal status.

Abstract Id: YUGP1966
Initial Experience Of Complete Cyto Reductive Surgery (Crs) With Hyperthermic Intrapertitoneal Chemotherapy (Hipec) From A Tertiary Cancer Care Centre In India
Presenter- Dr. M D RAY
Co-author - M D RAY, SEEMA SINGH, ASHUTOSH MISHRA

Initial Experience of Complete Cyto reductive Surgery (CRS) with Hyperthermic Intrapерitoneal Chemotherapy (HIPEC) from a Tertiary Cancer Care Centre in India, M D Ray, Seema Singh, Ashutosh Mishra, S V S Deo, N K Shukla Introduction: Peritoneal metastasis in intra-peritoneal visceral malignancies was earlier thought as incurable terminal disease but with the advent of Cytoreductive surgery and Hyperthermic Intrapertitoneal chemotherapy (CRS + HIPEC) in the recent past, the approach to such cases have been changed with better oncological outcomes and acceptable morbidity and mortality. Materials and Methods: A prospective study was conducted between January 2015 to January 2017 in the department of Surgical Oncology at AIIMS, New Delhi. A total of 55 patients underwent CRS + HIPEC procedure at our centre. Preoperative assessment for cytoreduction was done using contrast CT-scan of the abdomen and PET scan as indicated. All procedures were performed by the same surgical team. After cytoreduction, HIPEC was performed by semi open method where different chemotherapeutic drugs were instilled and circulated in peritoneal cavity at the core temperature of 42 °C for 60 min. Results: Median patient age was 46 with 14.55% male and 85.45% female (M:F; 5.87). Majority (90.91%) were Performance status (ECOG 1) and remaining were ECOG 2. Median PCI was 7.5 (5-21). Ovarian cancers comprising the commonest one inclusive of both primary, after NACT and recurrent cases;65.45%; followed by Carcinoma Colo rectum, Pseudomyxoma peritonei, Peritoneal mesothelioma and Carcinoma Appendix in decreasing order. (90.91%) patients had a complete cytoreduction (CC 0) and acceptable cytoreduction (CC 1) was achieved in 9.09% cases. Median duration of CRS and HIPEC was 7.3 hrs and patients were discharged after a median hospital stay of 7 days. Nausea and vomiting was the most common complication in early post operative period; followed by deep venous thrombosis in 10.99%, paralytic ileus in 9.09% and subacute intestinal obstruction in 5.45% cases in late post operative period. Most common cause of readmission was subacute intestinal obstruction (9.09%), which was managed conservatively. Three (5.45%) patients died in early postoperative period due to cardiopulmonary compromise. Seven (12.73%) patients developed recurrence (local, 7.27%; local and systemic in 3.64%; systemic in 1.82%) which were managed either by systemic chemotherapy, surgery or palliative chemotherapy. Conclusion: Our initial results indicate that CRS + HIPEC procedure can be performed with acceptable morbidity however diffuse peritoneal disease is a predictor of high incidence of recurrence. Appropriate case selection by a multi-disciplinary team is vital to achieve complete cytoreduction and expected outcomes. Key words- peritoneal carcinomatosis, cytoreduction, hyperthermic intraperitoneal chemotherapy.

Abstract Id: YUGP1976
Diffuse Intrinsic Pontine Glioma
Presenter - Ms. TANVI GUPTA
Co-author - Tanvi Gupta, barbiegupta95@gmail.com, Sanjeev Singh, sanjeev.15935@lpu.co.in

Review on: An Idealistic Approach of Diffuse Intrinsic Pontine Glioma Tanvi Gupta*, Sanjeev Singh School of Bioengineering & Biosciences, Lovely Professional University, Jalandhar, Punjab-144411 Diffuse Intrinsic Pontine Glioma (DIPG) affects the children at any infancy in the childhood. The diagnosis of DIPGs reports for 10% of Central Nervous System (CNS) tumors originating in the area of brainstemâ€™s Glial tissue called Pons which governs the eye activity, gesture movements, breathing, blood pressure and blood rate. The tumorâ€™s prevalence is still limitless but the statistics propounded 300-400 children are spotted with DIPG year after year. Authenticated competent medication method in DIPG debris Radiation Therapy. As long as for the larger part of the convalescent, this medication method is sole of short term effect. Modernistic Development in the era of molecular biology of DIPG have embossed unaccustomed belief moreover unlocked different boulevard for curative opportunities. Keywords: Infant cancer, DIPG, Radiation, Pons. Correspondence: barbiegupta95@gmail.com
Abstract Id: YUGP1988
Trismus-Exercise Prescription And Its Influence On Quality Of Life
Presenter - Mr. Madhavan Sasidharan Satish
Co-author - Srinivasan Vijay, Anitha D, Ashwin

BACK GROUND: In south central asia cancer of oral cavity ranks among the three most common types of cancer. In India the age standardised incidence of oral cavity cancer is 12.6/100000 population1. Mouth opening of 35mm or less is regarded as trismus. Radiationtherapy induced fibrosis in head and neck area is identified as one of the most common causes of trismus2. Currently there is no standardised treatment for trismus. Exercises, several jaw mobilization devises and stretching techniques are available but their effectiveness on trismus is still largely unknown. AIM: The aim of this study is to analyse the effect of exercise therapy on trismus among oral cavity cancer patients and its influence on quality of life. METHODOLOGY: Oral cavity cancer patient (stage I to 1VA), (n=68) aged between 18 to 65 planned for chemoradiation therapy were assessed for trismus and QOL on 4 occasions – baseline before treatment at the time of diagnosis, 3rd week of treatment, at treatment completion(chemoradiationtherapy) and at 6 months follow-up, using RTOG trismus scale and cancer institute quality of life questionnaire. Patients with trismus were treated with cancer institute mouth opening exercise protocol. Results analysed using student t-test, RMANOVA and chi square test. RESULTS & CONCLUSION: 8% of the patients had trismus before treatment.42% developed trismus during the treatment, while 64% of the patients had trismus at completion of treatment and in follow up 71% of the patients had no trismus.67% reported high quality of life during follow up. With mouth opening exercise most of the patients with trismus were able to achieve adequate mouth opening. Reference: 1. World cancer report 2014:Stewart, B, & Wild, Christopher P. (2016). 2. The effect of radiation therapy in head and neck cancer patients in the treatment of radiotherapy-induced trismus: A systematic review. Scherpenhuizen A etal., J oraloncology. 2015.05.001. E pub 2015 Jun 6.

Abstract Id: YUGP1992
Ayurvedic Plant Extract Tinospora Cordifolia As A Potential Anti-Cancerous Agent Against Hormone Independent Metastatic Breast Cancer
Presenter - Dr. Jyotsana Singh
Co-author - Brijesh Kumar, Nikhil Kumar, John F Marshall

Ayurvedic plant extract Tinospora cordifolia as a potential anti-cancerous agent against hormone independent metastatic breast cancer Jyotsana Singh (Ph.D.1)Brijesh Kumar (Ph.D.1,2), Nikhil Kumar (Ph.D.3), John F Marshall (Ph.D.4)* and Rituraj Konwar(Ph.D. 5)1Division of Endocrinology, CSIR-Central Drug Research Institute, Lucknow 2Sophisticated Analytical Instrument Facility, CSIR-Central Drug Research Institute, Lucknow 3CSIR-National Botanical Research Institute, Lucknow 4Tumor Biology, Barts Cancer Research Institute, University of Queen Mary, London.

* Corresponding authors. SFirst Author-Jyotsana Singh (jyotsana.singh2018@gmail.com), LSS-105, CSIR-CDRI, Sector 10, Jankipuram Vistar, Sitapur Road, Lucknow, 226031. Basis of the study-Biological heterogeneity of metastases and epithelial mesenchymal transition (EMT) in breast cancer are two evil faces responsible for poor patient management. Targeting EMT in the breast cancer is very challenging as therapeutic interventions are immediately required. Although there are a number of anti-metastatic drugs and chemo-therapeutic agents but they have failed to cure the aggressive metastatic tumors compelling the direction of drug discovery towards a newer approach, where the EMT targeting seems to be a promising approach. In present study we have studied the anti-metastatic potential of Tinospora cordifolia Miers (Menispermaceae), also popular as amrita, guracha, guduchi or jetwakika. The stem extracts were selected for investigation since it has been documented for its immunomodulatory activity. The wide distribution, perennial nature and dioecy of T. cordifolia have led to critically investigate the seasonal and gender based impact on the activity and the content of bioactive compounds by various groups. Recently, our group has successfully developed a statistical approach based on phytochemical markers for confident prediction of variations in metabolic profile and cytotoxicity against MCF-7, MDA-MB-231, DU-145 and PC-3 cancer cells due to geographical, seasonal and gender difference in T. cordifolia stem. Material and Method- Plant materials and chemicals The extract, in form of CDRI-TCSF (Tinospora cordifolia, stem, female) and CDRI-TCSM (Tinospora cordifolia, stem, male) were provided by SAIF (Sophisticated analytical instrument facilities, CSIR-CDRI) division. Male and female plants bearing flowers and fruits (only female plants) were collected from naturally growing population on the banks of the Gomati River, Lucknow in 2012, 2013 and 2014. The plant samples were identified and deposited in the departmental herbarium of the Botany Division of CSIR-CDRI, Lucknow, India. Certified reference material (CRM) of T. cordifolia stem was purchased from Tulsi Amrit Pvt Limited, Indore, India (Batch No. 10TC 1438). Cell culture, cytotoxicity assay and cell cycle analysis MDA-MB-468 were cultured in DMEM media supplemented with 5ml L-glutamine/ 500ml and MCF-10A-Ca1a cells were cultured with DMEM:F-12 (1:1), 5ml L-glutamine/ 500ml, chlorea toxin (100ng/ml), EGF (20ng/ml), hydrocortisone (0.5 µg/ml), insulin (10µg/ml). The CAF (Cancer associated fibroblast) cells were maintained in DMEM:RPMI (1:1)ratio supplemented with 10% FBS and 2.5% penicillin-streptomycin. The cells were grown in 5% without any antibiotics. The test plant extracts were diluted with DMSO in 10mg/ml stock solution and the MTT protocol were followed as already described. The cytotoxicity is performed at 24h, 48h, 72h and 92h. The cells were maintained in humidified environment of 5% CO2 and 37OC temperature in incubator. Cell cycle assay The propidium iodide dye was used to assay the cell cycle arrest at 48h. In brief, the 1X105cells were seeded, grown for 24h and treated with different concentrations of the PETF for another 48h. Next the cells were harvested and samples were prepared and flow cytometric analysis was performed. Wound Healing Assay The MDA-MB-468 and MCF-10A-Ca1a cells were used for the wound-healing assay at 48h. In short, 1x105cells per well were seeded onto 6-well plates and grown until 80% of confluency in respective cell culture media supplemented with 10% FBS. One horizontal and one vertical scratch were created using a 10pL sterile micropipette tip on the confluent cell monolayer in each well to ascertain the area under study. The cells were treated with test plant extract. Cells were washed thrice with PBS, added with test compound in medium supplemented with 5% FBS, and monitored for 48h. Images were captured using phase-contrast microscopy at 0 and 48h after treatment with test compound. Cell migration distance was measured using Image-J software (NIH, USA). The result was drawn from three independent experiments and the image is representation of one of the results. EMT path-scan assay Cells (100 cells/well) were seeded in 4 well-chambered slides and grown till cells acquired complete morphology. The cells were then treated with either with test plant extract or without, for 48h, washed thrice with PBS, fixed with 4% paraformaldehyde for 15 min at RT, followed by blocking as per manufacturer instruction (CST, 7771). The cells were then stained with the antibody cocktail; E-cadherin(Alexa Fluor® 488, Ex(max) (nm) 495, Em(max) (nm)- 519)Vimentin (Alexa Fluor® 555, Ex(max) (nm) 555, Em(max) (nm)-565)antibody cocktail overnight at 4°C in dark. The cells were washed with PBS and counter probed with 27 antibody; the detection cocktail for 2 h in dark. The slides were removed from the cassette and mounted with Prolong® Gold Antifade Reagent having DAPI for nuclear stain. The images were taken on the confocal microscope. Colony formation assay The in-vitro colony formation potentials of the MDA-468 cells and CA1a were analyzed by anchorage-dependent colonogenic assay. 500 cells were counted and seeded into 4 well plates in triplicates. After 48h, the cells were exposed to different concentration of CDRI-TCSF and CDRI-TCSM. The cells were cultured in CO2 incubator at 370C. After the experimental exposure time, the treatment media was removed and the cells were left for 7 days and then trypsinized. The colonies were scored in a hemocytometer. The experiment was repeated thrice and the results were analyzed by one way ANOVA and Dunnet test.

References:

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more days with serum free media, with the media being changed after every 2 days. After incubation, the colonies were fixed with 100% methanol for overnight at -20°C. Next the cells were stained with 0.1% crystal violet dissolved in the methanol (Sigma-Aldrich). The colonies were counted manually with 750 cells/colony and expressed as percent control. 3D organotypic assay The 3D organotypic assay was performed with MDA-MB-468 and MCF-10A-CA1a cells along with two CAFs, 2276 and 1939. Briefly, the gel was prepared with Matrigel (BD 354243) and collagen type I (BD 355236). The transwell chamber were coated with 300 μl collagen type I (1:100 dilution in PBS) and incubated at 37°C, 1h. Excess collagen was removed and 120 μl Matrigel/collagen was added without any bubble formation. The gel was left for 1-2 h to set followed by addition of media without letting it to be dried out. The cells were trypsinised and counted. Total 100,000 cells/well cells were required in 200 μl culture media (culture media was same as required to grow the cells under study) of media. For cell mixture, 67,000 fibroblast (i.e. (100,000/3)*2) and 33,000 cancer cells were required. 600 μl of same media was added underneath transwell through top slit of transwell. The cells were left to grow for 24 h. Next, after 24 h the media was removed and added with fresh 350 μl culture media (either with test plant extract or without) at the bottom and top surface of the organotypic culture gel was fed with plain cell culture media without any FBS (either with test plant extract or without). The media is replaced after every 2 day until the termination of the experiment. At the end of the experiment, the transwells were placed in the formalin with 200 μl above and 600 μl of the transwell surface inside the chamber dishes, overnight. Next, formalin was discarded and replaced by 70% ethanol for atleast 10 minutes with 200 μl above and 600 μl below the transwell surface inside the chamber dishes. After fixation the gel is embedded in the paraffin and sectioned for the further study. LA-7 induced syngenic mammary tumor model In brief, animal were injected 106 cells animal in the mammary fat pad with 10ml syringe in form of cell suspension in the LA-7 culture media of female SD rats. The animals were administered with cyclosporin subcutaneously (80mg/kg animal body weight, dissolved in olive oil, 100μl with insulin syringe). The animals were left for 10 days for tumor formation and regularly monitored for tumor growth; measured after every 3 day. Tumors were measured with vernier calipers. After attaining a measurable tumor size, test plant extracts were administered in the animals orally at the dose of 75mg/kg either CDRI-TCM or CDRI-TCF or PTX weight with gamaesia to enhance the biavailability of treatment in animal body. The control group was vehicle (0.01% DMSO) treated. After 21 days of study the animals were sacrificed by cervical dislocation. The animal body weights were recorded at regular interval with survival index. The weight of vital organs like lung, liver, kidney, heart, spleen and tumor were harvested in saline solution and recorded at the termination of the experiment. The lungs were further studied for any neoplastic lesions with BouinÂ’sÂ™ solution for overnight. The lesions were counted manually. Primary cell culture The ER/PR-ve breast tumor samples were collected and assayed to evaluate the impact of TCSM and TCSM after 48h of treatment. In brief, the tumor tissues were collected, minced, digested and re-suspended DMEM-high glucose medium. Supernatant was discarded, the pellets were washed in cold PBS and centrifuged again at 750 g for 10min at RT. Pellets were then suspended in PBS and filtered. The cell suspension was then centrifuged at 40 g (1min); only supernatant was transferred into new 50mL tubes and centrifuged at 100 g (2min) obtained the pellet consist of epithelial fraction The entire procedure was done in sterile conditions. The cells were culture at 37°C, 5% CO2 and under humidified condition. Statistical analysis The statistical significance of difference between the experimental groups were determined with one way ANOVA. Tukey multiple tests on GraphPad Prism Version 5.0 software. Two-way ANOVA analysis was used to determine the tumor volume and total tumor burden in the in vivo animal groups. All the experiments were done at least thrice. Results- We have studied the influence of gender variations of PETF on anti-breast cancerous activity. The aggressive breast cancer cells, MDA-MB-468 and MCF-10A-CA1a were selected for 2D and 3D studies and female syngenic tumor bearing SD rats were selected as in vivo model. TCSF and TCSM induced significant cytotoxicity to the breast cancer cell and both resulted in the induction of G2/M arrest in highly aggressive MDA-MB-468 cells, conferring the anti-cancerous potential. The extracts resulted in significant inhibition of cancer cell migration and colony formation in both the cell lines with much higher significant inhibition in MDA-MB-468. The key regulators of EMT, E-cadherin and Vimentin were significantly modulated by both TCSM and TCSF with significant higher activity in the TCSM. Vimentin was down regulated and E-cadherin was found to up regulated. In 3D organotypic model, we observed that the invasive and migratory potential were significantly reduced by TCSM extract as compared to the TCSF. Our in vivo study on syngeneic rat model also validated the results that the TCSM possesses better potential to be developed as therapeutic intervention against breast cancer when compared with the TCSF. We have next studied activity on highly metastatic ER/PR negative patient-derived primary tumor culture where TCSM significantly inhibited the proliferation. However, we have worked on the crude plant extract of T. cordifolia, hence validation of the anti-cancerous property on pure compounds derived from T. cordifolia and their comparison among TCSM and TCSF plant is warranted. Conclusion- 1. First experimental evidence against the anti-cancerous activity of the ayurvedic medicinal plant is affected by regional variation as well as dioecious nature of plant. 2. In vitro results show that both PETF extracts has potent anti-cancerous activity with significantly higher potency in the TCSM. 3. Significantly reduced EMT-MET and metastases in 2D and 3D microenvironment. 4. Studies on syngenic SD rat mammary tumor model showed significant tumor regression in TCSF and TCSM with much higher reduction in TCSM. 5. We are first to report that the male plant possesses better anti-tumor potential and could be developed as therapeutic intervention against metastatic and aggressive breast cancer.

Abstract Id: YUGP1996

Baseline Hemoglobin As A Predictive/Prognostic Marker For Early Tumour Control And Survival Outcome In A Case Of Squamous Cell Carcinoma Of Head And Neck Carcinoma - An Institutional Review At Rajiv Gandhi Cancer Institute And Research Centre

Presenter- *Dr. Sarthak Tandon*
Co-author - Dr Munish Gauria, Dr Parveen Ahlawat, Dr Manoj Pal

Purpose/Objective: Anemia is very common in head and neck cancer (HNC) patients, and seems to be correlated with intratumoral hypoxia. It is one of the main prognostic factors of locoregional recurrence and poor survival and affects the outcomes with radiotherapy (RT). This is an institutional review of HNC already treated with RT to assess the early tumour response with baseline hemoglobin (Hb). Material and Methods: Hundred patients of proven squamous cell HNC who were treated with definitive RT with/without chemotherapy were selected between the periods of JanuaryÂ’16 to MayÂ’16. All patients had their tumour response assessed at 12 week after completion of RT. Results: A logistic regressionÂ was performed to ascertain the effect of Hb on the likelihood that patients have residual disease. The results showed, for each unit reduction in the Hb level, the odds of having residual disease increases by a factor of 1.34 (Odd Ratio 0.742; CI = 0.593 - 0.927; p = 0.009). A receiver operating characteristics (ROC) analysis was performed to determine an “Optimal threshold cut-off value of Hb level” for which there was greatest difference in response at 12 weeks of completion of RT. AUC, sensitivity and specificity were also calculated to analyze the predictive ability of this cut off.Â The results showed that Hb level 13.2 g/dl predicted the CR with a sensitivity of 75.4%, specificity of 53.5% and with an AUC of 0.632 (95% CI, 0.518 - 0.747; p = 0.024). There was greatest magnitude of difference in early outcome in patients having Hb level above and below this cut-off of 13.2 g/dl. Conclusions: Low baseline Hb (less than 13.2 g/dl in our study) is poor prognostic marker for response to treatment with RT.
Abstract Id: YUGP1998
Role, Accuracy And Feasibility Of Sentinel Lymph Node Biopsy In Post Nact Patients With Locally Advanced Breast Cancer-A Tertiary Centre Experience Of 185 Patients
Presenter- Dr. Ghanish Panjwani
Co-author - BB Pandey, ,

Introduction: For patients presenting with early breast cancer for upfront surgery, Sentinel Lymph Node biopsy (SLNB) is now a standard procedure in most centres significantly reducing the morbidity associated with Axillary Lymph Node dissection (ALND). Many single institutional studies and multicentric trials have now assessed upon the feasibility, accuracy and efficacy of Sentinel Lymph Node biopsy in post NACT patients with N0 axilla. Yet, the costs and difficulty in procuring radio labelled dyes forbade widespread applicability of this procedure. Material & Methods: This is a prospective study to determine the feasibility and accuracy of SLNB following Neo-Adjuvant chemotherapy (NACT) for Locally Advanced Breast Cancers (LABO) using methylene blue dye alone. USG guided FNAC was done to classify patients into N0/N+ before starting NACT and again carried out post NACT and those found N+ were be considered for a formal axillary clearance. A total of 185 patients were finally selected for SLNB from April 2014 to May 2016. After SLNB, ALND was done in all subjects to determine the sensitivity, specificity and accuracy of SLNB. Data was analysed with Graph-Pad-Prism (ver6.05). Results: 42.39% women were pre menopausal with mean age being 46 years. T4 disease was found in 68.47% with N2 disease in 39.67% and N1 in 58.61%. After NACT, 7.60% patients showed CCR with 80.4% being downstaged and 27.6% patients converted from node positive to node negative axilla. The node identification rate for SLNB was 91.4% with median number of nodes harvested being 2. The false negative rate was 12.50%. False negative rates were less when two or more SLN were found but relatively higher when only a single SLN was harvested. Patients classified as node positive on clinico-sonological examination prior to starting NACT had SLN Identification rate of 89.77% and sensitivity, specificity and accuracy of 87.50%, 100% and 93.67% respectively. Conclusions: Acceptable SLN identification rates are achievable using methylene blue dye alone to perform SLNB in post NACT patients of LABC. False negative rates are acceptable when two or more SLN are found. Thus, when blue dye alone is used, cost and availability issues are solved and acceptable sensitivity and specificity and accuracy is achieved.

Abstract Id: YUGP2002
Do Cancer Patients Who Use Tobacco Quit After Diagnosis?
Presenter- Ms. Bincy Mathew
Co-author - Dr. E. Vidhubala, ,

Background: Continued tobacco usage after cancer diagnosis and treatment leads to secondary malignancies and treatment failure. Although, many quit after cancer diagnosis, the reason why some continue to use is yet to be understood. The current study aims to understand the prevalence of quit status and to explore the reasons for quitting and continue to use tobacco even after cancer diagnosis. Methods: A total of 71 patients was diagnosed with tobacco related cancers, twenty-five (7 current users & 18 â€œ recent quitters) patients who were under treatment were interviewed using a semi-structured questionnaire. Results: Of the 71 patients, 67.60% quit tobacco habit after the diagnosis, whereas 32.4% continued to use even during the treatment. Thematic analysis revealed 3 major categories for current users: psychological distress, no perceived benefits and understanding about cancer and its association with tobacco. In contrast, six themes emerged for recent quitters: impact of cancer diagnosis, perceived benefits and risks, future concerns, advice from a health care professional and understanding about cancer and its association with tobacco. The current users considered cancer as a tantamount to a death sentence, while recent quitters were able to comprehend the benefits of quitting and prioritize their needs post-diagnosis, which helped them in quitting tobacco. Conclusion: By understanding the perception of current users and recent quitters on tobacco usage and its association with cancer would help us to design an effective tobacco cessation intervention for hospitalized patients in turn improving their overall quality of life.

Abstract Id: YUGP2004
The Application Of Recursive Partitioning Analysis, Graded Prognostic Assessment And Basic Score For Brain Metastases As Prognostic Indices Among Patients With Brain Metastases Treated With Radiotherapy At Department Of Radiotherapy Rscm 2012-2014
Presenter- Mr. Arry Setyawan
Co-author - Soehartali Gondhowiardjo, Renindra Ananda Aman,

Background: The incidence of intracranial metastasis has increased annually, which also followed by the increased number of patientsâ€™ disability and mortality. Standard therapy in brain metastasis are Whole Brain Radiotherapy (WBRT), Stereotactic Radio Surgery (SRS), surgery, or combination of all. With all these treatment options available, it is very important to consider the prognosis in order to decide which therapy is appropriate. One of the methods that can be used to determine the prognosis is by using the prognostic indices. Currently, there has been no data or report about the demographic and survival profile of patients with brain metastasis in Indonesia using the available index prognosis. Methods: This is a retrospective cohort study to evaluate the survival analysis in patients with brain metastasis that are undergoing treatment in Radiotherapy Department, RSUPN Dr. Cipto Mangunkusumo in 2012-2014 based on RPA, GPA, and BSBM index. Results: Fifty-two patients are included in this study after obtaining the approved consent. The median of survival rate is 9.16 months. Survival analysis based on RPA index showed median class I, II, and III are 16.3, 11.2, and 4.7 months, respectively. Characteristics and median observer based on GPA, from GPA 0-1 to GPA 3.5-4 are 4.3, 10.4, 12, and 16.3 months, respectively. These findings are similar with the previous studies. However, BSBM index does not able to illustrate the result that is appropriate when it is being applied to the subjects of this study. Conclusions: GPA and RPA index can be used to predict the prognosis in patients with brain metastasis that are undergoing treatment in RSUPN Dr. Cipto Mangunkusumo because it provides characteristics, which correspond to the reference data. GPA index is considered better because it uses more objective variables. Keywords: Prognostic indices, Brain metastases, cancer patient survival

Abstract Id: YUGP2006
Is Tripôle Negative Breastâ€œAnâ€œIndianâ€œProblemâ€œAâ€œProspectiveâ€œAnalysisâ€œFromâ€œAâ€œTertiaryâ€œCareâ€œOncologyâ€œCentre.
Presenter- Dr. Sameer Gupta
Co-author - Jeetendar Paryani, Prof Arun Chaturvedi, Vijay Kumar

Background: Breast cancer is a heterogeneous disease with distinct biological subtypes as determined by gene expression profiling studies. Breast cancer is most common cancer in Indian females and is believed to be biologically different from west, notably in terms of high prevalence of Triple negative subtype (TNBC). Reliable data on clinical and epidemiological profile of TNBC in Indian population is scarce. Aim of this study was to analyze the epidemiological and clinical profile of TNBCs Methods: Data of 355 patients of breast cancer registered in our department between 2013 and 2015 and followed up until December 2016 was collected and reviewed for epidemiological and clinical features. Results: Total 355 patients were analysed. TNBC subgroup was most common (n = 152) (43%) followed by Luminal A (25%) subtype. Nearly 60% patients were hormone negative. Median age at disease presentation in TNBC was 42.4 years compared to overall age of 45.3 years (24–73 years). In
Abstract Id: YUGP2012

**Short Term Outcomes Of Robotic Surgery For Rectal Cancers : A Single Institution Experience**

**Presenter:** Dr. Rohit Kumar C  
**Co-author:** Dr Somashekhkar S P, Dr Shabber S Zaveri, Dr Ashwin R

**Background:** Robotic surgical systems have dramatically changed minimally invasive surgery as they could potentially address limitations of laparoscopic rectal surgery. Inspite of many evidences that are being published it is still in its infancy when it comes to its acceptancy in terms of safety, feasibility and oncological outcomes. This prospective observational study is conducted to evaluate the safety, feasibility, technique, and outcomes (operative, oncological short-term and post-operative) of robotic-assisted rectal surgery for carcinoma rectum in the Indian set up. Materials and Methods: This was a prospective observational study conducted between February 2012 to June 2017, including 60 patients, diagnosed of rectal carcinoma. All patients who were diagnosed of rectal carcinoma where evaluated and worked up for staging and metastatic survey. Patients underwent robotic rectal cancer surgery in form of either low anterior resection or abdominoperineal resection. Results: Out of 60 patients, 42 were male and 18 were female, aged between 34-80 years. All patients had adenocarcinoma rectum, with 18 having carcinoma in upper rectum, 10 in mid rectum and 32 in lower rectum. 53 patients had T3 lesion, 4 had T2 and 3 had T4 lesion. 47 out of 60 patients received neoadjuvant chemoradiation before surgery. 46 patients had low anterior resection and 14 patients underwent abdomino-perineal resection. Average operative time including docking time and surgery time was 226.32 minutes (170-300 minutes), mean blood loss was 146.76 ml (120-200), there was one conversion to open surgery. Bowel sounds appeared on average on 3rd day, with patients requiring IV analgesics on an average for 3.7 days (2-5 days) and oral analgesics for 3.6 days (2-5 days). 2 patients had anastomotic dehiscence. Minor complications was noticed in 20 patients. All margins were negative (proximal, distal, circumferential) in all patients, mesorectal grade was complete in 58 patients and 2 patients had moderate grade. Mean number of lymph nodes harvested is 9.5 (2-32). Conclusion: In conclusion, robotic rectal surgery has several benefits in the treatment of rectal cancer and should be part of the armamentarium of the experienced surgeon dealing with this disease. We conclude that the robotic-assisted rectal cancer surgery is safe and an oncologically feasible technique. However, large study group and long-term follow-up data are required to evaluate the recurrence and survival rates. Key words: robotic rectal surgery, carcinoma rectum

Abstract Id: YUGP2016

**Effectiveness Of Physiotherapy On Breast Cancer Related Lymphoedema**

**Presenter:** Ms. Anitha D  
**Co-author:** M.S.Satish, Srinivasan Vijay, Dr.V.Sridevi

**BACKGROUND:** Breast cancer is one of the most common cancer in India, with an incidence of 1, 55, 000 new cases per year. Although early detection and multimodality treatment has resulted in an overall improvement in the survival of breast cancer patients to 89%, one of the common complications associated with the treatment is on the rise. 41.1% of the patients in India were found to develop lymphoedema, which has a serious hold on their physical functioning and body image thus compromising their quality of life. The effectiveness of lymphoedema management techniques are yet to be studied in tropical country like India. Hence, the present study was carried out to assess the effectiveness of compression therapy, compression sleeve and structured exercise on lymphoedema and its influence on body image and quality of life. METHODS: Breast cancer patients with post mastectomy related lymphoedema attending physiotherapy out-patient department were assessed for upper limb circumference measurement, Shoulder ROM (goniometer) and quality of life (CI-QOL), before and after physiotherapy (Sequential pneumatic compression therapy, Compression sleeve and Structured exercises). The data was analysed using descriptive statistics, t-test and chi square. RESULTS: During the pre-assessment, 40% of the breast cancer patients with lymphoedema were found to have good QOL. However, 64% of the patients reported body image issues. There is a significant reduction in the lymphoedema post intervention, in both Fore arm (t=2.823; p< 0.000). Body image also differed significantly at the follow up (t=5.253; p<0.000).
Abstracts

Co-author - Dr Shanti Lal Jeengar, Dr Pinakin Patel, Dr Raj Govind Sharma

INTRODUCTION: Lipids are major cell membrane components essential for various biological function including cell growth and division of normal and malignant tissues. Our study is a Case Control study to find out association between Lipid profile with Oral cancers. Also to assess and compare lipid profile of patients with matched healthy control. METHO AND MATERIAL: Our study conducted on 25 subjects with proven Oral malignancy with age and sex matched healthy controls in Dept. of Surgical Oncology S M S Medical College and Hospital, Jaipur. Lipid profile and TNM staging in Head and Neck cancer patients were also estimated. These values were subjected to statistical analysis and independent T-test and Chi-square test used to analysis. RESULTS: Mean serum TGG,TC and HDLC levels showed statistically significantly reduced in oral cancer group as compared with control group. LDL and VLDL showed statistically non-significant results. CONCLUSION: Our study find inverse relationship between TGC, TC and HDLC with Oral cancer patients. The Low serum Lipid status may be considered a useful indicator strong suggest to in-depth study of pattern of lipid profile alteration in Oral cancer patients.

Abstract Id: YUGP2020
Cystosarcoma Phylloid Of Breast-Case Reports And Review Of Literature
Presenter- Dr. Pradeep Tanwar
Co-author - Dr. Suresh Singh, Dr. Pinakin Patel, Dr. Jyoti Sharma

Objective-To present a series of 3 cases of Cystosarcoma of Breast. Clinical presentation and intervention-We are reporting a series of 3 cases of cysto-sarcoma phylloides in women of different age group (58, 37 & 17 yrs) who presented with complaint of lump breast. Out of three cases, one was a case of recurrence. Core biopsy examination was done. One case was having 7 kg, large tumour with significant axillary lymphadenopathy so MRM was done. In case of recurrent cystosarcoma breast, mastectomy with shoulder disarticulation was done as tumour was involving upper limb vessels. 3rd case of 17 years old patient was very aggressive & operated for mastectomy. Histopathological examination showed one case was having low grade and 2nd case was having high grade cystosarcoma phylloid. 3rd case of 17 years old patient was histopathological challenge as first histopathological examination showed cystosarcoma phylloid but on review and marker study proved it being metataplastic carcinoma. Postoperatively all 3 patient are to be given chemotherapy and radiotherapy. Conclusion-Malignant cystosarcoma phylloides tumour is a very rare but aggressive breast malignancy. Either wide local excision with adequate margins or mastectomy is an appropriate treatment for patients with malignant phylloides tumour. Histopathological & clinical correlation is of critical importance and review histopathological examination should be advised if any suspicion before adjuvant treatment. Adjuvant radiotherapy & systemic chemotherapy appear to improve disease-free survival and recurrence.

Abstract Id: YUGP2022
Prognostic Utility Of Stromal Tumour Infiltrating Lymphocytes (TILs), Neutrophil - Lymphocyte Ratio (NLR), Platelet - Lymphocyte Ratio (PLR) In Oral Squamous Cell Carcinoma (OscC) .
Presenter- Dr. Sameera Begum
Co-author - Dr Riaz Abdulla, Jagadish kudukli, Varsha mohanty

PROGNOSTIC UTILITY OF STROMAL TUMOUR INFLTRATING LYMHCYTES (TILs), NEUTROPHIL - LYMPHOCYTE RATIO (NLR), PLATELET - LYMPHOCYTE RATIO (PLR) IN ORAL SQUAMOUS CELL CARCINOMA (OSCSC) . BACKGROUND: Oral Squamous Cell Carcinoma (OSCSC) is the sixth most common cancer worldwide. Over the past few decades, hematological components of the systemic inflammatory response have been combined to form inflammation-based prognostic scores to predict cancer survival. Studies have shown that the presence of systemic inflammation and platelet status correlate with poor survival in various cancers. Oral cancer has been associated with an immune response both systemically and within the tumour microenvironment. Recent data suggest stromal TILs have a prognostic role in OSCC. PURPOSE: To establish a feasible method to assess utility of stromal TILs (sTILs) and correlate with preoperative peripheral blood Neutrophil - Lymphocyte ratio (NLR), Platelet Lymphocyte ratio (PLR) in Lymph Node Metastasis (LNM) positive and negative OSCC patients for the prognostic evaluation. MATERIALS AND METHODS : In this study, 34 patients diagnosed with OSCC who underwent curative resection between 2016-2017 were enrolled. Ethical clearance was obtained from institutional ethical clearance committee, Yenepoya University. Patient consent was obtained from all the participants. Clinical and demographic characteristics of all patients were collected. Complete blood count (CBC) was performed preoperatively. NLR and PLR were calculated. Resected tumour specimens from all 34 OSCC patients were subjected to routine tissue processing sectioned and stained with H&E. The stained sections were evaluated for the percentage of the (s)TILs following the 2014 international working group guidelines. High (>50%) and low (2.7) and (>135) respectively is seen among patients with lymph node positive. The histopathological grading of OSCC when compared with the NLR, PLR & sTILs showed that all the three parameters were high in moderately differentiated OSCC. CONCLUSIONS: Preoperatively increased NLR and/or PLR are significant prognostic predictors in cancers. Increased level of sTILs are associated with improved prognosis in OSCC. sTILs should be regularly reported by pathology laboratories as an additional indicator of prognosis.

Abstract Id: YUGP2026
Management Of Hepatic Adenoma(S): Single Centre Experience
Of 10 Cases From Tata Memorial Centre, Mumbai
Presenter- Dr. KAMLESH VERMA
Co-author - Shridhara Patkar, Ashwin Polnaya, Amit Gupta

Introduction: Hepatic adenoma is a rare benign tumour of liver with estimated incidence of 3 per 10,000,000 population. Although being benign in nature it warrants surgery as it is associated with risk of spontaneous bleeding in 28% and malignant transformation in around 10% of cases. We performed retrospective analysis of patients presenting to our institute between July 2011 â€“ April 2017 Results: Ten patients were diagnosed as hepatic adenomas in the above mentioned period. Of these 3 patients had multiple lesions and 7 had single large adenoma. All patients were females. 80% of patients presented with abdominal pain as the presenting complaint. In all patients surgical resection was attempted. In one patient surgery was abandoned after frozen section confirmation of hepatic adenoma and intra-op ultrasound showing diffuse bilateral disease. Three patients underwent TAE for large size for improving surgical safety. Four patients underwent extended hepatectomy ( 3 right and 1 left), two left lateral hepatectomy, one right hepatectomy and two segmentectomy of liver. Apart from these 10 patients one patient underwent right hepatectomy as biopsy was suggestive of hepatic adenoma but on final HPR it turned out to be focal nodular hyperplasia. Median intra-operative blood loss was 1500 ml (range 600 -3500) with median duration of hospital of 6 days (range 3-130). There was no post operative morbidity or mortality. The Liver tumour size was 12.4 cm (range 4.5 â€“ 19.0). Conclusion: All hepatic adenomas should be resected as they have high propensity to develop life threatening complications and have a 10% risk of developing malignancy. Hepatic resection in non cirrhotic liver can safely be performed in a high volume centre. TAE can be used as an adjunct especially for large tumours in view of high vascularity of these tumours.
Abstract Id: YUGP2030

Exploring The Role Of Organochlorine Pesticides In Breast Fibroadenomas Causation: A Pilot Case Control Study
Presenter - Dr. Sugandha Arya
Co-author - Dr. Pankaj Kumar Garg, Dr. Sanjay Gupta,

Introduction: Fibroadenomas are the most common benign tumors of the breast. They are usually seen in women of reproductive age group and present as painless, well defined, firm and mobile tumors. Unopposed action of estrogens increases the risk of fibroadenoma due to expression of estrogen receptor beta by the stromal cells of fibroadenoma. The present study was designed to assess the role of xenoenorgichlorine organochlorine pesticides (OCPs) in the causation of breast fibroadenoma. Method: The study included 20 histopathologically proven patients of breast fibroadenoma (cases) and 20 age and gender matched healthy volunteers (controls). The serum levels of eleven organochlorine pesticides â€“ Hexachlorohexane (HCH): ?-HCH, ?-HCH, ?-HCH and total HCH, Dieldrin, Endosulfan: Endosulfan I, Endosulfan II, DDT and its metabolites - p,p'-DDT, p,p'-DDE, p,p'p'™-DDD and Heptachlor were determined in all subjects estimated by Gas chromatography equipped with electron capture detector. Polyvarichic variations in OCP metabolising genes GST T1 and GST M1 was determined by PCR. Result: The two groups were comparable with respect to age (mean age of fibroadenoma patients was 21.28 vs mean age of controls was 21.36 with p=0.907). There were significantly higher serum levels of organochlorine pesticides in patients with breast fibroadenoma as compared to controls - a-HCH (5.543 vs 4.126, p=0.001) ?-HCH (4.938 vs 3.940, p=0.008), total HCH (13.335 vs 11.633, p=0.001), DDT (5.982 vs 3.897, p=0.001), DDD (3.510 vs 1.521, p=0.001), Endosulfan 1 (5.280 vs 3.290, p=0.001) and Endosulfan (2.563 vs 1.877, p=0.003). Also, significantly higher numbers of fibroadenoma patients were found to be having GST T1 null genotype as compared to controls. Conclusion: The present study suggests that the organochlorine pesticides may play a role in the causation of breast fibroadenoma facilitated by nonfunctional metabolizing genes as GST T1. Further studies with larger sample size are warranted to further analyze the role of Organochlorine pesticides in the pathogenesis of fibroadenoma breast, especially in agrarian countries where these pesticides are commonly used.

Abstract Id: YUGP2032

Role Of F18 Fdg Pet Ct To Identify High Risk Patients For Infection In Pre Autologous Stem Cell Transplant Evaluation Setup Of Patients With Hematological Malignancies
Presenter - Dr. Thangalakshmi Sivathapandi
Co-author - Dr.Shelley Simon, Dr.Indirani Elangovan,

Aim: Several risk factors like intensive chemotherapy, tissue damage and advanced underlying disease predispose to infections in hematological malignancy patients. The objective of study is to investigate the role of F18 FDG PET CT in identifying high risk patients for infection in pre autologous stem cell transplant evaluation of patients with hematological malignancies.

Materials AND METHODS: Thirty one patients with various hematological malignancies and planned for autologous stem cell transplant (SCT) were prospectively included in this study. All these patients underwent 18F-FDG PET CT using standard protocol before autologous SCT and reading was performed by two nuclear medicine physicians. The median follow-up after autologous SCT was 18 months. RESULTS: Among 31 patients, 23 had lymphoma, 6 had leukemia and 2 had multiple myeloma. The patients were categorized into FDG-PET negative (N=15) and positive (N=16) groups. Among these PET positive (n=16) patients, 11 patients had pulmonary infections, 4 patients had FDG positive nodes which were confirmed to be granulomatous by histopathology and 1 patient had liver abscesses. These patients underwent appropriate directed treatment and were subjected for autologous stem cell transplant. Amongst PET negative (n=15) patients, 12(80%) patients had favorable and 3(20%) had unfavorable prognosis on follow up. In PET positive group, 13(81%) had favorable and 3(19%) had unfavorable prognosis. CONCLUSION: 18F-FDG PET CT aids in early detection of foci of infection in pre stem cell transplant patient which guides appropriate treatment and favorable outcome of autologous SCT. Detecting the foci of infection by F18 FDG PET CT in prior hand also avoids flaring up of hidden infections which is common post autologous SCT due to granulocytopenia and immune compromised status. Keywords: 18F-FDG PET/CT, autologous stem cell transplant, infection.

Abstract Id: YUGP2034

Comparison Of Ajcc 8Th And 7Th Edition Staging For Carcinoma Breast- Predictor Of Overall And Disease Free Survival
Presenter - Dr. Kunal Choudhary
Co-author - Sanjilt Kumar Agarwal, Rosina Ahmed,

BACKGROUND: Since 1977, TNM classification of AJCC has been used as a comprehensive tool for prognostication and planning of management of cases of carcinoma Breast. Although the importance of tumour biology is well recognised the first edition of the staging manual in which biological factors have been incorporated is the 8th edition of the AJCC staging manual. OBJECTIVE: The objective of the study was to compare the 7th and 8th edition of AJCC staging for carcinoma Breast as a prognostic indicator for overall survival (OS) and disease free survival (DFS). METHODS: Prospectively maintained data for patients having upfront surgery, treated in a single centre from June 2011 to June 2014, was re-analysed. Variables were tumor size, nodal status and distant metastasis for staging as per 7th edition and for 8th edition grade, ER, PR and HER2 status were used additionally. OS and DFS were calculated and their correlation to the stage was seen using Kaplan Meier method. RESULTS: A total of 262 patientsâ€™ data was analysed. Mean age was 54 (28-70) years and median follow up was 32 (1.5-60.47) months. The stage to stage comparison between the anatomical and prognostic staging revealed that staging remained unchanged for only 54(21%) patients. Prognostic staging downstaged 98(37%) patients and upstaged 110(42%) patients as compared to anatomical staging. Log rank test done separately for anatomical and prognostic staging showed that both anatomical (p)
Abstract Id: YUGP2045

Assessment Of The Quality Of Life In Patients Diagnosed With Breast Cancer In A University Teaching Hospital

Presenter - Ms. Abinaya Sivakumar
Co-author - Dr. Ramya R.

Background: Breast cancer being one of the most common cancers prevalent in the female population worldwide, is on the rise in the major metropolitan cities of our country. As of 2012, it is estimated that 1 in 28 women is likely to develop breast cancer during her lifetime. Many patients struggle to cope with their everyday lives and have to deal with the socio-economic aspects of their treatment that may affect their quality of life. This study aims to describe the quality of life among breast cancer patients in a university teaching hospital and the role of sociodemographic, medical and psychosocial factors on their quality of life. Materials and methods: This questionnaire-based study was carried out for a period of one year between June 2016-17 at a university teaching hospital after obtaining the Institutional Ethics Committee approval (REF: CSP/16/ APR/46/99). 78 patients undergoing treatment for breast cancer were interviewed using the EORTC QLQ-C30 Version 3.0 and its supplementary QLQ-BR23 questionnaires after obtaining their informed consent. The data was analyzed using SPSS Version 16.

Results: From the QLQ-C30, the mean Global Health status was 46.47, the mean score in the functioning scale was 76.24, highest for 'physical' while the mean score in the symptom scale was 63.25, highest for 'financial difficulties'. From the QLQ-BR23, the mean score in the functioning scale was 83.55, highest for 'body image' and the mean score in the symptom scale was 37.24, highest for 'systemic therapy side effects'. Patients of the younger age group significantly complained more of the breast symptoms while the elderly were more dyspeptic. The patients who had employed more had more symptoms of nausea and vomiting and particularly had a more troubled future perspective of life when compared with the unemployed mainly consisting of homemakers who had disturbed role functioning. Many of the patients belonging to the lower socioeconomic statuses may not have been remarkably affected financially as they could have been covered by the Chief Minister Scheme run by the Government of Tamil Nadu. By religion, Hindus were significantly more upset by hair loss whereas Muslims seem to have been more emotionally affected. Among those who underwent surgery, MRM patients had more pain symptoms while BCS patients had more financial difficulties and more side effects from the chemotherapy. Conclusions: Age and employment were found to be important factors affecting the overall quality of life of the patients among other sociodemographic factors. It reflects the need for more psychosocial support to be given by the healthcare providers to enhance the daily living of the patients. References: 1. Globocan 2012 data; National Institute of Cancer Prevention and Research (NICPR) http://cancerindia.org.in/cp/index.php/know-about-cancer/statistics#breast-cancer 2. Dubashi B, Vidhubala E, Cyriac S, Sagar TG. Quality of life among young women with breast cancer: Study form a tertiary cancer institute in south India. Indian Journal of Cancer, April-June 2010, Volume 47, Issue 2. 3. Siganis, Munn-Sann Ly, Fen Nee Lau. Quality of Life among Breast Cancer Patients In Malaysia. Asian Pacific Journal of Cancer Prevention, Vol. 17, 2016. 4. G. Damodar, T. Smitha, S. Gopinath, S. Vijayakumar, Yedukondala A. Rao, Assessment of quality of life in breast cancer patients at a tertiary care hospital. Archives of Pharmacy Practice, Vol. 4, Issue 1, Jan-Mar 2013. 5. Sajani Manandhar et al. Quality of Life among Breast Cancer Patients Undergoing Treatment in National Cancer Centers in Nepal. Asian Pacific Journal of Cancer Prevention, Vol. 15, 2014.

Molecular Subtypes As A Predictor Of Response To Neoadjuvant Chemotherapy In Breast Cancer

Abstract Purpose The objective of this study was to assess the response to neoadjuvant chemotherapy (NACT) in molecular subtypes of breast cancer. Methods This study included 60 locally advanced and metastatic breast cancer patients. We excluded patients who had recurrence and been treated by surgery or given prior chemotherapy / radiotherapy. We analyzed the clinical and immuno histochemical characteristics using core biopsy specimens to determine their correlations with the response to chemotherapy. Results Total patients were 60, of them clinical stage III were 34 (56.7%) and stage IV patients were 26(43.3%) patients. 16 patients [26.7%]were luminalA, 11[18.3%] patients were luminal-B, 21 patients were Her2 enriched, 12 patients were triple negative( of them 9 were basal like) molecular subtypes. All patients received anthracycline -based chemotherapy containing regimen 38,non taxol-22 patients. Clinical complete response was observed in 19 patients (31.7%); a clinical partial response, in 30 patients (50%); clinical stable disease, in 8 patients (13.3%) and progressive disease 3 patients (5%). 8 out of 11 patients who showed no response were HER2 negative. A pathological complete response...
Abstracts

Abstract Id: YUGP2051
Algorithmic Segmentation Of Liver Tumor Pet/Ct Medical Images.
Presenter - Prof Deepti Sehrawat
Co-author - Abhishek Sehrawat

The motive of this paper is to present an effective technique to segment liver on PET/CT images. Segmentation of liver is a challenging task in PET as well as in CT. Segmentation is based on the intensity of the pixel and whose values may be equal / similar to other structures in case of the liver. Thus, the difference between pixel values may not be sufficient to enable algorithm-based segmentation which makes it quite challenging to segment the liver in different part to identify the tumor out of it. In this paper we have proposed a method of liver segmentation using the fuzzy C mean clustering which is completed in two phases. First phase is to read the image and convert it into the gray-scale image and find its level of intensity of each pixel of liver tissue. In second phase, use of thresholding technique, contrast enhancement, fuzzy C-means clustering and mathematical morphological operation is done to make a binary mask that can extract liver from PET/CT fused images. Finally, the results were validated on the basis of ground truth and visual interpretation by Nuclear Medicine Physicians.

Abstract Id: YUGP2053
Thermo Mammogram As A Tool To Assess Response To Neoadjuvant Chemotherapy In Carcinoma Breast
Presenter - Dr. MUNIASHAMY PALANIYANDI
Co-author - Prof Subbiah Shanmugam, Prof Gopu Govindasamy, Dr. Sujay Susikar

Thermo mammogram as a tool to assess response to neoadjuvant chemotherapy in carcinoma breast. Abstract Introduction: Response to neoadjuvant chemotherapy (NACT) is predicted by clinical examination alone in locally advanced carcinoma breast. This study uses thermo mammogram (TMG) to assess the response. Aim & Objectives: To study thermo mammographic changes during NACT in breast cancer and predict response to NACT in locally advanced carcinoma. To compare clinical response with TMG response/changes in any form. Materials and methods: All patients with locally advanced breast cancer who had treated with NACT were included in this study. Baseline TMG picture was taken using MAMRIT system before chemotherapy. TMG was repeated before next cycle. All patients were also assessed clinically during and after each cycle of chemotherapy. To assess the potential of TMG in predicting tissue response to chemotherapy, the pre-cool, post cool and the temperature difference between pre-cool and post cool before every cycle were analyzed. Results: Total of 19 patients were analysed. 8 patients had complete clinical response, 6 patients had partial response, 5 patients had static disease, 1 resistant. Median of pre-cool, temperature difference between pre-cool and post cool for patients between no response and complete response did not show statistically significant difference. However, the median of Post cool spot temperature for patients in visit 1 (34.0 vs 31.5) p

Abstract Id: YUGP2065
Evaluation Of Response To Neoadjuvant Chemotherapy In Technically Unresectable Moderately Advanced Oral Cavity Cancers
Presenter - Dr. Puneet Takkar
Co-author - Dr. Puneet Takkar, Dr. Abhishek Kadian

BACKGROUND: Moderately advanced and technically unresectable oral cavity cancers have a poor prognosis. Neoadjuvant chemotherapy might be beneficial in such patients by reducing tumour bulk and allowing definitive surgery AIM: To evaluate the response of neoadjuvant chemotherapy in moderately advanced technically unresectable oral cavity cancer MATERIALS AND METHODS: Prospective observational study - secondary data analysis of patients with moderately advanced oral cavity cancer, which were treated with neoadjuvant chemotherapy (NACT) during the period November 2014 - April 2016. Data was analysed for information on patient characteristics, chemotheraphy received, toxicity, clinical response rates, local treatment offered and pathological response rates. The statistical analysis was performed with SPSS version 20 RESULTS: 30 patients, with a median age of 52 years were analyzed. Buccal mucosa was the most common sub site (50%). Three drug regimen was utilized in all patients. Resectability was achieved in 14 patients (46.67%). Febrile neutropenia was seen in 3 patients (10%). The overall response rate was 31% CONCLUSION: NACT was effective in converting moderately advanced technically unresectable oral cavity cancers to operable disease in approximately 47% of patients. Post NACT, there is significant association between clinical and pathological findings of response rates. There is no increase in surgical complication rates following NACT. Table 2: Clinical response after receiving NACT and pathological response in patients who achieved resectability Response Clinical Response Pathological Response Number of patients Number of patients (n = 29)(%) (n = 14) %) CR 0 (0.00) 1 (7.14) PR 9 (31.00) 9 (64.29) PD 9 (31.00) 0 (0.00) SD 11 (37.90) 4 (28.57) Total 29 14 PR - complete response, PR - partial response, PD - progressive disease, SD - stable disease

Abstract Id: YUGP2069
Clinical, Radiological, Pathological Correlation Of Nodal Status In Operable Epithelial Ovarian Cancer
Presenter - Dr. BRIGHT SINGH R S
Co-author - PROF. SUBBIHAN SHANMUGAM, PROF. GOPU GOVINDASAMY, DR. SYED AFROZE HUSSAIN

ABSTRACT Background: The aim of this prospective study, is to correlate radiological and intra operative nodal characterization with pathological examination of pelvic and paraaortic nodes in operable epithelial ovarian cancer. Methods: All the 27 patients with epithelial ovarian cancer admitted in Government Royapettah Hospital between October 2015 and October 2016 were included in the study. All the patients during the study period underwent CT scan of abdomen and pelvis. For lymph nodes that measured more than 1 cm in short axis were considered metastatic. All the patients were surgically staged according to FIGO standard surgical procedures. Early stage operable patients had undergone upfront staging laparotomy and for advanced cases, interval cytoreduction done following neoadjuvant chemotherapy. Inspection and palpation of nodes in pelvic and paraaortic region were done before and after opening of retro peritoneum and classified as significant and insignificant nodes. Significant palpable nodes (more than 1 centimeter) were recorded. All the patients underwent pelvic and paraaortic lymph nodal dissection. All the lymph nodes in the corresponding areas were grossed into significant and insignificant lymph nodes depending upon size, consistency, and perinodal spread. The lymph nodes were sent for histopathological examination and correlated with the radiological and clinical parameters to get the reliability of the above modalities in predicting malignant deposits. Results: Statistical analysis was done with SPSS package12. Significant correlation was obtained (P value

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Journal of Cancer Research and Therapeutics - Supplement 1 - 2017 - Volume 13
Abstract Id: YUGP2071
The Role Of Bursectomy In Radical Gastroectomy On Survival And Recurrence In Gastric Cancer: A Meta-Analysis
Presenter - Dr. Saqib Shahhab
Co-author - Dr. PANKAJ KUMAR GARG, Dr. ASHISH JAKHETIYA, Dr DURGATOSH PANDEY

Introduction: Though the multimodality management of gastric cancer has gradually become the standard of care, surgery continues to be at the forefront of it. Radical gastrectomy is the only potentially curable treatment available for an operable non-metastatic gastric cancer. The practice of bursectomy during radical gastrectomy varies across the centers in the absence of its verified therapeutic value. The present meta-analysis was conducted to evaluate the role of bursectomy in radical gastrectomy on survival and recurrence in gastric cancer. Methods: A literature search was performed in Pubmed for the clinical studies that compared bursectomy with non-bursectomy in radical gastrectomy for gastric cancer, published prior to December 2015. Review manager (Cochrane Collaboration’s software) version RevMan 5.2 was used for analysis. The generic inverse variance method was used to calculate the estimate of overall survival and disease recurrence in patients undergoing bursectomy in radical gastrectomy. The data was entered as natural logarithm of relative effect size and standard error of mean for each of the studies. The final analysis included 6 studies. Results: There were four studies available for the analysis: three were non-randomized while one was randomized controlled trial (RCT). A total of 1340 patients were included in the meta-analysis. 491 had bursectomy and 848 did not undergo bursectomy during radical gastrectomy. There was no statistically significant difference in either overall survival (HR=0.89, 95% CI 0.72-1.09) or in disease recurrence (HR=0.95, 95% CI 0.82-1.10) in bursectomy group compared to non-bursectomy group; however, subgroup analysis of RCT did show a survival benefit in bursectomy group (HR=0.79, 95% CI 0.64-0.98). Conclusion: Though the overall results of the present meta-analysis do not suggest the significant advantage of bursectomy in radical gastrectomy in improving survival, subgroup analysis of RCT shows a trend towards improved survival after bursectomy. Further high-quality RCTs with adequate sample size are warranted to better define the therapeutic role of bursectomy in gastric cancer.

Abstract Id: YUGP2078
Congenital Anomalies And Anatomical Aberrations In Head & Neck Oncology â€“ A Single Institution Experience
Presenter - Dr. BRIGHT SINGH R S
Co-author - PROF SUBBIAH SHANMUGAM, PROF. GOPU GOVINDASAMY, DR SENTHILKUMAR.P

ABSTRACT: BACKGROUND: Congenital anomalies are defined as structural or functional anomalies that occur during intrauterine life. Awareness of such variations will decrease intraoperative dilemma and complications. In this article we have presented our experience in congenital anomalies and anatomical aberrations in head and neck malignancies. We have reviewed literature and discussed relevant embryology & their clinical significance. MATERIALS AND METHODS: All patients with head and neck malignancies operated at our institution in the past three years, who had congenital anomalies and anatomical aberrations detected during preoperative evaluation or intra-operatively were included in this study. RESULTS: Eight types of congenital anomalies were encountered, with most common anomaly being the aberrations in pattern of facial nerve branches (43%). Thyroglossal cyst and non recurrent laryngeal nerves were the next common anomalies noted (13%). Preoperative suspicion and diagnosis was evident in three patients. CONCLUSION: Though rare, congenital anomalies may pose significant challenges to the surgeon. Since most of them are noticed intra operatively, a thorough knowledge of anatomy and its variation will help prevent injury to these structures. When promptly recognised and appropriately dealt, congenital anomalies do not produce surgical morbidity.

Abstract Id: YUGP2081
Comprehensive And Sensitive Detection Of Somatic Mutations For Monitoring Minimal Residual Disease
Presenter - Dr. Satish Sankaran
Co-author - Pooja Agrawal, Arun Hariharan, Disha Awasthy

There is growing evidence that somatic mutations in dDNA extracted from peripheral blood plasma (liquid biopsy) can be used for evaluating Minimal Residual Disease (MRD) as well as response to treatment in different cancer types. The MRD work flow involves testing in two phases; a. profiling of the tumor tissue and selection of somatic variant/s that can be used for tracking, b. tracking the variant at a later time point using a liquid biopsy. We evaluated different technologies and assays that would be suitable for developing a monitoring product. For evaluation, the data from >200 solid tumor samples across various tumors tested on our comprehensive StrandAdvantage 152 gene somatic cancer panel was analyzed. The overall positive detection rate using the 152 gene panel was >80% comprising of both single nucleotide variants across 36 genes and copy number variants. Loss-of-function TP53 variants were detected in >55% of cases. On comparison of different commercially available cancer hotspot panels, the Swift 56G panel covered the majority of single nucleotide variants detected (>95%) with a positive detection rate of 79%, covering all the detected TP53 variants. The added advantage of this panel was the ability to use on both the FFPE tissue as well as liquid biopsy sample. The 56G Swift panel was validated in our lab using both FFPE tissue as well as blood using characterized control and clinical samples with a input DNA requirement of as low as 20 ng. We could achieve 96% sensitivity and 100% specificity with a limit of detection (LOD) of 3% for FFPE tissues. The clinical samples analyzed showed >90% concordance when compared with data from runs using the in-house validated TruSeq Cancer Amplicon Panel (Illumina). The sensitivity, specificity and LOD for liquid biopsy samples were 93.9%, 99.9% and 0.5% respectively. In summary, we have validated a protocol for monitoring residual disease that works well with low sample amounts, across both FFPE tissue and blood samples.

Abstract Id: YUGP2087
Characterization Of The Actionable Landscape Of Solid Tumours: An Indian 1000-Patient Study
Presenter - Dr. Urvashi Bahadur
Co-author - Aarthi Ravichandran, Shataparna Bannerjee, Shreya Paliwal

Next Generation Sequencing (NGS) allows for comprehensive profiling of a tumour genotype across multiple genes. Such molecular profiling can identify key mutations that have the potential to impact therapeutic decisions. We examined the clinical utility of multi-gene sequencing for suggesting additional therapy options. Towards this, we have profiled over a 1000 tumour samples over a wide variety of tumour types (31) using a commercial 48 gene panel and assessed mutations for actionability. The most common tumour types analysed were breast (328), lung (180) and colon (152) and the most commonly mutated genes were TP53, PIK3CA, KRAS. Targeted therapy options were given in 60% of these cases. A potentially attenuated response to approved therapy was suggested in 61% of colon, 15% of head and neck and 10% of lung cancers. EGFR was the most frequently altered gene in lung cancer with L858R and exon 19 deletions observed in 33% and 45% of EGFR positive cases respectively. In colon, BRAF, NRAS and extended KRAS mutations were observed in 10% of the cases, indicating that testing for more than the standard KRAS mutations is also valid in the Indian context. Therapy was recommended in 48% of the less frequently observed cancer types. Further, a larger panel covering more genes and capable of detecting fusions and copy number variations may offer greater utility when additional therapy options are of particular interest. Our custom-designed, validated 152 gene panel provides actionability in...
Abstract Id: YUGP2091

Stereotactic Body Radiation Therapy For Oligometastatic Pulmonary Tumors From Cervical Cancer
Presenter - Mr. Wang Weiping
Co-author - Hou Xiaorang, Hu Ke, Zhang Fuquan

Objective: To evaluate the efficacy and toxicity of stereotactic body radiation therapy (SBRT) for pulmonary metastases from cervical cancer. Methods: Nineteen patients with 29 oligometastatic pulmonary lesions form cervical cancer were treated with SBRT in our institute from July 2011 to July 2016. Before pulmonary metastases, all patients experienced a period of disease free survival after initial treatment. Thirteen patients (68.4%) suffered with solitary lung metastasis, 3 patients (15.8%) with multiple unilateral lesions and 3 patients (15.8%) with bilateral lesions. The median size of lung lesions was 2cm (0.7-5.6cm). Patients underwent cone-beam CT before the delivery of SBRT. The most common dose fractionation schemes were 64Gy in 8 fractions (8 lesions) and 56Gy in 7 fractions (7 lesions). Nine patients (47.4%) received systemic chemotherapy. Results: The median follow-up was 9.5 months (3.0-62.4months). The median follow-up of surviving patients was 18.9 months (3.6-62.4months). The 1-year overall survival (OS), progression free survival (PFS), regional control (RC) and local control (LC) were 76.8%, 55.8%, 68.1% and 75.6%, respectively. The median OS and PFS were 62.4 and 12.7 months, respectively. Six patients (31.6%) gained more than 20 months disease-free survival. Eleven patients (57.9%) experienced tumor relapse, including 7 patients with pulmonary relapse and 4 patients with extra-pulmonary disease. Only 1 patient (5.3%) suffered with symptomatic radiation pneumonitis (grade 2). Conclusion: SBRT was an efficacy treatment approach with low toxicity for oligometastatic pulmonary disease from cervical cancer. It should be considered as an important approach for pulmonary disease from cervical cancer beside surgery.

Abstract Id: YUGP2095

Signaling Through The Hedgehog Pathway In Ovarian Cancer
Presenter - Ms. Sneha S
Co-author - Sneha Smarakan, Rohit Pravin Nagare, Krishna Priya Syama

SIGNALLING THROUGH THE HEDGEHOG PATHWAY IN OVARIAN CANCER
Sneha S, Nagare R P, Krishna Priya S and Ganesan TS.

The signaling pathways that cancer stem cells (CSCs) employ may be similar to those in embryonic stem cells. These are â€œwntâ€™s, â€œnotchâ€™s and â€œhedgehogâ€™s. Objective: Evaluate signaling by CSCs, using specific small molecule inhibitors in serious ovarian cancer cells. Methods: Serous ovarian cancer cell lines (N=7) were cultured as spheroids under stem cell conditions in the presence or absence of small molecule inhibitors and counted after two weeks. The effect on cell proliferation was evaluated by the MTT assay. In addition, cells from malignant ascites from patients with serous adenocarcinoma of the ovary (PMC) were cultured as monolayer in the presence or absence of inhibitors. Assays were performed to analyse effect on CSCs. These were ALDH1A1 assay (N=20), Hoechst exclusion assay (N=3), expression of surface markers (N=20), wound healing assay (N=6), and colony assay (N=7). The effect on the cell cycle of CSCs was analysed using Hoechst and Pyronin Y. Results: Spheroid formation in OVCA3 and UC1101 cells was inhibited completely by the smoothened inhibitor (SMO) GDC0449 (3ÂµM) despite lack of cytotoxic effect when evaluated by the MTT assay. Flow cytometry analysis of PMC cultured in the presence of GDC0449 showed significant reduction in the expression of ALDH1A1 (2.5Â±0.9), CD44 (18.6Â±5.1), CD9 (1.6Â±0.8), CD133 (0.5Â±0.3), CD117 (18.8Â±13.4), CD24 (0.1Â±0). Similar results were obtained with inhibitors, LDE225 (SMO, 2.5mM) and GANT61 (Gli, 5ÂµM). Significant reduction in migration of PMC was observed in the scratch assay and clonogenic assay in the presence of inhibitors (P<0.001). Side population assay revealed a reduction in CSCs following treatment with GANT61 (P<0.05). In PMC, GANT61 also decreased the quiescent (Hoechst33342low/PyroninYlow) cell population (P<0.05). Discussion and Conclusion: These results demonstrate that the hedgehog pathway is important in maintaining the integrity of CSCs in ovarian cancer.

Abstract Id: YUGP2097

An Investigatio Into The Mutational Spectrum And Sub-Types Of TnbcS In Indians; A Population With High Proportion Of TnbcS
Presenter - Dr. Aruna Korlimarla
Co-author - Jyothi S Prabhu, Savitha Rajaranji, Hari P S

TNBC is a heterogeneous disease and the subtypes reported by Lehman B et al in 2012 differ in their gene expression profiles, mutational spectrum and the extent of immune infiltrates. Indians have a higher proportion of TNBC (~30%) with a greater number of younger women and clinico-epidemiological features that resemble that of the ethnic African American (AA) population (Kakarala M et al 2010). We have earlier reported the use of the BRCA1/1D4 transcript ratio, as a measure of BRCA1 deficiency in TNBCs (Korlimarla A et al 2016). Here we examined the mutational spectrum in a fraction of our TNBC tumors. We sequenced somatic DNA from 25 TNBCs (FFPE Specimens) on Illumina MiSeq V2 150x2, from a non-consecutive retrospective case-series of close to 200 tumors (comprising 30% TNBC) from a regional cancer centre in Southern India. The TruSeqAmplicon - Cancer Panel Kit (Illumina) comprising of 212 DNA-specific amplicons covering hotspots in 48 cancer associated genes was used to construct the libraries. Variant calling was done following ACMG guidelines. Data from our series was compared to TCGA. The most frequently mutated genes were TP53, followed by PIK3CA and KRAS indicating similarity in the biology of the disease compared to that reported in the TCGA set (N=102). At 80%, the frequency of TP53 mutations in our set was comparable with that of Caucasians (70%) and AA (73%). However, we noted a statistically significantly higher proportion of PIK3CA mutations (7/25 =28%) as compared to ~8% in TCGA set (8/102) of which there were none in OMs (0/20), (P=0.003). Curiously enough frequency of KRAS mutations was also high at 24% which has not been earlier reported. Is the mutation profile of Indian TNBCs different from that of the west? A more detailed analysis of this work validated on a cohort with outcomes and survival data is underway. Since very little is known about the mutation landscape of Indian TNBCs, analysis of the mutational spectrum and identification of actionable mutations in TNBCs can help target therapy.

Abstract Id: YUGP2099

The Efficacy And Toxicity Of Image-Guided Intensity Modulated Radiation Therapy Combined With High Dose Brachytherapy For Figo Stage Iib Cervical Cancer
Presenter - Mr. Wang Weiping
Co-author - Wang Dunhuang, Liu Xiaoliang, Meng Qingyu

Objective: We evaluated the efficacy and toxicity of image-guided intensity modulated radiation therapy (IMRT) combined with high dose intracavitary brachytherapy (ICBT) for FIGO stage IIB cervical cancer. Methods: We retrospectively analyzed 373 patients with stage IIB cervical cancer treated with IMRT combined with high dose ICBT and concurrent chemotherapy in our institute from May 2005 to
December 2013. A dose of 50.4 Gy in 28 fractions was delivered to clinical target volume with IMRT technique. A dose of 59-61 Gy was prescribed to the involved regional lymph nodes with simultaneous integrated boost. Weekly cone-beam computed tomography (CBCT) or daily mega voltage computed tomography (MVCT) was used for image guide. A second CT simulation and planning was conducted after IMRT of 20 fractions and ICBT of 1-2 fractions. With high-dose-rate ICBT, 30-36 Gy in 5-7 fractions was prescribed to point A. All patients received concurrent chemotherapy. Results: The median follow-up was 32.5 months (range, 3.1-119.8 months). The 3-year overall survival (OS), disease-free survival (DFS) and local control (LC) were 87.5%, 82.2% and 92.5%, respectively. A total of 60 patients (16.1%) experienced treatment failure, including 21 patients (5.6%) with pelvic relapse, 37 patients (9.9%) with distant metastasis and 2 patients (0.5%) with pelvic relapse and distant metastasis. Of the 108 patients with positive regional lymph nodes, 7 patients (6.5%) and 2 patients (0.5%) with pelvic relapse and distant metastasis. Of patients (16.1%) experienced treatment failure, including 21 patients (5.6%) with pelvic relapse, 37 patients (9.9%) with distant metastasis and 2 patients (0.5%) with pelvic relapse and distant metastasis. Of the 108 patients with positive regional lymph nodes, 7 patients (6.5%) experienced regional lymph nodes failure. There was 1 patient died of treatment-related renal failure. The incidence of grade 3 chronic gastrointestinal and genitourinary toxicity were 2.7% and 2.4%. Conclusion: IMRT combined with high dose ICBT and concurrent chemotherapy resulted in a good survival and acceptable toxicity for stage IIIB cervical cancer.

Abstract Id: YUGP2101

**Evaluation Of Brca1, Stat-1 And Stat-3 Expression In Non Familial Stage IIB Cervical Cancer.**

*Presenter- Dr. Sameer Gupta*

*Co-author- Preeet Agarwal, Prof. Arun Chaturvedi, Vijay Kumar*

Background: Targeted therapy against ER/PR/HER-2/Neu for carcinoma breast is well established but there is continuing search for optimal targeted therapeutic options for triple negative breast cancer (TNBC) patients. TNBC is reported to be the most common breast cancer subtype in Indian population which is nearly twice the rate reported in Western countries. We evaluated the expression of BRCA-1 in non-familial female breast cancer patients along with the downstream molecular targets (STAT 1 and 3) with the objective of identifying potential therapeutic targets in TNBC.

Methods: Immunohistochemistry performed for Estrogen receptor (ER), Progesterone receptor (PR), Her-2/neu receptor (HER2), Cytokeratin (CK5/6), Ki67, BRCA1, STAT1, STAT3, pSTAT1 and pSTAT3 in 145 sporadic IDC-NOS breast cancer cases with appropriate positive and negative controls with objectives to study inter marker co-relation and their correlation with clinic-pathological variables and clinical outcomes. Results TNBC was most frequent subtype (37%) followed by equal distribution of HER2 and Luminal type B (21.7% each) and luminal A type (19.4%). BRCA nuclear loss was observed in 62.68% (89/142) and STAT1-loss in 68.6% (59/86). Cases with BRCA1 nuclear loss and STAT1-loss had larger tumor size, higher grade, axillary nodal metastasis (pN2, pN3), high Ki67 and poor clinical outcome as compared to cases with BRCA1 nuclear protein / STAT 1 expression. Expression of pSTAT1 was studied in 60 cases. BRCA1 nuclear loss and STAT1 down regulation was seen in 88.3% (38/43; p=0.044). STAT 3 expression was seen in 115/137 (83.94%) cases. Association of STAT3 nuclear expression with Nottingham grade, BRCA1 nuclear loss, Ki67 was found to be statistically significant. STAT 3 phosphorylation showed that STAT 3 up-regulated tumors were aggressive with larger tumor size and proliferative activity. Conclusions Therapeutic targeting of BRCA1 pathway and STAT 3 up regulation by PARP and STAT3 inhibitors may be useful way forward in sporadic breast cancers. Total 74% (40/54) TNBC cases displayed BRCA1 nuclear loss with nine cases (9/54; 16%) harbouring STAT3 up-regulation. Targeted agents against BRCA 1 and STAT 3 may be especially relevant for TNBC which are not only hormone treatment deprived but also have limited chemotherapy treatment options.

Abstract Id: YUGP2103

**Value Of 18F-Fdg Pet-Ct Parameters To Predict Prognosis In Patients With Locally Advanced Cervical Cancer.**

*Presenter- Mr. Wang Dunhuang*

*Co-author- Wang Weiping, Liu Xiaoliang, Meng Qingyu*

Objective: The aim of this study was to predict prognosis in patients with locally advanced cervical cancer by the relevant parameters of 18F-fluorodeoxyglucose positron emission tomography- computed tomography (18F-FDG PET-CT), such as maximum standardized uptake values (SUVmax), mean standardized uptake values (SUVmean), metabolic tumor volume (MTV) and total lesion glycolysis (TLG). Materials and methods: We retrospectively investigated 125 patients with locally advanced cervical cancer who underwent 18F-FDG PET-CT before definitive chemoradiotherapy in our institution from February 2010 to December 2015. SUVmax, SUVmean, MTV and TLG of the primary tumor were analyzed to evaluate the relationship between these factors and prognosis. Receiver operating characteristic (ROC) curves was used to calculate the optimal cut-off values of SUVmax, SUVmean, MTV and TLG for DFS. The survival data was analyzed by the Kaplan-Meier method and COX regression analysis. Results: The median follow-up was 29 months (range, 3-77 months). Univariate analysis indicated that MTV more than or equal 18.8 cm3 showed worse overall survival (OS), disease free survival (DFS) and disease metastasis free survival (DMFS). TLG more than or equal 113.5 implied worse DFS and DMFS. In multivariate analysis, TLG more than or equal 113.5 was independent predictive factor for DFS and DMFS, while there was no significant relevance for OS. Conclusion: Pretreatment TLG more than or equal 113.5 related with more distant metastasis in patients with locally advanced cervical cancer.

Abstract Id: YUGP2107

**Giant Cell Tumor - Lung**

*Presenter- Dr. Vijayakumar Subramaniam*

*Co-author- Professor Dr.K.KALICHVELI, Dr.S.SURESH KUMAR, Dr.G.RAGA*

INTRODUCTION: Primary extraosseous benign giant cell tumors have been described in many internal organs, (e.g. pancreas, liver, gallbladder, uterus, kidney, ovary, large intestine, heart, lung, thyroid and salivary gland) the skin and soft tissues. These tumors, apart from the minute epithelial elements, are histologically indistinguishable from the skeletal giant cell tumor, “osteoclastoma”. The main components of these tumors were osteoclast-like multinucleated giant cells and mononuclear stromal cells. Until now, Only 8 cases of giant cell tumor of the lung were reported in the literature. Surgery is curative. CASE REPORT: A 33 year old female presented with cough and haemoptysis of 2 months duration with past history of lower lobectomy of right lung for the same complaints, 3 years ago. Pathology of lobectomy specimen was reported as giant cell tumor of the lung. Present CT scan of the chest showed mass lesion in the right upper lobe. Patient underwent right completion pneumonectomy and pathology was reported as recurrent giant cell tumor of the lung with negative margins. Now the patient is on regular follow up. This case is reported for its rarity. KEY WORDS: Osteoclastoma, Giant cell tumor, Lung.

Abstract Id: YUGP2109

**Fat1 Knockdown Led To Reduce Micro-Rna Expression In Glioblastoma.**

*Presenter- Ms. NARGIS MALIK*

*Co-author- Srринivas H, chitrangda srivastava, yakhlesh gupta*

Background: FAT1 gene is localized at chromosome 4q35.2 encoding a 506 KD a transmembrane protein and functions as oncogene and tumor suppressor depending on tissue types in human cancers. Our lab has identified an oncogenic role of FAT1 in glioblastoma.
miR-221-3p/222-3p has been reported to have oncogenic role and targeting tumor suppressor (e.g. CDKN1B, PTEN, PUMA etc.) in many cancers along with glioblastoma multiform. miRNAs are noncoding RNA which are bound to the 3â€™UTR of target mRNA and repress their expression. Here, we have elucidated the role of FAT1 gene in the regulation of miRNAs in glioma. Methodology: In order to delineate regulation of miRNA by FAT1 in glioma we used knockdown strategies followed by expression analysis by q-PCR. miRNA 221-3p/222-3p are isomiRs and acts as OncomiRs in human cancer. FAT1 specific siRNA and scramble siRNA were used in this study purchased from Invitrogen, USA. Glioma cell lines were maintained in Dulbeccoâ€™s modified Eagleâ€™s Medium (DMEM) with 10% fetal calf serum (FCS). The Knockdown experiment was carried out in U87MG, U373, A172, T98, LN229 and GOS3III glioma cell lines. We have used Exiqon total RNA isolation kit to isolate miRNA and followed by preparing cDNA by using Exiqon cDNA synthesis kit. We have used LNA-primer (locked nucleic acid) to analyze the expression of miR-221/222-3p in glioma cell lines. We have done in-silico analysis to identify potential miRNA target molecules by using miRNA target prediction software (micromap.org, Diana-micro, Target Scan Human, and miRDB). GBM (Glioblastoma) tumor samples (n=18) were collected from Department of Neurosurgery/Pathology of All India Institute of Medical Sciences, India. GBM tissue were collected in 1 ml of RNA-Later solution and incubated for 24 hours at 4Â°C. After removing RNA-Later solution the tumor tubes were immediately stored at -70Â°C till further use. For the control, normal human brain RNA were purchased commercially (Clonetech, USA). Results: We have observed increased expression of FAT1 and miRNA in different glioma cell lines (U87MG, U373MG, A172, LN229, T98G and GOS3). In order to validate the FAT1 and miRNA correlation we have used knockdown strategy in glioma cell lines. We have analyzed the expression of miRNA in glioma cell lines after FAT1 knockdown and compared with siControl. We have observed more than 80% FAT1 knockdown in U87MG, U373MG, A172, T98G and GOS3 and almost 70% FAT1 knockdown in LN229. We observed a decreased expression of miR-221/222-3p after FAT1 knockdown in different glioma cell line. We have done in-silico study to identify potential miRNA targets and found CDKN1B, TIMP, PDCD10, PUMA and PTEN molecules are the significant targets of miRNA. In order to validate these findings we have analyzed expression of PDCD10, PUMA and PTEN in FAT1 knockdown cells and compared with siControl cells. We observed increased expression of PDCD10, PUMA and PTEN after FAT1 knockdown in glioma cell lines. Our observation suggests that FAT1 expression affects the miRNA and its target in glioma cell lines. In order to confirm our in-vitro observation and its clinical relevance, we have done correlation study in GBM tumors. GBM tumors (n=18) were collected and expression of FAT1, miRNA and its targets were analyzed by q-PCR. We have observed negative Pearson correlation of FAT1 with PDCD10 (correlation value -0.720), PTEN showed (correlation value -0.267) and PUMA (correlation value -0.218). In conclusion:- Taken together our in-vitro and GBM tumor data for the first time suggesting FAT1 to be a novel molecule regulating the expression of miRNA in GBM and FAT1 may emerge as a target for therapeutic intervention.

**Abstract Id: YUGP2111**

**A Dosimetric Comparison Of Fixed-Field Intensity-Modulated Radiotherapy, Rapidarc Therapy And Helical Tomotherapy For Extended-Field Irradiation In Cervical Cancer**

**Presenter - Mr. Dong Tingting, Liu Nan, Yang Bo**

Objective: To compare dosimetric parameters of fixed-field intensity-modulated radiotherapy (FF-IMRT), rapid arc therapy (RA) and helical tomotherapy (HT) for extended-field irradiation in cervical cancer, aiming at investigating the suitable radiation technique. Materials and methods: We chose 15 patients with para-aortic lymph node for cervical cancer who underwent definitive chemoradiotherapy in our institution since 2015. FF-IMRT, RA and HT plans were designed basing on the same CT simulation image for each patient. To evaluate isodose distribution, conformity index (CI), homogeneity index (HI) and dose of organs at risk (OARs) by dose volume histogram (DVH) of three plans. The three plans were also compared in terms of Monitor units (MU) and time of single treatment. Results: HT showed significantly better CI and HI than FF-IMRT and RA, and RA was also superior to FF-IMRT. HT was superior to FF-IMRT and RA for protecting OARs, such as small intestine and kidney. But there was little difference between FF-IMRT and RA. RA provided shortest time of single treatment and least MU, and there was significantly difference between three plans. Conclusion: Three plans all satisfied requirement of clinical dosimetry for extended-field irradiation in cervical cancer but HT was superior to FF-IMRT and RA. HT achieved superior OARs sparing while maintaining the best CI and HI, may reduce related toxicity of radiotherapy. RA could realize the goal of clinical dosimetry, meanwhile shorten the treatment time, probably reduce the influence of uncertain factors and patientsâ€™ discomfort.

**Abstract Id: YUGP2117**

**The Clinical Outcomes Of Cervical Cancer Patients With Para-Aortic Lymph Nodes Metastasis Treated By Definitive Extended Field Intensity-Modulated Radiation Therapy**

**Presenter - Mr. Liu Xiaoliang**

**Co-author - Wang Dunhuang, Wang Weiping, Meng Qingyu**

Objective: To compare and analyze the clinical outcomes of cervical cancer patients treated by definitive extended field intensity-
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Co-author - Meng Qingyu, Wang Weiping, Wang Dunhuang

Objective: To analyze and evaluate the clinical outcomes of cervical cancer patients treated by prophylactic EF-IMRT. Methods: We retrospectively analyzed 122 cervical cancer patients treated by prophylactic EF-IMRT in Peking Union Medical College Hospital between Apr 1st 2008 and Dec 31st 2014. All patients received external beam irradiation of 45-54 Gy, and a concomitant boost to 54.8-66 Gy was delivered to involved lymph nodes. Some patients with stage IIIB were received a related parametrium boost of 6-10 Gy. HDR brachytherapy with Ir192 was prescribed to point A at a dose of 24-42 Gy/4-7F. Most patients received concurrent chemotherapy of weekly cisplatin or paclitaxel. Results: The median follow-up time was 31 months (3.7-96.1 months), the 3-year OS, DFS, LC were 88.0%, 77.7%, 91.2%, respectively. The expected 5-year OS, DFS, LC were 85.6%, 75.9%, 89.0%. By the end of the last follow-up, there were 26 patients relapsed, among which, 9 (34.6%) patients had local recurrence only, 16 (61.5%) patients had distant metastasis only, 1 (3.9%) people had both local recurrence and distant metastasis. The percentage of acute grade 3 or greater GI, GU and hematologic complications were 7.9%, 6.7%, 67.4%. The percentage of late grade 3 or greater GI, GU and complications were 2.7% and 1.8%. The HGB level before treatment was an independent predictors of OS and DFS. Conclusions: EF-IMRT for cervical cancer patients with high risk of para-aortic lymph node metastasis, has good clinical outcomes, but it still needs prospective study to identify.

Abstract Id: YUGP2133

Role Of Gefitinib In Non-Small Cell Lung Carcinoma: A Retrospective Study

Presenter- Dr. DURGESH KUMAR
Co-author - A.K. Arya, Anuj kumar, Indira Yadav

Background: Lung cancer is the leading cause of death due to cancer in India. We analyzed 33 patients of lung cancer, receiving oral Gefitinib for advanced Non-small cell lung cancer in department of Radiotherapy (LPRI). Materials and Methods: Patients who were diagnosed from January 2012 to may 2017 were evaluated. 33 patients were evaluable. All patients received Gefitinib 250 mg/day until disease progression, unacceptable toxicity, or death of the patient. Response of treatment was evaluated by chest X-ray, Symptomatic improvement (Kemofsky scale) and according to the clinical judgment. Results: Out of 33 patients, 22 were male, and male to female ratio was 2:1. The mean age at the time of diagnosis was 59.98y (range 40-75 yr) (4 (12.1%) of the patients were non smoker. Out of 28smokers, 14 patients have history of alcohol consumption. Mean year of smoking was 25 yr. Majority of the patients had advanced disease, 56.6% patient presented with Squamous Cell Carcinoma and 43.3% Adenocarcinoma. The mean duration of treatment was 180 days (range 90-288days). Out of 33, 18Patient had received prior chemotherapy in form of Cisplatin and Etoposide. Follow-up duration ranges from 105-458 days (mean 278 Days). DFS was 125 days (range 90-262days), 25/33 (75.7%) patient responded well to treatment without any morbidity. Conclusion: In case of advanced and recurrent Non-small cell lung cancer patients, Tab. Gefitinib is better option. It is well tolerated and toxicity profile is also low.

Abstract Id: YUGP2135

Multimodality Management Of Pnet Chest Wall : Aims-New Delhi Experience.

Presenter- Dr. Suman Kharkwal
Co-author - Dr SYS Deo, Dr NK Shukla, Dr.Sunil Kumar

Background: Askin tumour or peripheral primitive neuroectodermal tumour (PNET) of Thoraco-pulmonary region is a rare, highly aggressive tumour belonging to Ewing sarcoma family of tumour (EFT). A paradigm shift to successful outcomes was possible in recent
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Role Of Hypofractionated Palliative Radiotherapy In Patients With Advanced Head And Neck Cancer

Presenter - Dr. Ankur Mudgai
Co-author - A.K. Karya, Indira Yadav, Anuj Kumar

We report a case of 39 year old woman who was initially diagnosed with biopsy proven squamous cell carcinoma of the cervix FIGO stage IIIB and underwent concurrent chemoradiation completed in October 2014. She had central residue at 4 months following chemoradiation and was treated with hypofractionated palliative radiotherapy in an attempt to attain durable complete remission. This approach was found to be cost effective and durable with acceptable continence level and good QOL.

Abstract Id: YUGP2145

Health Related Quality Of Life And Functional Outcome Following Radical Cystectomy With Orthotopic Neobladder For Invasive Bladder Cancer.

Presenter - Dr. Praveen Kumar
Co-author - Sasikala Prabaharan, Ramesh S Bilimagga,

Back ground: Bladder cancer is estimated to be the ninth most common cancer worldwide. The global incidence of bladder tumours is 4.4%. In Chennai the age standardised incidence of bladder tumour among male is 3/10000 population. Orthotopic neobladder (ONB) reconstruction is the most favoured mode of urinary diversion following radical cystectomy. Studies reveal that Scientific advancement in uro-rehabilitation has improved the Quality of life (QOL) and Functional status in urinary incontinence. However, the quality of life of ONB patients is yet to be understood. Hence, present study aims to investigate the quality of life and functional outcomes in male patients following ONB.

METHODS: Bladder cancer patients(n=20) underwent radical cystectomy with Neo bladder reconstruction were assessed for quality of life during 3rd month and 9th month following surgery using Cancer Institute QOL questioner and author constructed urinary continence score for Functional outcome. ONB patients were taught and emphasised on kegelâ€™s exercise preoperatively and also advised to follow the same postoperatively. Data were analysed using descriptive statistics and paired â€œtâ€‌ test.

RESULTS: It was found that 45% of patients had high QOL while, 5% had very high QOL, descriptive statistics and paired â€œtâ€‌ test. 45% of patients had high QOL while, 5% had very high QOL, 45% of patient reported average QOL. The overall QOL (t=7.847; p< 0.000) found to differ significantly between 3rd and 9th month. The mean score is indicative of improvement in post assessment. CONCLUSION: Most of the patients with bladder reconstruction on a regular Kegelâ€™s exercises had acceptable continence level and good QOL.

Abstract Id: YUGP2147

Re-Irradiation As A Salvage Option In Pelvic Malignancy-A Case Report

Presenter - Dr. Praveen Kumar
Co-author - Sasikala Prabaharan, Ramesh S Bilimagga,

We report a case of 39 year old woman who was initially diagnosed with biopsy proven squamous cell carcinoma of the cervix FIGO stage IIIB and underwent concurrent chemoradiation completed in October 2014. She had central residue at 4 months following chemoradiation.
for which she underwent salvage surgery (Total abdominal hysterectomy+BSO+BPLND ). Postop, HPE revealed mod diff squamous cell carcinoma with free margins and all dissected lymph nodes negative for disease. 8 months after surgery she developed a lesion in the vaginal vault with biopsy features of adenocarcinoma, which was confirmed by Immunohistochemistry. PET-CT, serum biomarkers, OGD scopy, stool examination for occult blood all came negative for second primary. She was treated as metastatic adenocarcinoma of unknown primary with 3 cycles of Cisplatin and taxol based chemotherapy(completed Jan 2016) to which she had poor response. Since the high vault recurrence was close to the bowel surgery will include bowel resection and permanent colostomy. In Multidisciplinary tumour board discussion considering the young age and the quality of life with colostomy reirradiation with tomotherapy was decided. She received External beam radiotherapy by IG-IMRT technique delivered using helical TomyTherapy-HD 52Gy/20 fractions to the vaginal vault over 4 weeks completed in March 2016. During the treatment, the patient’s gastrointestinal and genitourinary toxicities were limited to grade II. She completed treatment over 4 weeks on outpatient basis. 1year post re-irradiation on follow-up PET-CT (March 2017) she was disease free but had to undergo stenting for unilateral hydroureronephrosis. This might be due to radiation induced ureteral fibrosis considering the close proximity of the tumor to the right ureter. CONCLUSION: Re-irradiation using highly conformal techniques of external beam radiation delivery is a promising option in patients who cannot undergo salvage surgery or difficult cases for brachytherapy.

Abstract Id: YUGP2149

Incisional Site Metastasis In Carcinoma Cervix : A Case Series And Review Of Literature
Presenter- Dr. Tabassum Samani
Co-author - Ankur Mudgal, Pradeep K. N., Indira Yadav

Background: Cervical cancer spreads through local, lymphatic and rarely through haematogenous route. Metastasis to skin occurs rarely (0.1-1.3%) in carcinoma cervix. Incisional site metastasis is an unusual presentation during the course of carcinoma cervix and is associated with poor prognosis. Case report: We report a case series of 3 cases of carcinoma cervix with incisional site metastasis. Case 1: A 38 year old female, diagnosed case of carcinoma cervix underwent surgery followed by EBRT (50Gy/25#) with concurrent CTRT with Cisplatin (40mg/m2) and ICRT(6.5Gy/3F). After one year she developed lump in the lower abdomen which on biopsy showed features of squamous cell carcinoma. Wide local excision was done but the lump recurred after 3 months. The patient was then taken for palliative CT but the response was poor. Case 2: A 60 yrs female diagnosed case of carcinoma cervix who had undergone surgery one year back presented with an ulcerative lesion in lower abdomen in our opd. On biopsy it showed features of squamous cell carcinoma. Patient received one cycle CT with good response. She abscended for 7 months and then presented with same complaint. She received 2 cycle CT and showed good response. Case 3: A 54 years female diagnosed case of carcinoma cervix presented in opd with lump in lower abdomen. Patient was operated at some private set up 1yr back and had squamous cell carcinoma. Patient was referred for wide local excision but she did not turn up. Conclusion: Recurrence of primary cervical carcinoma in form of skin metastasis can present as swelling in surgical scar. FNAC and other radiological investigations such as ultrasound and CT scan are helpful in making diagnosis. Incisional scar metastasis is predictive of poor prognosis. Wide local excision and chemotherapy are the only treatment options available. Surgeons must take some protective measures like trocar fixation, prevention of gas leaks, slow deflation of peritoneum, and povidone-iodine rinsing of instruments and trocars before their removal. Keywords: Incisional site , metastasis , carcinoma cervix

Abstract Id: YUGP2151

Paediatric Malignant Renal Tumours: A Five Year Experience From A Tertiary Oncology Care Centre.
Presenter- Dr. Yeshwanth Rajagopal
Co-author - C. RAMACHANDRA, LAPPAJI,

Paediatric renal malignancies represent about 7-8% of all childhood malignancies. Wilms’ tumour is the most common of these. Ours is tertiary cancer centre [regional cancer centre] in an urban area, which caters to both urban and rural populations. We present our 5 year experience of management of renal tumours in the paediatric age group. 97 cases reported in 5 years with an average of about 6% of all paediatric malignancies. Wilms’ tumour represented more 90% of the cases followed by clear cell sarcoma. We have elaborated the clinic-pathological profile of renal tumours, their management and follow up.

Abstract Id: YUGP2153

Langerhans Cell Histiocytosis (Lch) - A Retrospective Case Series From Single Centre
Presenter- Dr. Roshan Koshy Jacob
Co-author - Dr Shashidhar V K, Dr Manjunath N,

BACKGROUND- LCH IS A REACTIVE PROLIFERATIVE DISEASE OF UNKNOWN PATHOGENESIS CHARACTERISED BY PROLIFERATION OF LANGERHANS CELLS. THE AIM OF THIS STUDY IS TO CHARACTERISE THE CLINICAL MANIFESTATIONS AND TREATMENT OUTCOME OF LCH PATIENTS BY RETROSPECTIVELY ANALYSING THE CLINICAL DATA OF PATIENTS DIAGNOSED WITH LCH, IN ADDITION TO SIMULTANEOUS REVIEW OF LITERATURE. CASE SERIES- SIX CASES OF LCH WERE INCLUDED IN THIS STUDY. THE MEDIAN AGE OF PRESENTATION WAS 5.5 YEARS (RANGE 2 YEARS TO 46 YEARS). MALE TO FEMALE RATIO WAS 1:1. FIVE OF THE PATIENTS WERE AGED LESS THAN 10 YEARS. FOUR OF THE PATIENTS HAD SINGLE SYSTEM DISEASE ON PRESENTATION WHILE THREE CASES HAD MULTIPLE SYSTEMS INVOLVEMENT. THREE AMONG THESE FOUR PATIENTS HAD CNS RISK LESION AND REQUIRED ADJUVANT CHEMOTHERAPY AFTER TUMOUR EXCISION. THE REMAINING ONE PATIENT HAD SINGLE SYSTEM DISEASE IN THE RIGHT TIBIA AND WAS KEPT ON FOLLOWUP AFTER EXCISION. AMONG THE TWO PATIENTS WHO HAD MULTISYSTEM DISEASE, ONE PATIENT HAD BONE MARROW INFILTRATION TOO. ALL SIX PATIENTS WERE TREATED AS PER THE LCH III PROTOCOL. THE PATIENT WITH MULTISYSTEM DISEASE AND BONE MARROW INFILTRATION EXPIRED SOON AFTER INITIATION OF TREATMENT. ONE PATIENT IS PRESENTLY ON THE INTENSIVE PHASE OF THE PROTOCOL. 4 PATIENTS HAVE COMPLETED THE INTENSIVE AND MAINTENANCE PHASE OF PROTOCOL AND ARE DISEASE FREE. CONCLUSION- THE CLINICAL PRESENTATION AND OUTCOME OF TREATMENT FOR LCH ARE HIGHLY VARIABLE RANGING FROM ISOLATED BONE LESION REQUIRING ONLY EXCISION TO MULTI-SYSTEM DISEASE WITH LIFE THREATENING ORGAN DYSFUNCTION.

Abstract Id: YUGP2155

A Case Report On Leiomyosarcoma Kidney
Presenter- Dr. Snigdha P P
Co-author - Dr. Flowerlit Thomas (corresponding author ), Dr. Sureshkumar, Dr. Mintu Mathew Abraham

A CASE REPORT ON LEIOMYOSARCOMA KIDNEY BACKGROUND Sarcomas involving kidney is a rare entity, accounting for 0.8 to 2.7% of renal malignancies. Among renal sarcomas, leiomyosarcoma is the most common histological subtype comprising 50- 60% of renal sarcomas, more common in females than males. They originate from smooth muscles of renal capsule, pelvis renalis, calyces and blood vessels. Leiomyosarcomas of kidney are highly aggressive. The
information available about renal leiomyosarcoma is limited Case Report A 50 year old female presented with intermittent left sided flank pain of one month duration. It was not associated with hematuria, pyuria, fever or decreased urine output. On examination, she was moderately built. Vitals were stable. No mass or organomegaly detected per abdomenally. Lab investigation revealed anemia. Serum chemistry levels were normal. CT urogram revealed a large exophytic mass arising from anterior medial cortex of lower pole of left kidney. The mass was seen projecting towards renal hilum. Features suggestive of renal vein thrombosis were seen. Subcutemetric left paraaortic lymph node present. A provisional diagnosis of renal cell carcinoma was made and patient underwent left radical nephrectomy. Intraoperatively there was a left lower pole exophytic mass of 7*7*7.5 cm with suspected infiltration into duodenopancreatic duct. Desmoplastic reaction was present along with multiple feeding vessels. Histopathological report was showing nodular growth of size 8*8*5.6 cm arising from lower pole of kidney, projecting into the hilum, with areas of necrosis and hemorrhage. Microscopically it was showing spindle cells arranged in bundles and fascicles, with mitotic rate of 4-5/HPF. Renal capsule, renal vessels and ureters were free. Diagnosis was pleomorphic spindle cell neoplasm. Possibilities included renal cell carcinoma, Leiomyosarcoma pT2NOM0. Immunohistochemistry study revealed smooth muscle antigen, vimentin and desmin positive and negative for pancytokeratin. Hence the diagnosis of leiomyosarcoma kidney was made. Now the patient has been started on adjuvant chemotherapy with Ifosfamide, Adriamycin and cisplatin. Discussion Renal leiomyosarcoma is a rare entity with aggressive behaviour. Clinically and radiologically, there are no diagnostic features and it is frequently diagnosed on histological examination. Sarcomatoid carcinoma is another entity which is difficult to be differentiated from leiomyosarcoma. Immunohistochemistry will help in diagnosis of leiomyosarcoma with positive smooth muscle antigen, Vimentin and desmin and negative for pancytokeratin and epithelial marker antigen. Radical nephrectomy is the primary treatment. Despite radical surgery, most of these tumors show progression with development of metastasis to lung liver and colon. 5 year survival is around 25-35%. Most of the patients die within 2 years. Because of this aggressive behaviour of the disease, modality treatment including surgery, chemotherapy and radiotherapy may be useful. But, benefit of adjuvant is obscure, because of paucity of data on treatment of this rare neoplasm. Conclusion With further sophisticated imaging modalities leiomyosarcoma kidney may be diagnosed preoperatively in future. As of now, strong suspicion should be raised if there is a nodular mass with whorled cut surface. Immunohistochemistry should be done for confirmation. Radical nephrectomy is the treatment of choice. Aggressive adjuvant chemotherapy and radiotherapy may give a better results, but not proven scientifically yet.

Abstract Id: YUGP2157
A Pdgfra, C-Kit(Cd117) Negative, Dog1 Positive Spindle Cell Gist Of The Stomach: A Case Report
Presenter- Dr. Tabassum Samani
Co-author- Durgesh Kumar, Indira Yadav,

Background: Gastrointestinal stromal tumors are the most common primary mesenchymal tumors of the gastrointestinal tract, they are thought to originate from interstitial cells of Cajal or their stem cell precursors. The usual immunohistochemical panel used for diagnosis of GIST are CD117 (C-kit), PDGFRA, and DOG 1.In such cases where C-kit, PDGFRA comes positive, targeted tyrosine kinase inhibitor therapy with imatinib mesylate shows good response, While C-kit and PDGFRA negative GIST is considered resistant to systemic therapy. We are reporting this case because of rarity of C-kit negative, PDGFRA negative and DOG1 positive GIST. Case report: We present a case of 21 year old woman who presented in surgery department with pain abdomen. After evaluation she underwent surgical excision. Histopathological report was spindle cell neoplasm, morphologically consistent with gastric stromal tumor. After excision patient was referred to us where she received cytostatic therapy with Imatinib mesylate. She again reported with pain abdomen after 4 months of starting systemic therapy, while she was on regular treatment. On re-evaluation, imaging study was suggestive of residual disease, for which re-excision was done. Later, the tumor was reclassified as GIST having DOG1-positive spindle cell morphology with negative immunohistochemical expression of CD117, C-KIT at the molecular level and negative PDGFRA. Conclusion: We observed that C-kit and PDGFRA negative GIST shows resistance to imatinib mesylate. We emphasized a role of DOG1 in the identification of gastrointestinal stromal tumors. Key words: Gastrointestinal stromal tumor (GIST), spindle cell, stomach

Abstract Id: YUGP2159
Ten Year Survival Outcome In Breast Cancer Patients: An Institutional Study
Presenter- Dr. Rajnish Nagarkar
Co-author - Dr. Rajnish Nagarkar, Dr. Sirshendu Roy, Dr. Aditya Adhav

Introduction: Breast cancer is one of the 2nd commonest cancers affecting women in India. The treatment and management of breast cancer is therefore important. In this study we present the clinical characteristics, treatment trajectory and outcomes following cancer directed treatment in a tier II city. Methods: In this retrospective study, two hundred and sixty women with breast cancer diagnosed in 2007, registered in hospital based cancer registry were randomly selected and analysed for their clinical presentation and outcomes. Frequency distribution, chi square test of proportions and Kaplan Meier Survival analysis was used for analysis. The mean age of study population was 54.8 ±11.8 years. Among the study cohort 86% were early breast cancers and 14% were metastatic breast cancers. 98.4% were infiltrating ductal carcinoma type and 1.1% was lobular carcinoma type. ER +ve tumors were 53.6%, PR +ve were 51.4% and Her 2 neu +ve was 6.3%. There were 45.3% ER 86% ve and 42.8% triple negative tumors. Mastectomy was done in 69.4%, breast conservation was done in 20.3%. Adjuvant RT was given in 52.7%, CT in 92.3%. There was 5% local recurrence, 18% metases and 18% mortality. Overall mean progression free survival was 115 months, 112 months for mastectomy (83%) and 118 months for breast conservation (74%) though not significant(Log rank X2 = 1.68, p=0.19 ). Similarly triple negative status, ER negative status, taxane chemotherapy did not significantly influence disease free survival. Conclusion: The results suggest good survival outcomes in early breast cancer patients. Factors that influence survival in metastatic cancer patients need to be assessed.

Abstract Id: YUGP2161
Extraskelatal Mesenchymal Chondrosarcoma: A Rare Case Report
Presenter- Dr. KUNAL KISHOR
Co-author - KUNAL KISHOR

Abstract Mesenchymal chondrosarcoma is a rare, high-grade malignancy of bone or soft tissue with a unique, biphasic histology and poor prognosis. Because of its rarity and variable length of disease-free survival, the natural history of the disease remains poorly understood. Mesenchymal chondrosarcomas are very rare in comparison to conventional chondrosarcomas and even more so when arising from an extraskeletal location. The prognosis for cure is poor, with a high incidence of local recurrence as well as regional and distant metastasis. Complete removal of the tumor is the mainstay of treatment, but adjuvant radiation therapy and chemotherapy should be considered. Introduction Mesenchymal chondrosarcoma (MC) was first described as an occurrence in the bone by Lichtenstein and Bernstein in 1954. It is a subtype of chondrosarcoma and is assumed to arise from remnants of the embryonic cartilage or
metaplasia of meningeal fibroblasts. MC mostly affects children and young adults between the ages of 15 and 35 years and accounts for less than 1% of all sarcomas. One-third of the cases occur outside the bone and are seen more in young patients (23 years). In this report, we discuss the major characteristics of ESMC and offer a review of the current knowledge regarding this rare disease entity. Case presentation A 36 year male, presented with pain, swelling in right forearm since 6 months duration, dull aching in nature and at sometimes noticed swelling in right forearm on inner site, smaller initially, the swelling is increasing in size since then to present size. There is mild difficulty in function of right forearm. No symptoms of neurological deficit. Local examination- single swelling its cartilaginous feel irregular on palpation, 8x10 cm in size, ovoid in shape with diffuse shiny smooth skin over swelling shows dilated veins, consistency is variable firm to hard, swelling mobile with flexors of the forearm but fixed with flexor contraction. No palpable lymph node, No neurological deficit. CEMRI RIGHT FOREARM- features are suggestive of a large heterogeneous signal intensity predominantly necrotic intramuscular mass lesion in proximal flexor compartment of right forearm measuring 12x6.7x4.3 cm in size possibility of a sarcomatous lesion appears likely. 18F-FDG Whole body PET-CT Scan-Metabolically active soft tissue density lesion in the lateral compartment of right forearm size 6.4x3.9cm SUV max 4.2), no other abnormal hypermetabolic focus elsewhere in the visualized body. Exploration and wide excision of soft tissue tumor with FDP of 3rd, 4th & 5th finger & part of FCU of right forearm under GA. HPE: Extraskeletal mesenchymal chondrosarcoma- Right Forearm( WHO Classification 2013) pT2apNxRx. Margins of resection are free of tumour. IHC 7 Markers: vimentin-positive, CD34+, SMA-Ve, S100-Ve,EMA-Ve,KI 67 +ve 3-4%, CD99 strongly +ve, Desmin-ve. Received radiation therapy consisting of 60gy in 30 fractions at the site of resected lesion. Counselling for adjuvant chemotherapy done but patient refused. The patient is doing well after 12 months of follow up period. Discussion The first case of mesenchymal chondrosarcoma (MCS) was described by Lichtenstein and Bernstein in 1959. Histologically, this tumour exhibits a biomorphic appearance of undifferentiated mesenchymal cells with islands of mature hyaline cartilage [8]. Immunohistochemical analysis often reveals positivity for vimentin, S100 protein and CD99; meanwhile, actin, cytokeratin, and EMA are typically negative. Genesis of the tumour is obscure. However, the transition areas between the spindle shaped mesenchymal cells and cartilage islands clearly indicate that the tumour takes its origin from the precartilage mesenchyme. Ultrastructural evidence confirms its cartilaginous origin. Surgical resection with wide margins is known as the most effective treatment modality for chondrosarcoma. Radiotherapy might play a role when accompanied by surgery although some believe MCS to be a radioresistant tumor. Some authors report the use of preoperative radiation therapy to reduce tumor bulk prior to radical resection, with the hope of reducing extension in continuity or by micrometastasis, but it does not change the preoperative approach. Postoperative radiotherapy does not show a statistically significant proof of better prognosis even when there is evidence that demonstrates trend toward increased survival. Chemotherapy has a limited role in chondrosarcoma and should be used as an adjuvant therapy in cases with aggressive behavior with potential metastasis, rapid local recurrence, and high-grade lesion. This patient was advised the same chemotherapy regimen as used for Ewingâ€™s sarcoma. The standard neoadjuvant/adjuvant chemotherapy backbone consists of vincristine, daunomycin, cyclophosphamide, and doxorubicin (VACD). Since then, a number of studies have sought to improve on that standard, using chemotherapy with VACD either alone or alternating with ifosfamide and etoposide (VACD-EI) - the latter significantly improved 5-year disease-free survival (DFS) (69% versus 54%), and mesenchymal chondrosarcoma could be treated as per Ewing â€™ s sarcoma. The prognosis of patients with MCS is extremely variable, ranging from complete tumor response and long-term survival, to rapid local tumor progression with widespread metastasis. The mesenchymal histology alone carries a nearly 10-fold increase in 5-year mortality. The overall 5- and 10-year survival for patients with mesenchymal chondrosarcoma, when considering all sites, is 55% and 27%, respectively. Conclusion Mesenchymal chondrosarcoma is a rare tumor of soft tissues and bone characterized by a bimorphic appearance on histopathology. It occurs in both young and old people and is more aggressive on initial presentation than other types of cartilaginous tumors. Even after treatment, mesenchymal chondrosarcoma can relapse years later. Researchers are exploring ways to evaluate the tumor in a systematic fashion looking for vulnerabilities of the tumor to new therapeutic strategies.

Abstract Id: YUGP2164
Potential Drug Interactions And Chemotherapy In Older Patients With Cancer
Presenter - Ms. BINCY VINOH
Co-author - Dr.B.JAYKAR, Dr.B.ARUL

Potential drug interactions and chemotherapy in older patients with cancer. BincyVinoy* Dr.B.Jaykar* Dr.B.Arul* Vinayaka Missionâ€™s college of pharmacy, Salem A B S T R A C T Purpose: Increased risk of drug interactions due to polypharmacy and aging related changes in physiology among older patients with cancer is further augmented during chemotherapy. No previous studies examined potential drug interactions(PDIs) from polypharmacy and their association with chemotherapy tolerance in older patients with cancer. Methods: This study used a retrospective medical chart review of 123 patients aged 70+ years who received chemotherapy for solid or hematological malignancies PDI among all drugs, supplements, and herbs taken with the first chemotherapy cycle where screened for using the drug interaction facts software, which classifies PDIs into five levels of clinical significance with level 1 being the highest. Descriptive and correllative statics where used to describe rates of PDI. The association between PDI and severe chemo toxicity was tested with logistics regressions adjusted for base line covariates. Results: A total of 144 PDIs where identified in 75.4% patients of the 82 level one PDI identified among these 32 PDI involved chemotherapeutics. A large proportion of the identified PDIs were of minor significance. Conclusions: In this convenience sample of older patients with cancer receiving chemotherapy be found notable rates of PDI and a substantial adjusted impact of PDI on risk of non-hematological toxicity. These finding warrant further research to optimize chemotherapy outcome. Key words: potential drug interaction, chemotherapy

Abstract Id: YUGP2166
Germline Testing In A Newly Established Hereditary Cancer Clinic
Presenter- Dr. Basumita Chakraborti
Co-author - Dr Soumitra Sankar Dutta, Dr Neeraj Arora, Dr Rosina Ahmed

Objective: As there is little data from developing countries, germline testing for gynaecological and breast cancers in the Indian context is based on criteria from Western populations. We describe early results for patients who met established testing criteria. Methods: A multidisciplinary Womenâ€™s Clinic for Family Cancers was established in 2016, staffed by genetic counsellor, psychologist and oncologists. Women diagnosed with breast or gynaecological cancer who met international genetic testing guidelines were offered counselling and Next-Generation Sequencing. We analysed service utilisation and test results. Results: In total 145 individuals were counselled, 85 affected with breast, 30 with ovarian, 8 with both breast and ovarian, 6 with endometrial and 6 with other cancers. 11 unaffected family members were counselled, with multiple members from 3 families. Reports were available for 99 people, 40(41%) were abnormal, with 27 pathogenic mutations and 13(32%) variations of unknown significance (VUS). Of 33 patients with ovarian cancer, 19(57%) had abnormal results, 13 were BRCA mutated â€¢ 7 BRCA1, 6 BRCA2 (3 VUS), and 5 had mismatch repair gene defects.
Abstract Id: YUGP2174
Clinical Effect Of Radiotherapy On Supraglottic Laryngeal Or Hypopharyngeal Carcinoma: A Single-Center Study.
Presenter - Dr. Min Zhang
Co-author - Xian-shu Gao, Bo Zhao, Jinpeng Yin

Objective: To analyze the outcome of patients with laryngeal cancer or hypopharyngeal carcinoma treated with curative radiotherapy or the combination of surgery with postoperative radiotherapy. Methods: A total of 37 patients treated from January 2012 to August 2016 were reviewed. In 19 cases treated with the combination of surgery with postoperative radiotherapy (group A), 6 cases were treated with postoperative concurrent chemoradiotherapy. In 1 case was treated with postoperative radiotherapy plus Sodium Glycididazole. Of the other 18 cases treated with radical radiotherapy (group B), 14 cases were treated with concurrent radiochemotherapy, 1 case was treated with radiotherapy plus Sodium Glycididazole and 3 cases were treated with radiotherapy alone. Results: The patients of the two groups were similar with respect to mean ages, original sites, stages, T stages, and N stages. The 3-years local control rates were 60.8%, and no statistical difference were observed between the two groups (P = 0.364). The 3-year overall survival rate was 54.4%, and no statistical difference were observed between the two groups (51.69% vs. 70.67%, P = 0.277). The 3-year disease free survival rates were 42.1%, and no statistical difference were observed between the two groups (34.6% vs. 49.6%, P = 0.277).

Abstract Id: YUGP2177
Pharmacist Led Medication Assessment On Polypharmacy And Potentially Inappropriate Medication Use In Senior Adults With Cancer
Presenter - Dr. BINOY A JOY
Co-author - BINOY A JOY, Dr. B. Jaykar, Dr. B. Arul

Pharmacist led medication assessment on polypharmacy and potentially inappropriate medication use in senior adults with cancer. The use of multiple or inappropriate medications in seniors is a significant public health problem, and cancer treatment and its prevalence and complexity. Existing studies are limited by patient self-report and medical record extraction compared with pharmacist-led comprehensive medication assessment. Methods: Retrospective examination of medication uses in senior adults with cancer to determine the prevalence of polypharmacy (PP) and potentially inappropriate medication (PIM) use and associated factors. PP was defined as concurrent use of five or more less than 10 medications. PIMs were categorized by 2012 Beers Criteria, Screening Tool of Older Person’s Prescriptions (STOPP), and the Healthcare Effectiveness Data and Information Set (HEDIS). Results: A total of 122 patients received a geriatric oncology assessment between January 2011 and June 2013 (mean age was 79.9 years, 64% were women, and 87% had solid tumors). Only 122 patients were included in the final analysis. Mean number of medications used was 9.23. The prevalence of PP and PIM use was 41% (n = 51), and 51% (n = 63), respectively. 2012 Beers, STOPP, and HEDIS criteria classified 173 occurrences of PIMs, which were present in 40%, and 21% of patients, respectively. Conclusion: A pharmacist-led comprehensive medication assessment demonstrated a high prevalence of PP, and PIM use. Medication assessments that integrate both 2012 Beers and STOPP criteria and consider cancer diagnosis, prognosis, and cancer-related therapy are needed to optimize medication use in this population. Keywords: potentially inappropriate medications, polypharmacy.

Abstract Id: YUGP2179
An 3D Printed Individualized Bolus For Superficial Lesions Irradiation
Presenter - Dr. Min Zhang
Co-author - Xian-shu Gao, Yong Qin, Yue Sun

Objective: To design and evaluate an individualized bolus for superficial lesions based on the patient's anatomy. Methods: A 3D printed bolus was designed based on the patient's anatomy. The bolus was fabricated using a rapid prototyping technique and was evaluated for its dosimetric properties. Results: The 3D printed bolus showed excellent agreement with the plan and the patient's anatomy. The PTV coverage was excellent, and the bolus did not cause any hot spots. Conclusion: The 3D printed individualized bolus is an effective solution for superficial lesions irradiation.
Abstract Id: YUGP2180

Development Of A Robotic Motion Platform For Quality Assurance Of 4D Radiotherapy
Presenter- Prof. K Joseph Maria Das
Co-author - SA Yoganathan, Ashish Dutta, KS Venkatesh

Objectives: The purpose of this work is to develop a robotic motion platform for the quality assurance of four dimensional (4D) radiotherapy treatments and validate the performance of the phantom in clinical environment. Material and methods: A 3D moving phantom was designed to enable quality assurance and testing of 4D imaging as well as treatment deliveries. The major part of the phantom is a dynamic platform over which any dosimetric or imaging QA devices can be placed and this dynamic platform can be used to mimic 3D tumor motion by using three independent stepper-motor systems (Bipolar 48mm Stepper). Each of three independent stepper motors was connected to respective micro-controllers (1067 4 axis). The stepper bipolar controller) using USB cables. Each of the three stepper motors was coupled to a lead-ball screw (25mm Ball screw) in a slide assembly, thereby creating one dimension motion of the stage and the axes are named x (right-left), y (inferior-superior) and z (anterior-posterior). The x, y, and z axes are connected orthogonally in order to move a stage in three dimensions. A computer interface program was developed using Matlab (version 8.5) and this program was able to move the three axes independently for arbitrary breathing period and amplitude. The phantom reproducibility and accuracy was evaluated using Real-time position management (RPM) system (Varian Medical Systems, Palo Alto, CA) for various breathing patterns i.e. Sinusoidal, regular and realistic (volunteers) breathing motions. Results: The prototype system was able to hold up to 5 kg weight. Cross correlation coefficient between the phantom motions and RPM recorded motions was calculated. The correlation coefficients were 0.979, 0.989 and 0.955 respectively for sinusoidal, regular breathing and realistic respiratory waves. Conclusions: A robotic motion platform was developed in-house and the performance was evaluated using RPM system. Initial results were promising and the limitations of this phantom will be addressed in the full fledged phantom which is under development. Acknowledgement: The authors would like to acknowledge assistance received from the Department of Science & Technology, Grant No: DST/TSG/AMT/2015/326, Government of India.

Abstract Id: YUGP2185

A Prospective Trial Evaluating The Efficacy Of Early Recovery After Surgery (ERAS) Protocol In Gynaecologic Malignancy In Indian Setting
Presenter- Dr. Reshu Srivastava
Co-author - Reshu Agarwal, Anupama Rajanbabu, Gaurav Goel

Objective To investigate whether the implementation of enhanced recovery after surgery (ERAS) protocol (a multimodal perioperative care enhancement protocol) is associated with faster recovery and reduced length of hospital stay in patients undergoing complex gynecologic malignancy surgery as compared to conventional perioperative care. The secondary objective of the study was to compare the readmission rate and to compare the postoperative complication rate. Methods This is a prospective interventional trial conducted in the department of gynecology oncology in collaboration with the department of anesthesiology at the Amrita Institute of Medical Sciences, Kochi, Kerala. The ERAS protocol consisting of various preoperative, intraoperative and postoperative (until discharge) elements were implemented at Amrita Institute of Medical Sciences from March 2017 in patients undergoing laparotomy for diagnosed or suspected gynaecological malignancy. Some practices were established earlier and some new interventions like patient education, high complex carbohydrate diet 12 hours before surgery, carbohydrate loading clear liquid 2 hours before surgery, pre-emptive analgesia with gabapentin 1 hour before surgery, less use of opioid analgesics, goal directed intravenous fluid therapy, early mobilization, early removal of FoleyÂ’s catheter and early start of oral diet etc, were incorporated. End points measured were the length of hospital (LOH) stay, 30 days readmission rate, and surgery related complication rate. The length of hospital stay in the intervention period was compared with length of hospital stay of the patients undergoing laparotomy in the pre-intervention period. Results Overall the length of hospital stay significantly reduced from 5 (2-18) in the pre intervention period to 4 (2-7) in the intervention period (p

Abstract Id: YUGP2187

Indian Cancer Patientsâ€™ Satisfaction With Medical Consultations And Their Psychological Well-Being: A Quantitative Study
Presenter- Ms. Shweta Chawak
Co-author - Dr Mahati Chittem,

Background: Quantitative research in psycho-oncology shows that patient-physician relationship is associated with patient health outcomes. The studies have found a relationship between satisfaction with cancer communication and psychological well-being, compliance and adherence to treatment. The aim of the study was to examine the relationship between patient satisfaction with medical consultation and psychological well-being (quality of life, the locus of control, psychological distress) in Indian cancer patients. Method: One ninety-six patients undergoing cancer treatment at a hospital in Mumbai, India participated in the study. The participants answered questionnaires on quality of life, the locus of control, patient satisfaction with communication and psychological distress. Using Statistical Package for Social Sciences (SPSS) version 16.0, Pearson product-moment correlation was carried out to understand the association between the psychological variables. Further series of multiple regressions were carried out on the correlates of the subscales of medical interview satisfaction scale (distress relief, communication comfort, rapport and compliance intent). Results: Decreased distress relief was associated with improved functional well-being, decreased levels of anxiety, and an external locus of control (subscales of chance). Increased comfort with communication was related to improved functional well-being and external locus of control (subscale of doctor). Increased rapport was related to an internal locus of control and an external locus of control (subscales of chance). Finally, increased compliance intent was related to an external locus of control (subscales of doctor). Perceived relationship with the doctor was found to be the greatest significant predictor among distress relief, communication comfort and rapport subscales of patient satisfaction with cancer communication. Conclusion: The study highlights the importance of the relationship with the doctor on various aspects of patientâ€™s satisfaction with consultation like distress relief, communication comfort and rapport. The study implies the need to understand the role of the physician to enhance patient-physician relationship. Keywords: Psycho-oncology, Cancer Communication, Patient-physician relationship, Cancer experience.

Abstract Id: YUGP2189

A Prospective Study Evaluating The Efficacy Of Surgical Care Bundle In Reducing Surgical Site Infections In Laparotomies Performed For Gynaecological Malignancies
Presenter- Dr. Reshu Srivastava

Objective To evaluate and verify whether the implementation of surgical care bundle in reducing surgical site infections in patients undergoing surgery for gynecologic malignancies was effective. Methods: A prospective study conducted in our institute where patients undergoing surgery for gynecologic malignancies were taught how to protect the surgical site. The surgical care bundle was implemented in the study group. Results: The study group had a statistically lower rate of surgical site infections as compared to the control group. The difference was statistically significant (p < 0.01). Conclusion: The surgical care bundle is effective in reducing surgical site infections in patients undergoing surgery for gynecologic malignancies.
Abstracts

Co-author - Anupama Rajanbabu, Reshu Agarwal, Nataraj YS

Objectives To investigate whether implementing a care bundle, defined as a set of evidence-based practices performed collectively, can reduce 30-day surgical site infections in women undergoing laparotomy for gynecologic malignancies. Methods This is a prospective interventional trial conducted in the department of gynecology oncology. The surgical site infection reduction care bundle consisting of 14 processes throughout the surgical encounter, including preoperative, intraoperative, post-operative and post-discharge elements were implemented at Amrita Institute of Medical Sciences from January 2016. Some practices were established earlier and some new interventions like patient education, sterile closing tray and staff glove change for fascia and skin closure, dressing removal if present at 24 hours, etc., were incorporated. End points measured were the rate of Superficial SSI, Deep SSI, organ space SSI, length of hospital stay due to SSI and 30 day readmission rate. The infection rate in intervention period was compared with the infection rate of the patients undergoing laparotomy in the pre intervention period. Results Overall 30-day surgical site infection rate significantly reduced from 19.5% (43/220) in the pre-intervention period to 5.8% (6/104) in the intervention period (P<0.001).

Abstract Id: YUGP2193
Uterine Sarcomas - Correlation Between Histological Type And Outcome - A Retrospective Clinical Observational Study
Presenter - Dr. Shruthi Shivdas
Co-author - Rajashekar K, Bafna U D, Pallavi V R

Introduction Uterine Sarcomas constitute 1% of female genital tract tumors, and 3% of 7% of uterine neoplasms. Uterine sarcomas are rare tumors, with poor survival rates and no established adjuvant therapies. Because of the rarity of these tumors, treatment patterns have to be based on retrospective case series. The WHO has recently reclassified these heterogenous group of tumors. In accordance with the current classification of uterine sarcomas, we discuss our experience with uterine sarcomas at our institute over a period of 10 yrs from 2007 to 2017. Aim To evaluate clinical characteristics, histopathologic pattern and outcome of uterine sarcomas. Methods All histologically proven cases of uterine sarcoma (WHO 2014) who had presented to our institute between June 2007 to April 2017 were retrospectively analysed, and the outcome was correlated with histology. The main outcomes were Overall Survival (OS) and Event Free Survival (EFS). Results Majority of the patients presented with abnormal vaginal bleeding. 86% of patients received some form of adjuvant therapy following surgery. At a median follow up of 18.5 months (range 0.3 – 36 months), both the median three year EFS and OS were similar at 40%, the median survival being 25 months (95% CI 11.6-38.3). Overall survival was noted to be significantly influenced by histology, unlike event free survival. Conclusion Despite the drawbacks of small sample size and short follow up period, our study has shown the significant relation between histology and outcome. The study also validates the recent WHO 2014 reclassification of uterine sarcomas. The relatively dismal survival rates despite adjuvant chemotherapy, justifies the need for further research.

Abstract Id: YUGP2195
Hodgkin’s Lymphoma In Patients With Hiv/Aids: A Single Institution Experience
Presenter - Dr. DEEPAK KOPPAKA
Co-author - KUNTEGOWDAHAHILLI LAKSHMAIJA C, KANAKASETTE GOVIND B, LOKANATHA DASAPPA

ABSTRACT BACKGROUND Hodgkin’s Lymphoma constitutes one of the commonest Non-AIDS-defining malignancies. With the widespread use of HAART, there is a decreasing incidence of NHL and an increasing incidence of Hodgkin’s lymphoma worldwide. There is limited data pertaining to this entity from India. MATERIAL AND METHODS A retrospective analysis of all patients diagnosed with Hodgkin’s Lymphoma and having coexisting HIV/AIDS from the period of January 2013 to December 2016 was done in the Department of Medical Oncology. The clinical features, treatment, and outcomes of these patients were analyzed. RESULTS Eighteen patients with Hodgkin’s lymphoma with coexisting HIV/AIDS were analyzed in our study. The mean age of the study population was 40.5 years with males accounting for 72% and females 28%. The mean CD4 counts at the time of diagnosis of lymphoma were 217 cells/mm3. At presentation 83% patients had B symptoms, 67% had a Bulky disease and 50% had bone marrow involvement. Most patients had advanced disease at the time of presentation (61%) and all these patients had high-risk IPS score. ABVD (Doxorubicin, Vinblastine, Dacarbazine, Bleomycine) regimen was used in all except one patient who received COPP (Cyclophosphamide, Vincristine, Procarbazine, Prednisolone) regimen. After a median follow-up of 27 months 61% patients in the study population were alive and disease free. At the time of this analysis, the median overall survival, and progression-free survival was not reached. Three patients succumbed to febrile neutropenia during the course of chemotherapy. 2 patients had a primary refractory disease, one patient had late relapse 15 months after the treatment and one patient succumbed to complications of HIV/AIDS. GDP (Gemcitabine, Dexamethasone, Cisplatin) was the salvage regimen used in all patients and none received autologous stem cell transplantation. CONCLUSION Hodgkin’s Lymphoma in patients with HIV/AIDS presents commonly with advanced disease and with adverse features such as B symptoms, bulky disease, and extranodal involvement. Treatment outcomes are relatively poor compared to Hodgkin’s Lymphoma in general population. This may be attributed to the advanced disease at presentation and poor tolerance to treatment in patients with HIV/AIDS.

Abstract Id: YUGP2200
Estimation Of Plasma Epidermal Growth Factor Receptor (Egfr) Mutation Status And Its Correlation With Tumor Tissue Egfr Mutation Status In Advanced Non-Small Cell Lung Cancer (Nsclc) Patients
Presenter - Dr. VOONNA PRAVEENA
Co-author - Thiruvengadasamy Kannan, D.Bhargavi, P.V.G.K. Sarma

Background: Patients with NSCLC harboring activating EGFR mutations respond to treatment with EGFR tyrosine kinase inhibitors (TKIs). The aim of this study was to determine whether tumor tissue EGFR analysis can be replaced with plasma EGFR analysis to assess mutation status. Methods: We prospectively evaluated EGFR gene mutation status (exons 19, 20, and 21) in paired tissue and plasma from 68 advanced NSCLC patients (before starting anticancer treatment) during the period, May 2016 to May 2017 using Real Time based Amplification Refractory Mutation System-Polymerase Chain Reaction (ARMS-PCR) assay and Allele specific PCR techniques respectively. Concordance and discordance rates were assessed. Results: Among 68 NSCLC patients, PCR results were obtained in 62/68 (91%) of biopsies and all 68/68 (100%) plasma samples. EGFR mutations were identified in 14/62 (23%) biopsy samples and 27/68 (40%) plasma samples. Most common mutation identified in both tissue and plasma was exon 19 deletion. Both tissue and plasma EGFR mutations were more common in never smokers (P=0.04 and 0.02 respectively). The overall concordance of EGFR mutation status between tissue and plasma reached 66% (41/62) (Kappa coefficient: 0.24; P=0.038). The sensitivity, specificity, positive and negative predictive values of plasma EGFR detection were 64.3%, 66.7%, 36% and 86.5% respectively. Conclusions: EGFR gene mutation analysis of plasma is feasible with allele specific PCR assays with a high negative predictive value. It can be considered in frail patients not suitable for repeat biopsy when tissue material is not available. But further investigation is required to determine whether plasma sample can be considered for determining EGFR mutation status.
Abstract Id: YUGP2202
Optimising Perioperative Outcomes After Complete Cytoreductive Surgery And Hyperthermic Intraperitoneal Chemotherapy ( CRS+ Hipec) In A Tertiary Care Centre
Presenter- Dr. SEEMAN SINGH
Co-author - SEEMA SINGH, M.D.Ray, ASHUTOSH MISHRA

Optimising perioperative outcomes after COMPLETE Cytoreductive Surgery and Hyperthermic intraperitoneal chemotherapy (CRS+ HiPEC) in a tertiary care centre Seema Singh; M.D Ray; Ashutosh Mishra; S.V.S Deo; N.K. Shukla Abstract: Background: Complete Cytoreductive surgery (CRS) with hyperthermic intraperitoneal chemotherapy (HiPEC) has become the treatment of choice for resectable peritoneal carcinomatosis (PC). Morbidity associated with the procedure in perioperative period affect quality of life and also increased rates of complication questions the cost-effectiveness of the procedure, therefore selection of the patient and preoperative optimisation is warranted to improve outcome. We analyzed our cohort of patients and sharing our experiences. Methods: Fifty five, CRS and HiPEC procedures, performed in patients of intraperitoneal visceral malignancies with peritoneal involvement during the period 2015-8& 2017, were examined in prospective analysis. Type of primary, peritoneal cancer index (PCI), completeness of cytoreduction (CC), duration of hospitalization, postoperative morbidity, mortality were reviewed. Morbidities were graded according to Clavien Dindo classification. Results: All of the fifty five patients underwent CRS and HiPEC. The median age was 46 (range, 26-67) and 14.55 % male and 85.45 % female (F:M; 5:8.7). Majority (90.91 %) were Performance status (ECOG) and remaining were ECOG 2. Median PCI was 7.5 (5-21). Completeness of cytoreduction score of 0 and 1 (CC-0) was achieved in all patients with CC-0 in 90.09% and CC-1 in 9.09 % cases. The mean operating time for CRS was 186.91 min (range, 320-400) and for HiPEC was 50.54 min (range, 60- 90 ). Median intensive care unit (ICU) was 2 days (range, 1-8 days), and mean hospital stay was 7 days. Overall 30 day morbidity after repeated CRS and HiPEC was 21% where 5.32% patients developed Clavien Dindo major complication (IIb and IV). Nausea and vomiting was the most common post operative event in early post operative period; followed by paralytic ileus in 9.09%, other haematological complications like thrombocytopenia/neutropenia occurred in 5.45% on postoperative day 3 and 4 . Deep venous thrombosis developed in 10.09% and sub acute intestinal obstruction in 5.45% cases in late (21-30 days) post operative period. Most common cause of readmission was subacute intestinal obstruction (9.09%), which was managed conservatively. Median disease-free interval between first CRS and HiPEC and peritoneal recurrence was 17 months (range, 6&30). Median disease-free survival of 14 months (range, 5 &<; 23). After a median follow up of 5 months (range, 2- 25 ), all patients are alive with disease (n = 7) or disease free (n = 48) under chemotherapy. None of our patients required repeated CRS+ HiPEC in follow up period. Conclusions: In experienced centres, CRS and HiPEC can be performed with acceptable morbidities and perioperative and postoperative outcomes can further be improved by proper patient selection and quality care. Keywords: peritoneal carcinomatosis, PCI. Complete Cytoreductive surgery, HiPEC.

Abstract Id: YUGP2204
Dosimetric Effect Of Statistical Uncertainty On Monte Carlo Dose Calculation In Monaco Tps Volumetric Modulated Arc Therapy For Cervical Cancer
Presenter- Mr. Mohandass P
Co-author - D.Khanna, D.Manigandan, Midhun Kumar

Purpose: To study the dosimetric impact of statistical uncertainty (SU) per plan on Monte Carlo calculation in Monaco,$d$ TPS during volumetric modulated arc therapy (VMAT) for cervical cancer. Methods: Five cervical cancer patients treated with 50.4Gy/28fractions were chosen for the study. VMAT plans were generated with Monaco,$d$ treatment planning system (TPS-V5.10) for Elekta Synergy,$d$ linear accelerator with 1cm leaf width. Plans were generated using dual full arcs with 2% statistical uncertainty per plan. By keeping all other parameters constant, plans were recalculated only by varying the SU, 0.5, 1, 2, 3, 4, and 5%. For plan evaluation, conformity index (CI), Homogeneity index (HI) to planning target volume (PTV), dose coverage to PTV (D98%) was analyzed. Mean and max dose to organ at risk (OAR) was analyzed for bladder, rectum, left femur, right femur and bowel bag. The normal tissue volume receiving dose $>$50Gy & $>$10Gy and normal tissue integral dose (NTID) (patient volume-PTV), calculation time (mins), gamma pass rate (0.05). Dmax to PTV was increases as SU increases (P50Gy &10Gy and NTID (P>0.05). Decrease in dose calculation time was observed with increase of SU (P0.05). Conclusion: For cervical cancer VMAT plans, SU can be accepted up to 3% per plan with reduced calculation time without compromising target coverage, OAR doses and plan delivery by accepting variations in point dose and inhomogeneous dose within target. There is no significant dose difference in calculation reproducibility and independent of photon energy.

Abstract Id: YUGP2206
Communication Of Prognostic Disclosure Vs Non-Disclosure Among Advanced Terminally Ill Cancer Patients A Physicians Perspective In India- Hyderabad Sravanthi Maya & Mahati Chittem
Presenter- Ms. Sravanthi Maya
Co-author - Dr. Mahati Chittem.

Background: Prognostic disclosure has emerged as a recent concern demanding increased involvement from the patient’s in the medical decision making process. Research states that there is high informational need amongst the patients in advanced stages of illness wherein information is either misunderstood or misinterpreted affecting the quality of life and care being provided to the patient. But in Asian countries, the model of family-centered decision making at times overpowers even the physician’s idea of patient autonomy. The aim of the study was to understand the experiences, perceptions of cancer, the process of communication and its impact from the physicians’ perspectives. Method: Twenty-six physicians (oncologists- medical, radiation, surgical, palliative) working in four hospitals across the city of Hyderabad were recruited for the study. Semi-structured interviews were conducted to understand the oncologist’s perceptions about prognostic disclosure vs non-disclosure among advance staged cancer patients. The interviews were transcribed and analysed using Interpretative Phenomenological Analysis (IPA). Results: The themes that emerged through the analysis were (i) Communication regarding disclosure of information (how to communicate, what to communicate, when to communicate, why to communicate, step by step communication); (ii) Role of family (family enforced-patient centered-doctor led communication, dependency on the physician); (iii) Barriers in communication (physician environment, physician role, caregivers role, other factors, reasons for non-adherence); (iv) Strategies in communication (uncertainty, need for support groups, gaps in communication, selective disclosure of prognosis); (v) Hospital settings (government vs private, non-availability of resources, need for specialized teams). Conclusion: The study indicates that physicians emphasise the need for prognostic disclosure, however, there were significant barriers in communication such as (patients, caregivers€™s and hospital environments). These barriers resulted in either selective or partial disclosure of prognosis to the patient. The study implies a need for the multimodal team and involving patients equally in the medical decision-making process. Keywords: Physician (Oncologist’s); Prognostic disclosure vs Non-disclosure, Psycho-oncology, Family-centered model.
Abstracts

Abstract Id: YUGP2210
Radiotherapy For Early Stage Endometrial Cancer, A Review Of Literature
Presenter - *Dr. Kartika Erda Brohet*
Co-author - Irwan Ramli, ,

Endometrial cancer is one of the most common gynecological malignancy in the world, and second most common in Indonesia. Most patients with endometrial cancer were diagnosed in early stages (I-II), so they were mostly treated with surgery. Choosing the best adjuvant therapy may improve local control, minimize toxicity, and must be reviewed case per case according to patient’s™ stadium and risk factors. Due to this condition, knowledge regarding basic principles of therapy and its technique will be reviewed in this paper, with its main focus in radiotherapy.

Abstract Id: YUGP2214
Effect Of Concurrent Chemoradiation On Serum Electrolytes In Carcinoma Cervix Patients: A Retrospective Analysis
Presenter - *Dr. LITHIKA LAVANYA M*
Co-author - DR MOHAN KUMAR S, DR JANAKI M G, DR ARUL POONI

Background: Cervical Cancer is the 3rd most common malignancy in women worldwide. Concurrent chemoradiation forms the main modality of treatment in locally advanced carcinoma cervix. Patients may experience symptoms like fatigue, dehydration and disorientation which may be attributed to treatment induced dyselectrolytemia. In our study, we analysed the serum electrolyte levels in patients undergoing concurrent chemoradiation at our institute. Objective:

1. To determine the effect of concurrent chemoradiation on serum electrolytes (sodium, potassium and chloride). Materials And Methods: Inclusion Criteria: Twenty five patients of Carcinoma Cervix receiving concurrent chemoradiation. Exclusion Criteria: 1. Patients who have previously been treated with chemotherapy or radiotherapy. 2. Patients with renal failure/ hepatic failure/ poor cardiac function/ sensorineural hearing loss 3. Patients taking loop diuretic. Serum electrolytes levels of 25 patients that was measured before weekly chemotherapy was retrospectively analysed and changes in their levels was recorded. Results: There was a significant change in levels of serum sodium and chloride from first to fourth cycle with p value of 0.019 and 0.001 respectively. Serum potassium also showed a change but not significant (p=.884). Conclusion: Careful watch on serum electrolytes level can reduce unforeseen prolongation in treatment time and can reduce the treatment related morbidity. Attention should paid to all electrolytes equally and corrected at the earliest.

Abstract Id: YUGP2215
Cytotoxic Potential Of The Pigment Produced By Streptomyces Sp. Jua14 On Human Cancer Cell Lines
Presenter - *Mr. Bharath P G*
Co-author - Dr. Varalakshmi K N, ,

Cancer refers to one of a large number of diseases characterized by the development of abnormal cells that divide uncontrollably and have the ability to infiltrate and destroy normal body tissue. According to the American Cancer Society, about 1,500 Americans die from cancer every day, the second leading cause of death in the United States. It is estimated that by the year 2020 there will be twenty million new cancer patients per year (American Cancer Society, Inc., Surveillance Research, 2014). On a worldwide scale, cancer causes seven million deaths per year (World Health Organization) Fighting cancer is considered one of the most important areas of research in medicine and immunology. Chemotherapy is one of the potent treatments for prolonging the patient’s™ life. Almost 60% of anticancer drugs are of natural origin. A new direction in cancer treatment has arisen, devoted to the adjuvant use of natural bioactive compounds such as bacterial pigments in conventional chemotherapy. This kind of research is gaining more attention (Lu et al, 2004). In particular, Actinomycetes can be used not only as strong immunoeffectuals but also as a source of potent metabolites, capable of penetrating cell membranes and interfering with particular signal transduction pathway linked to processes such as inflammation, cell differentiation and survival, carcinogenesis, and metastasis (Rocha et al, 2001) Streptomyces sp. producing a yellow pigment was isolated from the soil samples of Madikeri region of Karnataka, India. This was found to be an aerobic, Gram stain positive and filamentous Actinobacteria. In this current study, in vitro anticancer activity of the pigment extracted from Streptomyces sp. on cancer cell lines (HeLa, HepG2 and MCF 7) was analysed. The metabolites were separated by TLC and screening for their cytotoxic potential was carried out through 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl tetrazolium bromide (MTT) assay and Trypan blue assays. The study showed a significant decrease in the viability of the cancer cells to about 50 percent or less. The Presence of apoptotic bodies were observed and confirmed through direct microscopic observation, DNA fragmentation analysis, LDH activity and Caspase enzyme activity assay. The compound exhibiting anticancer property was also found to be harmless to normal human lymphocytes. Future studies can be focused on to identify the active component involved.

Abstract Id: YUGP2218
Introduction Of Robotic Surgery In A Regional Cancer Centre: A Prospective Comparison Study Of Robotic And Open Colorectal Resection For Tumours
Presenter - *Dr. Ankit Verma*
Co-author - , ,

AIM: To compare robotic surgery and open surgery for colorectal cancers in terms of short term outcomes and for intraoperative parameters. METHODS: Prospective comparative study. RESULTS: Between December 2016 and June 2017, 73Â patients with colon and rectal adenocarcinoma were enrolled into the study, 38 patients underwent Open and 35 underwent Robotic procedure. The groups were comparable in terms of demographics and type of procedure. The Robotic surgery took significantly longer in the operating room than the Open (222 vs. 141 min, p < 0.001). The rate of major complications was similar for both (5.3 vs. 9.8%, p = 0.454). Wound infections were less frequent in the Robotic group (10.5 vs. 29.3%, p = 0.039). The mean hospital stay was 1 day shorter in the minimally Invasive group (5.7 vs. 6.7 days, p = 0.176). The lymph nodes harvested was comparable (14.7 Robotic vs. 15.5 Open, p = 0.596). CONCLUSION: This study confirmed that the naive robotic surgical team can still safely introduce robotic surgery into their colorectal practice. When compared to the open approach, the robotic approach reduces hospital stay, blood loss as well as the rate of surgical site infection.

Abstract Id: YUGP2220
A Single Institutional Retrospective Audit To Analyze The Factors Affecting Clinical Outcomes In Patients Of T(1-2) N(0-1) Squamous Cell Carcinoma Of The Oral Tongue Who Underwent Surgery With Or Without Post-Operative Radiotherapy
Presenter - *Dr. Praloy Basu*
Co-author - Dr. Praloy Basu, Dr. Upasana Mukherjee, Dr. Poulami Basu

Background- This single institutional retrospective study aims to assess the results of curative surgery with and without post-operative radiotherapy in patients with T(1-2) N(0-1) squamous cell carcinoma of anterior 2/3rd of the tongue and to evaluate the factors affecting survival in such cases. Methods- Retrospective analysis of 79 cases of
T(1-2) N(0-1) squamous cell carcinoma of anterior 2/3rd of the tongue who presented at the Department of Radiotherapy, Medical College and Hospital, Kolkata between January 2012 and December 2014. Patient characteristics, tumor characteristics, treatment modality and survival patterns were analysed. Statistical analysis was done using IBM SPSS Version 23. Results- The two year disease free survival rate was 77.2 %. High grade histology and depth of invasion more than 8 mm were significant prognostic factors affecting DFS (p

Abstract Id: YUGP2228

Posterior Reversible Encephalopathy Syndrome (Pres): A Rare Complication Of Primary Intestinal Diffuse Large B Cell Lymphoma (Dblcbl)

Presenter- *Dr. Velukuru Sai vivek*
Co-author - Dr. Manjunath.N, Dr. Shashidhar.V.K, Dr. Prachikala

Introduction: Gastrointestinal tract is the most common extra nodal site involved by lymphoma accounting for 5-20% of all cases. Primary intestinal lymphoma (PGIL) accounts for only 1-4 % of all gastric malignancies and small intestinal lymphomas constitute 20-20% of them. DLBCL is the most common pathological variety and its most common complications are intestinal perforation and obstruction, which necessitate immediate surgery. We are here reporting a case of primary small intestinal DLBCL, which was complicated by PRES. Case report: A 16 year old female presented with complaints of abdominal pain associated with b symptoms for the past 3 months. Ultrasonography from an outside hospital showed a large exophytic mass of 15 x 10 cm from the rectosigmoid wall of colon. While awaiting the biopsy of the abdomino-pelvic mass IHC report and staging investigations patient had developed intractable vomiting which was not controlled with conventional antiemetics and as the preliminary biopsy report was suggestive a lymphoproliferative disorder patient was initiated on dexamethasone. 24 hours after initiation of steroids patient had large quantity of melena resulting in drop of hemoglobin by 3 g/dl and went into a delirious state which needed Intensive care admission and ventilator support. Interestingly through out this episode the patientâ€™s blood pressure and heart rate were within the normal levels. Emergency CT angiography of the abdomen showed intraluminal hemorrhage from a branch of the superior mesenteric artery and CT brain was suggestive of diffuse white matter changes in the posterior cortex similar to the findings seen in PRES. Embolization of the vessel was done which controlled the bleed and with in a span of 48 hours patient regained her consciousness and CT brain done after 7 days showed near total resolution of the cerebral changes and patient does not have any residual neurological complaints at present. CONCLUSION: PRES is a reversible clinical and radiological syndrome, which is usually seen in a variety of conditions mainly acute hypertension and eclampsia. The occurrence of hemorrhage in an intestinal lymphoma has been reported in the past but it leading to a reversible encephalopathy has not been reported in the past and should be kept in mind while treating a case of any acute bleed.

Abstract Id: YUGP2232

Male Breast Cancer: Experience Of Tertiary Oncology Center In India

Presenter- *Dr. Velukuru Sai vivek*
Co-author - Dr. Shashidhar.V.K, Dr. Manjunath.N, Dr. Veerandra.A

Introduction: Male breast cancer is so rare that it represents less than 1 % of all breast cancers and about 1 % of all cancers that occur in men. In men breast cancer has been shown to present at an advanced stage and carries a poorer prognosis. This is a retrospective study to collect the clinical, pathological and survival data of this rare entity among the patients who presented to center. Material and methods: In this retrospective analysis we analyzed all the male breast cancer patients case records who presented to us in the last 5 years -2012-2016 Results: Among all the 6 patients who presented to us the median age of presentation was found to be 67 years, the mode of presentation was self detection of a breast lump in all the 6 patients (100%), the lump was associated with pain in 3 of the patients and none of them had nipple discharge or retraction. 5 out of the 6 patients had stage 3 disease and underwent Modified radical mastectomy (MRM) and were found to have Infiltrating ductal carcinoma with N1 nodal status. 4 out the 6 patients had triple positive receptor status. 3 out of the 5 patients who underwent MRM received adjuvant chemotherapy with 4 cycles of Adriamycin and Cyclophosphamide followed by 4 cycles of Paclitaxel. 1 patient received 6 cycles of FEC and the other received 6 cycles of CMF based chemotherapy. All the 5 patients are on hormonal treatment as today and are healthy. 1 patient has defaulted on follow up after the initial surgery. Conclusion: The clinical and pathological characteristics of the male breast cancer patients in terms of incidence, age, mode of presentation, stage, pathology and receptor status co-related with the characteristics seen at other centers. This rare cancer needs large sample metacentic studies to understand better the biology and survival rates.

Abstract Id: YUGP2234

Alterations In Serum Lipid Profile Patterns In Head & Neck Cancer And Oral Submucous Fibrosis Patients

Presenter- *Dr. Ankit Verma*
Co-author - ,

Background: The changes in lipid profile have long been associated with cancer because lipids play a key role in maintenance of cell integrity. The present study evaluated alterations in serum lipid profile patterns in head & neck cancer and oral submucous fibrosis patients as well as the changes seen in their different stages. Materials & methods: A total of 95 subjects who were clinically diagnosed as patients of Head & Neck cancer and Oral Submucous Fibrosis & age and sex matched healthy controls were studied in the Oral Oncology Department of Kidwai Memorial Institute of Oncology,Bangalore from December 2016 to May 2017. The lipid profile values including (i) Serum Cholesterol, (ii) Low Density Lipoprotein Cholesterol, (iii) High Density Lipoprotein Cholesterol, (iv) Very Low Density Lipoprotein Cholesterol, (v) Serum Triglyceride were estimated. Also the lipid profile values in TNM (primary tumor, regional lymph node, distant metastasis) staging in Head & Neck cancer patients & functional staging of Oral Submucous Fibrosis patients were also estimated. These values were subjected for statistical analysis. Results: Mean lipid levels were found to be maximum in oral cancer patients for all the parameters except S.HDL. For all the variables except S.LDL, minimum values were observed in oral submucous fibrosis patients. For serum LDL minimum values were observed in control group. Conclusion: Our study found a direct relationship between lipid profile & cancer patients & an inverse relationship between lipid profile & oral submucous fibrosis patients. The findings strongly warrant an in depth study of alterations in serum lipid profile patterns in head & neck cancer & oral submucous fibrosis patients.

Abstract Id: YUGP2236

Spindle Cell Neoplasm Of Broad Ligament : A Rare Case Report

Presenter- *Dr. Pradeep Tanwar*
Co-author - Dr. Suresh Singh, Dr. Pinakin Patel, Dr. Jyoti Sharma

Objective- To present a rare case of Spindle cell neoplasm (leiomyoma) of broadligament. Clinical presentation and intervention- A 58 year old, postmenopausal woman presented with complaints of lump & pain abdomen for 6 months. It was diagnosed clinically as pelvic mass and radiologically as malignant tubo-ovarian mass. The patient was operated and a right sided broad ligament tumor was detected. Total abdominal hysterectomy & B/L salpingo-opherectomy with excision of broad ligament tumor was done. On histopathology, the tumor was diagnosed as spindle cell neoplasm and on marker
study it was found to be a leiomyoma of broad ligament. Conclusion: Leiomyoma of broad ligament is a rare entity and it should always be kept as differential diagnosis of adnexal tumors.

Abstract Id: YUGP2242
Gastro-Intestinal Melanomas - Are They Really Rare?
Presenter- Dr. VIJAY PRATAP SINGH
Co-author - , ,

Mucosal melanomas comprise of only 5% of Melanomas. Gastro-intestinal melanomas form a very small part of these Mucosal melanomas. Thus the GI melanomas are not found very often. However, we present a series of 6 cases of GI and Anal canal melanomas that we encountered in last 18 months at a tertiary care Armed Forces Hospital in Eastern India. Interestingly, our clientele includes a pan - India population with no regional bias or environmental factor.

Abstract Id: YUGP2244
In-Silico Analysis Of Pot1-Tpp1 Interaction In Cancers
Presenter- Ms. Ankita Sarmah
Co-author - Mohana Priya J, Dr. Trupti N Patel,

Protection of Telomeres 1 (POT1) is a significant protein of the Shelterin complex found in the telomeric region of chromosomes. It inhibits DNA repair machinery from recognizing the telomeres by binding to telomeric ssDNA and associating with the TPP1 protein of Shelterin complex. C-terminal mutations in POT1 can affect its interaction with TPP1. The main aim of this study is to screen for the highly deleterious mutations of POT1 using in-silico tools that are associated with various cancers, some of which have not been previously studied. P357S has been found to cause thyroid cancer; H437P, V439G, F566C cause malignant melanoma; G534C causes carcinoma of the large intestine. We further performed a comparative docking analysis of the mutated POT1 and native TPP1 through PatchDock, ClusPro and Hex docking software. We found that C591W, M587T and V439G showed significantly lower binding scores than the native while H437P, G534C and P475L showed marginally low binding scores and the rest displayed binding energies almost similar to that of the native POT1-TPP1 structures. Molecular Dynamics (MD) Simulation of mutated POT1 and TPP1 having significantly lower scores gives a new insight in understanding the consequences of the erroneous interactions that will provide an impetus to further research.

Abstract Id: YUGP2246
Exploring The Role Of Organochlorine Pesticides In Breast Fibroadenoma Causation: A Pilot Case Control Study
Presenter- Dr. Sugandha Arya
Co-author - Dr. Pankaj Kumar Garg, Dr. Sanjay Gupta,

Introduction Fibroadenomas are the most common benign tumors of the breast. They are usually seen in women of reproductive age group and present as painless, well defined, firm and mobile tumors. Unopposed action of estrogens increases the risk of fibroadenoma due to expression of estrogen receptor beta by the stromal cells of fibroadenoma. The present study was designed to assess the role of xenosterogetic organochlorine pesticides (OCPs) in the causation of breast fibroadenoma. Method The study included 20 histopathologically proven patients of breast fibroadenoma (cases) and 20 age and gender matched healthy volunteers (controls). The serum levels of eleven organochlorine pesticides â€“ Hexachlorohexane (HCH); ?-HCH, ?-HCH, ?-HCH and total HCH, Dieldrin, Endosulfan: Endosulfan I, Endosulfan II, DDT and its metabolites - p,p'-DDT, p,p'-DDE, p,p'â€“DDD and Heptachlor were determined in all subjects estimated by Gas chromatography equipped with electron capture detector. Polymorphic variations in OCP metabolising genes GST T1 and GST M1 was determined by PCR. Result The two groups were comparable with respect to age (mean age of fibroadenoma patients was 21.28 vs mean age of controls was 21.36 with p=0.907). There were significantly higher serum levels of organochlorine pesticides in patients with breast fibroadenoma as compared to controls - a-HCH (5.543 vs 4.126, p=0.001) ?-HCH (4.938 vs 3.940, p=0.008 ), total HCH (13.335 vs 11.633, p=0.001), DDT (5.982 vs 3.987, p=0.001), DDD (3.510 vs 1.521, p=0.001), Endosulfan I (5.280 vs 3.290, p=0.001) and Endosulfan II (2.563 vs 1.877, p=0.003). Also, significantly higher numbers of fibroadenoma patients were found to be having GST T1 null genotype as compared to controls. Conclusion The present study suggests that the organochlorine pesticides may play a role in the causation of breast fibroadenoma facilitated by nonfunctional metabolizing genes as GST T1. Further studies with larger sample size are warranted to further analyze the role of Organochlorine pesticides in the pathogenesis of fibroadenoma breast, especially in agrarian countries where these pesticides are commonly used.

Abstract Id: YUGP2249
Malignant Solitary Fibrous Tumour With Chest Wall Invasion-A Rare Presentation And A Surgical Challenge!
Presenter- Dr. Itisha Chaudhary
Co-author - Dr Durgatosh Pandey, Dr Neellesh Jain,

Solitary Fibrous Tumour of the pleura are rare and unique tumours with the malignant variety being rarer, constituting 15-30% of all the cases. The Solitary Fibrous Tumours originating from the visceral pleura are more common than those arising from the parietal pleura (~20%) and chest wall invasion has been reported in less than 5% of all the reported cases. We here present a case, of a 64 year old gentleman who had two huge Solitary Fibrous tumour, size 10 x 9 x 8cms and 15 x10 x 9.5cms originating separately from the parietal pleura and occupying almost the whole of left hemithorax.It was invading into the chest wall, with the upper tumour involving the 3rd to 5th rib posteriorly and the transverse process of the 3rd and 4th dorsal vertebra and the lower tumour involving the 6th and 7th rib. Left Pneumonectomy with Chest wall Resection from 3rd to 7th rib posterolaterally and Mesh reconstruction was done after thorough pre-operative preparation. Histopathological evaluation and Immunohistochemistry study reported it as Malignant Solitary Fibrous Tumour-FNCLCC Grade II. The patient underwent post-operative Radiation Therapy in view high risk status according to the risk stratification modeland is under regular follow-up. Keywords: Solitary Fibrous Tumour, Malignant, Parietal pleura, Chest wall Invasion.

Abstract Id: YUGP2250
Comparative Study Of Er, Pr Status In Pre And Post Menopausal Breast Cancer Patients.
Presenter- Prof. Raj Govind Sharma
Co-author - Dr Jitendra Singh, Dr Suresh Singh, Dr Pinakin Patel

“INTRODUCTION: In Carcinoma Breast ER,PR and Her2neu are established prognostic factors and predict chemotherapy response & resistance. In our study we have assessed the ER, PR and Her2neu receptor positivity to find the association of Menopausal status with receptor status. MATERIAL AND METHODS: A prospective study was conducted in Dept. Of Surgical Oncology, S M S Medical College and Hospital Jaipur from Feb. 2015 to Dec. 2016. All the patients with Biopsy proven Carcinoma Breast were included. Patients were categorized into Pre and Postmenopausal groups. A total of 500 cases were included in the study with 250 in each Pre and Post memopausal group. Both the groups were compared for receptors status along with Histopathological features such as tumor size, lymphnode involvement, grade, LVI and PNI. Appropriate statistical tests were applied for analysis. RESULTS: Five hundred cases of breast Cancer were included in the study. Mean age of
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presentation was 47.1. Left side (51.8%) Cancer Breast was more as compared to right side. Postmenopausal females presented with higher Mamographic BIRADS grade. There was no difference in Lymph nodal involvement in both the groups. Maximum number of cases reported in stage IIIA thereby signifying delay. LVE was associated with tumour size in both the groups. Perineural invasion had significant association with Menopausal status but not with hormone receptors. Cases of locally advanced Breast Cancer were more in Post menopausal women 13.6% as compared to 7.2% in the other group,. Triple negative cases were more in Postmenopausal 27.2% as compared to 15.2% in Premenopausal. Hormone receptor status showed more positivity among Premenopausal group. Both ER 58% and PR 51.2% positivity was more in Premenopausal females. Her2/neu overexpression was more in Premenopausal 55.6% as compared to 32.8% in Postmenopausal. Hormonal receptor showed no association with Her2/neu in both the groups. CONCLUSIONS: Assessment of ER, PR and Her 2/neu overexpression has become important in Breast cancer as it has an impact on prognosis and determines the treatment modalities.

Abstract Id: YUGP2252
Predictive Factors For Pathological Complete Response In Carcinoma Thoracic Esophagus
Presenter- Dr. Ruparna Khurana
Co-author - S K Sharma, Anjali Pahuja, Swarupa Mitra

Introduction: Neoadjuvant chemoradiation followed by surgery has evolved as the Positron Emission Tomographyâ€“Computed Tomography (PET-CT) is increasingly being used for radiological response assessment and prediction of pathological response. Pathological complete response (pCR) to neoadjuvant therapy has been shown in various trials to be a surrogate marker for locoregional control and survival. Aim: To evaluate the predictive and prognostic factors for pathological complete response in carcinoma esophagus Methods: All consecutive patients of carcinoma thoracic esophagus attending the Radiology and Oncology OPD between December 2013 and December 2014 for preoperative chemoradiation followed by surgery; were selected for the study. They were prospectively analysed for basic socio-demographic data, patient and treatment related characteristics, response to therapy and survival parameters. All included patients underwent preoperative chemoradiation followed by radiological response evaluation with PET-CT followed by surgical resection. A total disappearance of all target lesions was taken as complete radiological response and a reduction of at least 30% in the maximum standardized uptake (SUVmax) value in the target lesions was taken as partial radiological response (Perist Version_1.0). Subsequently pathological response was assessed with histopathological examination using CAP criteria. Multiple univariate and multivariate analyses were done to establish significant factors associated with complete pathological response. Results: Fifty consecutive patients of carcinoma thoracic esophagus were prospectively recruited and analysed. More than half (52%) were females; with a median age at diagnosis of 55 years (Range: 35 â€“ 71 yrs); mean tumour length on PET-CT was 5.9 cm and mid thoracic esophagus was the most common site of involvement, accounting for 68% of all cases. Squamous Cell Carcinoma was the most common histology accounting for 96% of all cases. Radiological complete response and pathological complete response were seen in 49% and 31% of all patients respectively. On univariate analysis gender (p = 0.02), ECOG (Eastern Cooperative Oncology Group) performance status at presentation, percentage drop in SUVmax (p = 0.01), chemotherapy regimen used and radiological complete response (p = 0.02) emerged as statistically significant factors of pathological complete response. However on multivariate analysis none of the factors reached significant values. Conclusion: One of the significant markers of complete pathological response is radiological response which is achieved in a fair number of patients. There is a significant association between the radiological and pathological response. Overall, complete pathological response can be predicted reasonably well by using PET-CT. Further research with bigger datasets is required to establish the association and institute PET-CT as an integral component of management protocol in Carcinoma Esophagus.

Abstract Id: YUGP2256
Transitional Cell Carcinoma In Ovarian Mature Cystic Teratoma â€“ A Case Report
Presenter- Dr. Khrutsozo Kikki
Co-author - Dr Flowerlit Thomas, ,

Introduction: Mature cystic teratoma is one of the common benign ovarian tumors in reproductive â€“ age women. Most MCTs are benign, and are typically treated by laparoscopic gynecologic surgery. However, malignant transformation has been reported in 0.17% to 3% of cases [1,2,3,4]. 80% of the malignancy occurring in MCTs are squamous cell carcinoma. Other commonly seen histologies are adenocarcinoma and carcinoid tumors.[ 5]. Urothelial carcinoma (UC) or transitional cell carcinoma is extremely rare in MCT with malignant transformation.[6]. Here we report a case of 53 year old postmenopausal women with an incidental finding of UC in a large right ovarian MCT which was accidentally ruptured during surgery. CASE REPORT A 53 year old postmenopausal women visited Government Medical College, Kottayam with complaints of abdominal distension and increased frequency of micturition since one year. Ultrasonogram of the abdomen and pelvis revealed a complex cyst of right ovary measuring 10.5x8.5 cm with hyperechoic areas, internal echoes and hyperechoic lines, suggesting a teratoma. Other pelvic organs were normal. While trying to remove the large ovarian cyst, it ruptured releasing mucoid material admixed with hair into the abdominal cavity. Staging laparotomy has been done along with a thorough peritoneal lavage. Grossly, the cystically enlarged right ovary was measuring 11x11x1.5cm, with a defect through which hair was protruding. There was sebaceous material and hair inside cavity and the cyst wall shows a protuberance of 5x2 cm size and a papillary excrescence adjacent to it measuring 1.5x1.5x1cm. Microscopically, section from the papillary excrescence revealed a neoplasm composed of cells arranged in papillary pattern and in sheets. Individual cells are polygonal oval or transitional with moderate to abundant cytoplasm, round or oval nuclei some with vesicular nuclei with prominent nucleoli and some show hyperchromatic nuclei. There was a small focus of invasion into the ovarian stroma. Figure showing transitional cell carcinoma with invasion Figure showing keratin pearl with teratomatous component 6 weeks after surgery, patient was referred to the Department of Oncology in the same institution. Patient was treated with Taxane based chemotherapy for a total of six cycles, in view of the surgical spillage. After 2 years, patient is still on follow up without any problem. DISCUSSION UC in MCT is very rare, and only 5 cases has been reported yet. None of them had residual disease after surgery and only one patient was treated with chemotherapy.[7] Due to the rarity of UC arising in MCT, there is no consensus regarding treatment and prognostic factors. It is important to differentiate UC arising in MCT from primary transitional cell carcinoma of the ovary (TCC-O). When UC is found in MCT, it is important to evaluate the origin of the carcinoma cells, whether the tumor is combined MCT and TCC-O or UC arising in MCT. To avoid an erroneous diagnosis, urinary tract examinations are required, and the possibility of metastatic UC should be excluded. 1. Disaia P, Creasman W. Germ cellstromal and other ovarian tumours. In: Disaia P, Creasman W, editors. Clinical gynaecological oncology. St Louis (MO): Mosby; 1997. pp. 351â€“371. 2. Sagae S, Kudo R. Surgery for germ cell tumins. Semin Surg Oncol. 2000;19:76â€“81. [PubMed] 3. Curling OM, Potsides PN, Hudson CN. Malignant change in benign cystic teratoma of the ovary. Br J Obstet Gynaecol. 1979;86:399â€“402. [PubMed] 4. Caspi B, Lerner-Geva L, Dahan M, Chetrit A, Modan B, Hagay Z, et al. A possible genetic factor in the pathogenesis of ovarian dermoid cysts. Gynecol Obstet Invest. 2003;56:203â€“206. [PubMed] 5. Kido A,
Abstract Id: YUGP2258

Novel, Biodegradable, Non-Iodinated Radiopaque Microbeads For Transarterial Radioembolization (TARE) Of Liver Tumors

Presenter - Dr. Vijay Harish Somasundaram
Co-author - Anusha Ashokan, Srikanth Murthy, Unni Ayalur Kodakara Kochugovindan

Purpose: Transarterial radioembolization (TARE) using the presently available non-biodegradable microbeads does not allow for retreatment of residual or recurrent tumors once their radioactivity has decayed. Further, exact location of the microbeads during the procedure and at follow up is essentially unknown and only indirectly indicated by the lack of contrast flow during an angiogram. We have developed and characterized, biodegradable ceramic microbeads with inherent X-ray attenuation properties and which can also be radiolabeled with 188Rhenium (a beta-particle emitter). Characteristics and potential application of these microbeads have been demonstrated in vitro and in vivo (animal models). Materials & Methods: Ceramic microbeads prepared using electrospraying technique. GE 8-slice CT scanner used to optimize X-ray attenuation offered by the microbeads in vitro and in vivo. Toxicity tested in vitro in peripheral blood mononuclear cells (PBMCs), in vivo in Sprague Dawley (SD) rats and New Zealand White rabbits. Biodegradation evaluated in vitro & in vivo. Radiolabeling of microbeads with 99mTechnetium (which has similar chemical properties as 188Rhenium but relatively safer to handle) was optimized using Capintec gamma counter. In vivo arterial embolization of microbeads studied in rabbit and pig models under GE OEC-9800 C-arm. Results: Ceramic microbeads of size ranges: 80-150μm, 200-300μm, 300-500μm and 500-800μm prepared, which had uniform X-ray attenuation on imaging. Material was non-toxic to PBMCs at concentration >250μm/ml and was well tolerated by SD rats at dose >50mg/kg. Both in vitro and in vivo, microbeads begin to degrade by 2 months and near completely degrade at 3 months.

Abstract Id: YUGP2262

A Prospective Study Of Concurrent Chemotherapy (Cisplatin, 5-Flourouracil) And Hyperfractionated Radiotherapy For The Treatment Of Locally Advanced Squamous Cell Carcinoma Of Cervix.

Presenter - Dr. Pragya Singh
Co-author - Dr. Surabhi Gupta, Dr. Pradeep K Natraj, Dr. Laxman Pandey

Aim: The aim of the study is to see the feasibility of hyperfractionated radiotherapy with concurrent chemotherapy in treatment of locally advanced carcinoma cervix and to evaluate the result in terms of loco-regional control, acute & late complications and pattern of failure. Material and methods: This study was designed to administer twice-daily radiation doses of 1.2 Gy/fraction to whole pelvis by two field/ four-field technique at 6 hours intervals, 5 days per week. Radiotherapy was delivered through Theratron Phoenix Cobalt 60 Teletherapy machine. Chemotherapy was given in week 1 and 5 of radiotherapy. Cisplatin was given on day 1 of the first week of pelvic external radiation at a dose of 50 mg/m2 before radiotherapy. The 5-flourouracil (5-FU) was initiated after the cisplatin at a dose of 750 mg/m2/day as a continuous intravenous infusion for 5 days. This same regimen was repeated during the last week of the external radiation.

Result: 11 patient with squamous cell carcinoma of the cervix (stage IB,II,III,IVA) were treated with concomitant chemotherapy and hyperfractionated radiation therapy. Radiotherapy was completed by 82% (9 of 11) and defaulted by two patient. Completed response was observed in 98% (8 of 9) and partial response was seen in 11% (1 of 9) patient at the end of completion of external beam radiotherapy. Upper gastrointestinal toxicity in the form of nausea and vomiting was observed, grade 1 in 33% and grade 2 in 66%. Lower gastrointestinal toxicity of grade 1 developed in 22% patient, grade 2 in 66% cases and one patient experienced grade 3 toxicity after completion of treatment which was managed conservatively. Haematological toxicity developed up to grade 2 which was manageable. Since this study is still in progress few patient are in process of receiving brachytherapy and rest in regular follow up. Conclusion: Combination of hyperfractionated radiation therapy with chemotherapy resulted in promising local control of locally advanced cervical cancer, with an acceptable complication rate. Key words:Cisplatin,5-Flourouracil, locally advanced, hyperfractionation, squamous cell carcinoma

Abstract Id: YUGP2264

Relapse Of Tobacco Related Habits In Patients Treated For Head And Neck Cancer: A Prospective Cross Sectional Study Relapse Of Tobacco Related Habits In Patients Treated For Head And Neck Cancer: A Prospective Cross Sectional Study

Presenter - Dr. Naresh Jangir
Co-author - Dr.Akash singh

Background: Tobacco related head neck cancers are known to recur or develop second primary cancers especially in patients continuing the habit. While studies suggest a relapse rate of approximately 30%, no such data is available in the Indian context. Material and Methods: Objectives: 1. To quantify relapse rate in patients treated for tobacco related head neck cancers 2. To determine predictors of relapse Methodology: Patients on follow up after treatment of tobacco related head neck cancers (oral and laryngopharyngeal squamous cell carcinoma) in a dedicated cancer institute in Eastern India are considered for the study. Demographic data is noted and responses obtained on a five point Likert scale for reasons of relapse. Results: This is an ongoing prospective study with a proposed sample size of 1000 till October 2017. Statistical analysis: Responses will be analysed from the 5 point Likert’s scale with a median and Interquartile range. Correlation between demographic data and tobacco habits will be made through cross tabulations. Predictors of relapse will be analysed using multivariate logistic regression analysis. Discussion: While the recent Global Adult Tobacco Survey suggests encouraging results about tobacco users from India, rate of quitting the habit is less than 10% in healthy individuals. Although individuals suffering from cancer refrain from tobacco consumption, the risk of tobacco addiction is not completely mitigated. Conclusion: Quantification of the burden and predictors from a representative population would enable intensification of tobacco cessation measures and eventually achieve better control rates.

Abstract Id: YUGP2268

A Study Of Clinico-Pathological Factors Associated With Lymph Node Positivity In Patients Of Locally Advanced Breast Cancer Undergoing Surgery After Nact

Presenter - Dr. Naresh Jangir
Co-author - Dr. Ghanish Panjwani

Introduction Axillary lymph node status is considered to be the most important prognostic factors in patients. Limited data is available for predicting the chances of lymph node positivity in patients of locally advanced breast cancer undergoing surgery after NACT. Methods A total of 185 patients were studied prospectively for clinicopathological factors and followed up during the course of neo adjuvant treatment and surgery. The final histo-pathological report of Axillary lymph
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Hybrid Mr/Ct Based Adaptive Intracavitary Brachytherapy For Cervical Cancers

AIM: MRI is the gold standard for target volume delineation and organ at risk delineation for intracavitary brachytherapy. Many centers use MRI based planning for the first fraction followed by CT based planning for subsequent fractions of intracavitary brachytherapy. In this study, we report our experience with hybrid MRI CT based planning for intracavitary brachytherapy of cervical cancers.

MATERIALS AND METHODS: Between November 2016 to May 2017, 30 cervical cancer patients were taken up for hybrid MRI CT based planning for intracavitary brachytherapy after an external beam radiotherapy dose of 50Gy. MRI was done for the first fraction followed by CT for subsequent fractions.

Abstract Id: YUGP2274

Supraclavicular Artery Fascio-Cutaneous Â€œHybrid Flap"- An Attractive Option For Head And Neck Reconstruction In Primary And Post Ablative Oncological Resection

Supraclavicular Artery Fascio-cutaneous â€œHybrid Flap"- An Attractive Option For Head and Neck Reconstruction in Primary and Post Ablative Oncological Resection Dr Ashok M Shenoy, Dr Krishnamurthy S, Dr Rajshekar Halkud, Dr Purushottam Chavan, Dr Siddappa K T, Dr Vijay P Kidwai Memorial Institute of Oncology, Bangalore, India Presenting author: Dr Vijay P , Post Graduate Student, MCh in Surgical Oncology, Department of surgical Oncology, Kidwai Memorial institute of oncology Background: 2/3rd of advanced head and neck tumours resections need reconstruction in some form, it may be restricted to one lining or be composite E.g. Inner, outer or with bulk and the need of the day is a Technically easy ,expeditiously executed in one stage ,Good match to recipient tissues with minimal donor site deformity/disability. It should be Cost effective with least in OT time, Post operative monitoring, good function and form restoration. Objective: We studied the Supraclavicular Artery Fascio-cutaneous flap in a series of 45 various post surgical head and neck defects operated for head and neck malignancies of both primary and post ablative, to understand its feasibility and limitations. Anatomic Considerations and design, Trans-cervical artery is a branch of transverse scapular artery, Itâ€™s a Fascio-cutaneous axial pedicle flap. It has vascular territory with arc of rotation from 15 -22 cms x10 -14 cms Lateral, anterior border of Trapezius over shoulder. Methods: Area reconstructed are parotid, temporal bone defect, lower alveolus, palatal defect, cheek skin defect, Inner lining Skin, Complete tubing circum-pharyngectomy, Bulk +/-Lining, Primary Take, Failure donor site morbidity have been described. Results: Supraclavicular Artery Fascio-cutaneous flap has same reach as any other regional flaps, which are more reliable and robust with technically feasible and easy. Comparatively it takes Less operating time and monitoring usually not needed, Conclusions: Supraclavicular Artery Fascio-cutaneous flap is Ideal for Lining inner & outer Bulk, moderately available for contour Pliable, Non hair bearing ,with Minimal Donor Site deformity.

Abstract Id: YUGP2278

Â€œErosaï Disease: A Rare Benign Disease Of BreastÂ€

Attractive Option For Head and Neck Reconstruction in Primary and Post Ablative Oncological Resection Dr Ashok M Shenoy, Dr Krishnamurthy S, Dr Rajshekar Halkud, Dr Purushottam Chavan, Dr Siddappa K T, Dr Vijay P Kidwai Memorial Institute of Oncology, Bangalore, India Presenting author: Dr Vijay P , Post Graduate Student, MCh in Surgical Oncology, Department of surgical Oncology, Kidwai Memorial institute of oncology Background: 2/3rd of advanced head and neck tumours resections need reconstruction in some form, it may be restricted to one lining or be composite E.g. Inner, outer or with bulk and the need of the day is a Technically easy ,expeditiously executed in one stage ,Good match to recipient tissues with minimal donor site deformity/disability. It should be Cost effective with least in OT time, Post operative monitoring, good function and form restoration. Objective: We studied the Supraclavicular Artery Fascio-cutaneous flap in a series of 45 various post surgical head and neck defects operated for head and neck malignancies of both primary and post ablative, to understand its feasibility and limitations. Anatomic Considerations and design, Trans-cervical artery is a branch of transverse scapular artery, Itâ€™s a Fascio-cutaneous axial pedicle flap. It has vascular territory with arc of rotation from 15 -22 cms x10 -14 cms Lateral, anterior border of Trapezius over shoulder. Methods: Area reconstructed are parotid, temporal bone defect, lower alveolus, palatal defect, cheek skin defect, Inner lining Skin, Complete tubing circum-pharyngectomy, Bulk +/-Lining, Primary Take, Failure donor site morbidity have been described. Results: Supraclavicular Artery Fascio-cutaneous flap has same reach as any other regional flaps, which are more reliable and robust with technically feasible and easy. Comparatively it takes Less operating time and monitoring usually not needed, Conclusions: Supraclavicular Artery Fascio-cutaneous flap is Ideal for Lining inner & outer Bulk, moderately available for contour Pliable, Non hair bearing ,No violation of breasts/back, with Minimal Donor Site deformity.
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Co-author - dr preeti jain, ,

â€œROSAI DORFMANS DISEASE: A RARE BENIGN DISEASE OF BREASTâ€
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3.dr pallavi agrawal,MD,consultant pathologist,Mahavir cancer sansthan,Patna

ABSTRACT : Rosai Dorfman Disease also called sinus histiocytosis with massive lymphadenopathy(SHML) is a rare disorder of sinus histiocyte.Mostly involves lymph nodes but can occur in other body parts.This disease is extremely rare in breast.We report a case of breast lump, clinically & radiologically appearing malignant that found out to be Rosai Dorfman Disease on histopathology & IHC. INTRODUCTION: ROSAI DORFMANS DISEASE of breast is a benign breast lump which appears clinically and radiologically malignant.Diagnosis is finally based on histology which shows histiocytosis with typical emperipolesis(1).An extremely rare disease of breast as few cases reported so far. This is a rare histiocytic disorder which involves clusters of WBC accumulated in lymph node and other organs. The term RDD given by two pathologists Juan Rosai & Ronald Dorfman in 1969(2). Occurs equally in males & females mostly in 1st and 2nd decade.Clinically presents as massive bilateral and painless cervical lymphadenopathy with fever, night sweats & weight loss(3).Mediastinal,retroperitoneal & inguinal nodes may be involved.Extranodal site most frequent is skin,soft tissue,upper respiratory tract,bone,eye and rarely in breast. PATHOLOGY: Histiocytosis showed pericapsular fibrosis and dilated sinuses heavily infiltrated by large histiocytes and plasma cells.EMPERIPOLEISIS (engulfment of lymphocytes and erythrocytes by histiocytes) is typical.Stain +ve for S100,CD163,CD68. CASE HISTORY: Hamida khatoon 60yf,postmenopausal women presented with lump in left breast for 1 month at MAHAVIR CANCER SANSTHAN, PATNA (mcs no.D 63317).Patient had no similar th/o breast lump.Patient was non diabetic,non hypertensive & no h/o any significant medical illness,There was no h/o any previous surgery.General examination was normal.On local examination of breast there was 3x2 cm firm,slightly mobile lump in left lower inner quadrant.1x1 cm skin overlying lump was teethered to it, Mammographic finding was BI-RADS cat.3 lesion.Core needle biopsy & further IHC examination suggested small lymphocytic lymphoma.Pt. was planned for wide local excision with 2 cm margin.HPE of lump suggested ROSAI DORFMANS DISEASE.Pt. recovered well.Follow up examination 3 monthly in May,Aug,Nov 2015 was normal. DISCUSSION: ROSAI DORFMANS(RD) disease is a rare histiocytic disorder which involves over production of a type of WBC ,called non langerhans sinus histiocyte(4).Generally accumulate in lymph node but can occur in other organs.Etiology may be infectious,environmental or genetic. Sinus histiocytic with massive lymphadenopathy(SHML) synonyms with RD disease may occur in nodal & extranodal site simultaneously. Patient may have fever,pain like systemis complaint or symptoms attributed to organ involved.Majority have spontaneous remission. Some have aggressive disease.Surgical intervention is needed for symptomatic basis or cosmosis .For widespread disease some vinca alkaloid,alkylating agents and steroids have been mentioned.(5) Breast is an extremely infrequent site of occurrence as few cases reported so far.Clinically and radiologically appearing malignant disease needs proper tissue diagnosis to prevent unnecessary overtreatment of this breast lump. REFERENCES: 1.Eisen RN,Buckley PJ,and Rosai J. Immunophenotypic characterisation of sinus histiocytosis with massive lymphadenopathy(Rosai-Dorfman disease).Semin Diagn pathol. 1990; 7: 74-82.2.Rosai J,Dorfman RF.Sinus histiocytosis with massive lymphadenopathy.Arch pathol 1969,87:63-70 3.Wang KH,Chen WY,Liu HN,et al.Cutaneous Rosai Dorfman Disease:clinicopathological profiles,spectrum and evolution of 21 lesions in six patients.Br J Dermatol 2006; 154:277-286 4.Foucar E,Rosai J and Dorfman R.sinus histiocytosis with massive lymphadenopathy(Rosai-Dorfman disease):review of the entity.Semin Diagn Pathol 1990;7: 19-73 5.Oka M,Kamo T,Goto N,et al.Successful treatment of Rosai Dorfman disease with low dose steroid.J Dermatol 2009;36237-240

Abstract Id: YUGP2282

Expression Of Cxcr-4 And Its Clinical Significance In Patients With Acute Myeloid Leukemia

Presenter - 'Dr. Chethan R
Co-author - Dr GOVIND BABU, Madhumathi, Dr Lakshmaiah

Background- Acute myeloid leukemia is the most common acute leukemia in adults. Acute myeloid leukemia is associated with cytogenetic and molecular abnormalities in around 60% of patients, the risk stratification of these patients is done based on these abnormalities into good intermediate and high risk. Several studies have indicated the adhesion of the AML cells to the stromal cells affects the survival, proliferation, and chemo-resistance of the AML cells. Studies have shown that expression of CXCR4 on the AML blasts is associated with short relapse-free survival and overall survival. Hence we aim to study prospectively the expression of the CXCR4 on the AML blasts and its impact on the clinical features and bone marrow remission in patients with Acute myeloid leukemia AIMS AND OBJECTIVES: "To determine the expression of CXCR4 in patients with AML and To determine its impact on the bone marrow remission following induction chemotherapy Materials and Methods All patients diagnosed with AML and eligible for intensive therapy were enrolled. The cxcr-4 expression on the blast cells was analyzed by flow cytometry based on MFI. Remission was defined as complete count recovery and bone marrow blasts less than 5%. Statistical methods- All study variables were described by using descriptive statistical methods like frequencies, percentage, mean, median, standard deviation and interquartile range (IQR). Association between categorical variables were checked by using chi-square or Fisher exact test. Normally distributed continuous variables compared between two groups by independent t test and skewed continuous variables compared between two groups by using Mann-Whitney U test. Normality of the variables was checked by Shapiro-Wilks test. P value of

Abstract Id: YUGP2284

Accuracy Of Pre-Operative Axillary Ultrasound After Neoadjuvant Therapy For Locally Advanced Breast Cancer To Predict Pathologic Response

Presenter - 'Dr. Avinash Raja
Co-author - Dr. B.B.Pandey, Dr. Ghanish Panjwani,

Background: Response to neoadjuvant chemotherapy (NACT) for breast cancer patients with LABC is considered to be an important prognostic factor; but there are limited studies to evaluate pre-operative response assessment in patients with locally advanced breast cancer (LABC) after NACT. We estimated the accuracy of ultrasound (US) to predict pathologic response after NACT using common response criteria and pCR definitions Methods: A total of 185 patients presenting with locally advanced breast cancer were subjected to pre-operative ultrasound of axilla after completion of NACT. Histo-pathologic assessment of Axillary Lymph Node dissection specimen was considered as gold standard and used to assess the sensitivity, specificity and accuracy of axillary ultrasound. Results: On axillary ultrasound examination of 185 post NACT patients, 131 were found to have demonstrable LN in the axilla, of these, only 108 harboured metastasis. USG could successfully detect 108/121 histologically positive lymph nodes. USG showed 89.25% sensitivity and 63.49% specificity for overall nodal status. For N1 disease, USG could correctly classify 103/121 as N1. Its sensitivity was 84.88%, which much higher than that of clinical examination only. The specificity for USG was 63.49%. The sensitivity and specificity of USG for N2 disease was 71.42% and 100% respectively, similar to that for clinical examination alone offering no added advantage in N2 disease. Conclusions: Pre-operative axillary ultrasound examination
Abstract Id: YUGP2285
Evaluation Of SlN Mapping Algorithm Using Icg Dye And Robotic Platform
Presenter- Prof. Anupama Rajanbabu
Co-author - Anupama Rajanbabu, Reshu Agarwal, Nataraj YS

Objective: There is growing interest in Sentinel node mapping in endometrial cancer as it can reduce the morbidity of lymphadenectomy at the same time provide prognostic information which can guide adjuvant therapy. The aim of this prospective trial is to evaluate the SLN mapping algorithm when using Indocyanine green (ICG) dye and robotic assisted fluorescence mapping. Methods: From March 2015 women with apparently early stage EC undergoing robotic-assisted laparoscopic hysterectomy including ICG dye robotic-assisted fluorescence mapping following the Memorial Sloan Kettering Cancer Centre (MSKCC) surgical algorithm. Result: Among 81 patients included in the study, 71 SLN was identified in 88%, bilaterally in 80.6% and unilaterally in 17.3%. 98.1% SLN-positive patients had pelvic SLNs and 1.9% had par-aortic SLNs. The most common pelvic nodes were obturator nodes in 64% patients. Median number of pelvic nodes were 4 and 9 (p

Abstract Id: YUGP2289
Factors Predicting Poor Locoregional Control And Survival In Ajcc 8Th Edition Classified T1-2N0 Oral Squamous Cell Carcinoma: Adverse Pathological Features And The Identifying The Need For Treatment Escalation
Presenter- Dr. Narayana Subramaniam
Co-author - Samkruthi Murthy, Narender Kumar, Deepak Balasubramanian

Introduction: AJCC 8th edition has incorporated depth of invasion into TNM classification of oral cavity squamous cell carcinoma (OSCC) due to the prognostic impact on recurrence and survival. After reclassifying our patients of T1-2N0 oral cavity according to these recommendations, we intended to study the effect of adverse pathological features (perineural invasion, lymphovascular invasion and differentiation) on overall survival (OS) and disease free survival (DFS) in these patients to determine the subset of patients likely to benefit from adjuvant radiation. Methods: Retrospective analysis from 296 patients of T1-2 oral squamous cell carcinoma (tongue, buccal mucosa and floor of mouth) treated in our institution was performed. As per the AJCC 8, T1 was classified as

Abstract Id: YUGP2291
Urinary Bladder Paraganglioma- Our Experience With Proposed Treating Algorithm
Presenter- Prof. Harvinder Singh Pahwa
Co-author - Sanjeev Misra, Awanish Kumar, Ajay Pal

Introduction: Paraganglioma accounts for less than 0.06% of all bladder tumors. There are sporadic case reports and no definite guidelines for investigating & managing such cases. We are presenting single centre experience of four such cases and proposing a treatment algorithm based on review of literature and our experience. Material & methods: Case 1 presented with hematuria and mass on ultrasonography. Cystoscopy revealed a solid, bluish sub mucosal growth due to increased vascularity. Patient developed hypertensive crisis during cystoscopic biopsy. The biopsy report came out to be paraganglioma. Case 2 also presented with hematuria and bladder mass on ultrasonography with similar cystoscopic findings s/o phaeochromocytoma. Urinary markers were normal and cystoscopic biopsy was done under general anaesthesia. Case 3 also presented with hematuria & clot retention but his urinary markers were raised. Case 4 presented with classical adrenosympathetic syndrome Results: All patients underwent partial cystectomy after staging with CT scan with proper preoperative and intraoperative preparation and had uneventful surgery and follow up. Conclusion: It is prudent to have in mind that any patient presenting with features of intense headache, heaviness in chest or blurring of vision during micturition or during cystoscopy or cystoscopic findings of solid submucosal growth in urinary bladder with bluish hue or increased urinary markers might herald a urinary bladder phaeochromocytoma. We are proposing a treatment algorithm for such cases based on review of literature which may be of great help.

Abstract Id: YUGP2294
Evaluation Of Nutritional Status Of Cancer Patients During Treatment By Patient-Generated Subjective Global Assessment: A Hospital-Based Study At A Tertiary Care Center In South India.
Presenter- Dr. Narayana Subramaniam
Co-author - Prof. K.V.Veerendra Kumar, Dr. Ramesh C. Sagar, Manik Madaan

Introduction The incidence of cancer is increasing worldwide and with it the prevalence of malnutrition, which may vary between 40 and 80 % in patients with neoplasia. The cancer is responsible for approximately 13 % of all causes of death worldwide, however the death of almost 20 % of cancer patients occurs as a result of malnutrition and its complications, rather than the malignancy of the disease itself. Nutrition is an important factor in the treatment and progression of cancer. The majority of cancer patients experience weight loss as their disease progresses and, in general, weight loss is a major prognostic indicator of poor survival and impaired response to cancer treatment (Knoshnives et al., 2012). Cancer patients are particularly susceptible to nutritional depletion due to the combined effects of the malignant disease and its treatment (Amaral et al., 2008; Paccagnella et al., 2010). The etiology of malnutrition in cancer patients is complex and multifactorial and may be influenced by the location and type of tumor, stage of the disease, side effects of the treatment, socioeconomic status, functional performance, symptoms of nutritional impact, need for fasting and inadequate nutritional therapy, as well as medical staff awareness about the importance of nutritional status for the prognosis and quality of life of hospitalized patients. With increasing incidence of cancer, identification and management of nutritional deficiencies are needed. According to guidelines from the European Society of Parenteral and Enteral Nutrition (ESPEN) and American Society of Parenteral and Enteral Nutrition (ASPEN), preoperative nutritional support should be considered in cancer patients. Further, for severely malnourished patients, they recommend performing surgery after administering preoperative nutritional support for more than 7 days (Weimann et al., 2006; Braga et al., 2009). Studies indicate that malnutrition and weight loss are common among 20 to 97% of oncologic patients (Kern and Norton, 1988; Ollenschlager et al., 1991; Abe et al., 2013; Gabrielson et al., 2013; Malhti et al., 2013) and the prevalence of malnutrition depends on the tumour type, location, stage and treatment (Shike, 1996). The consequences of malnutrition may include an increased risk of complications, decreased response and tolerance to treatment, impaired quality of life and decreased survival rate (Ottery, 1996; Nitenberg and Raynard, 2000). Factors affecting a person’s food intake, such as difficulties swallowing and loss of appetite play an important role in quality of life (Hickson and Frost, 2004). Objective To determine the prevalence of Malnutrition in Cancer patients during treatment Materials and Methods Study design Present study was an observational study in which the standard questionnaire of PG-SGA was used to evaluate nutritional status of the patient. This study was conducted between September 2016 to February 2017 In the present study, cancer patients were selected as subjects from the oncology
ward of Kidwai memorial institute of oncology, India. The participants enrolled in the study comprised of cancer patients who were receiving surgery, radiotherapy, chemotherapy or a combination of these or had completed treatment and was on follow-up care. All the gathered data were analyzed by MS-Excel. Inclusion criteria for the study (1) patients older than 18 years, (2) patients giving their informed consent. Exclusion criteria for the study 1. cognitive impairment, 2. mental disorder, or 3. communication problems Results and discussion During study period data of 297 patients were collected. Out of the 297 subjects, 175(58.92%) patients were males and 122(41.07%) patients were females. Distribution according to the site of cancer are given in Table 1. Among the participants enrolled in the study, they were treated with radiotherapy, chemotherapy or chemo-radiotherapy. In most cases, patients had undergone surgery along with different therapy. Number of patients receiving different therapy and surgery are illustrated in Figure 1. Figure 1. Procedure Number of Patients Surgery with Chemotherapy 120 Surgery with Radiotherapy 60 Chemotherapy alone 25 Radiotherapy alone 22 Chemoradiotherapy 25 Surgery Alone 20 BMI of participants were classified in different groups (Table 2) It has also been observed that 78.70% of patients had less than usual food-intake, 21.79% of patients had unchanged food-intake and 4.21% of patients had more than usual food-intake over the preceding month and this may result in poor nutritional status and intolerance treatment. Table 1. Distribution by site of cancer site Male Female Esophagus 26 29 Lung 19 7 Pancreas 5 2 Table 2.BMI classification of patients Biliary tree 6 11 Stomach 39 36 CATEGORY BMI Male Female Bone and soft tissue 25 9 severely underweight 30 3 Total 175 122 Gastrointestinal symptoms were predominantly anorexia 168(56.56%) patients, nausea in 134 (45.11%) patients, vomiting 65(21.88%) patients, diarrhea being least common 38(12.79%) which was usually chemotherapy induced. Many of patients had combination of GI symptoms especially anorexia and nausea. Weight loss data described in table 3. Table 3. Description Number of patients 10% loss in past 6 months 67 Not sure about weight loss 108 Total 297 On examination, 138 patients (46.46%) had muscle wasting, and triceps skin fold thickness was suggestive of undernutrition in 98(32.99%) patients. Overall SGA classification showed, undernutrition (PG-SGA-B), and severe undernutrition (PG-SGA-C) was seen in 78.62% of patients. Table 4 and pie chart 1 Co-relation between PG-SGA score and BMI The prevalence of moderate to severe malnutrition in the patients was 78.62% (PG- SGA) and the prevalence of undernutrition was 39.05% (BMI). From the nutrition assessment tool of PG-SGA, the result we got indicated that BMI alone cannot be a reliable indicator of nutritional status of an individual in cancer patients. Previous studies in cancer patient groups also highlighted the limitations of using BMI as the sole measure of nutritional status PG-SGA SCORE NO OF PATIENTS PERCENTAGE A 64 21.38% B 74 25.13% C 159 53.49% TOTAL 297 100 CONCLUSION In conclusion, This observational study highlights the fact that nutritional issues are prevalent among cancer patients during treatment. High prevalence of malnutrition (78.62%) was observed among cancer patients, and this was significantly associated with clinical symptoms directly related to the eating process, weight loss, gastro intestinal symptoms. PG-SGA is still an important simple, reliable tool for assessment of overall nutritional status of patients, also signifies the fact that BMI alone is never a guide for nutritional assessment. Nutritional screening is an important step needed to help intervene earlier in the Cancer patientâ€™s trajectory. Earlier detection of nutritional risk symptoms will result in thorough nutritional assessments and interventions that may help prevent further or pending malnutrition and weight loss during treatment and ultimately improve the quality of life of the advanced cancer patient.

Abstract Id: YUGP2296

Carcinoma Of Unknown Primary: Diagnostic And Therapeutic Dilemma: A Case Report Authors: Dr. Prateek Gupta, Dr. Rajgovind Sharma, Dr. Jyoti Sharma, Dr. Ajay Dayma
Presenter- Dr. PRATEEK GUPTA
Co-author - Prateek Gupta, RajGovind Sharma, Jyoti Sharma

ABSTRACT Introduction: Neck lymph node metastasis with an unknown primary in the head and neck region is a common problem in the surgical oncology unit. The optimal management strategy for such patients is still not very well defined which in turn gives rise to ample confusion in the mind of the clinician. We are presenting one such interesting case where lymph node metastasis had been variously diagnosed as originating from salivary gland, thyroid and finally found to be squamous cell carcinoma with unknown primary. Case Report: A 37 year old female presented with bilateral swelling in the cervical region. Initial FNAC from both side was suggestive of mucopidermoid carcinoma probably originating from parotid. Further workup with USG neck suggested infective pathology in the cervical swelling and also revealed lesion in the right lobe of the thyroid and isthmus. An array of investigations followed which only added to the confusion and finally b/l biopsy was done which confirmed squamous cell carcinoma in the b/l cervical swelling. B/l neck dissection followed by radiotherapy was done after histopathology confirmed it to be metastatic carcinoma. Discussion: Carcinoma of unknown primary is defined as the histological diagnosis of metastasis without the detection of a primary tumour. Cervical node metastasis with unknown primary is a common problem with incidence upto 7%. There are various treatment protocols but primary modality of choice is surgery followed by postoperative radiotherapy. The intent of treatment is curative as the lymph node metastasis represents regional spread. Conclusion: We present this unique case because of the interesting mode of presentation, the diagnostic and therapeutic dilemma it created among the various specialty clinicians involved in this patientâ€™s care and the eventual successful intervention.

Abstract Id: YUGP2300

Immunophenotyping Of Body Fluids As A Diagnostic Tool In Hematological Malignancies â€“ Initial Experience From A Tertiary Cancer Centre.
Presenter- Dr. Divakar Sharma
Co-author - Dr. D.S.Madhumathi, Dr. Malathi M, Dr. S Balu

Basis of the study Immunophenotyping (IPT) of body fluids- CSF, pleural and peritoneal effusions is a simple, rapid, sensitive and specific method for diagnosis of hematological malignancies in the context of a known disease as well as for new diagnosis. Recent studies suggest that malignant involvement of body fluids, especially when manifested as initial presentation, is associated with poorer prognosis. The objective of this study is to discern the role of Flow Cytometric IPT in diagnosis of hematological malignancies in body fluids as an adjunctive tool to cytomorphology for rapid diagnosis. Materials and Methods This study is a single institution 2-year retrospective analysis of diagnostic IPT in Body fluids. All cases for which Flow cytometry was performed for body fluids from 2015 to 2016 were reviewed. Cytomorphological findings of body fluids were correlated with IPT, hematological investigations and clinical data, as available. Results A heterogeneous group of 7 patients were evaluated and reviewed (1 CSF, 4 Pleural fluids, 2 Peritoneal Fluids). Age of the patients varied from 3 to 43 years with a median of 13 years. All cases were considered oncologic emergencies. Positive findings were observed in 6 cases (86%) and 1 case was considered as unequivocal. 6 cases (86%) were new diagnosis and 1 case (14%) was a known case of lymphoma. Conclusion Positive IPT findings especially in conjunction with suspicious cytomorphologic findings led to definitive diagnosis of hematological malignancy in all 7 cases analysed. Rapid sub categorisation of lymphoproliferative diseases and initiation of treatment is possible with IPT of body fluids samples in selected cases and for oncological emergencies. A large scale study is needed to validate/update the potential diagnostic utility of Flow Cytometry in body fluids.

Abstract Id: YUGP2310

Port Site Metastasis After Laparoscopic Radical Hysterectomy For Carcinoma Cervix
Abstracts

Presenter- Dr. Vinotha Thomas
Co-author - Murali TV, Amrita Rao, Shylasree TS

Port site recurrence is an uncommon event following minimal access surgery in carcinoma cervix and its occurrence in reported cases is mostly associated with disseminated disease. Our patient, a 55 year old lady with carcinoma cervix I b1, poorly differentiated squamous cell carcinoma, underwent total laparoscopic radical hysterectomy, bilateral pelvic lymphadenectomy and received adjuvant radiation in view of two intermediate risk factors: deep cervical stromal invasion and presence of lymph vascular invasion. Ten months after completion of treatment she presented with recurrence 6x5 cm in the right iliac fossa 5 mm port site which was biopsy proven. Positron Emission Tomography (PET) excluded disseminated disease She was treated with chemotherapy: carboplatin and paclitaxel as per multidisciplinary meeting discussion, followed by excision of port site metastasis with bi-layered mesh repair and pedicle flap cover. Intraoperatively, the lesion was found mainly in the subcutaneous plane with involvement of the external oblique muscle superficially and no disease in the internal oblique, transversalis muscle, rectus sheath or the peritoneum. The post-operative period was uneventful. She has been advised adjuvant radiation to the site. Conclusion: Port site recurrence, though rare, can occur following minimal access surgery in case of carcinoma cervix. In the absence of any other metastasis with good loco regional disease control, there is a role of radical treatment of the port site disease with either surgery or radical chemoradiation. Chemotherapy is tried in the neoadjuvant setting depending on the size of the tumor but response is variable.

Abstract Id: YUGP2327
Assessment Of The Quality Of Life In Patients Diagnosed With Breast Cancer In A University Teaching Hospital
Presenter - Ms. Abinaya Sivakumar
Co-author - Dr. Ramya R.,

Background: Breast cancer being one of the most common cancers in the female population is on the rise in the major metropolitan cities of our country. As of 2012, it is estimated that 1 in 28 women is likely to develop breast cancer during her lifetime. Patients have to deal with the socio-economical as-pects of their treatment that may affect their quality of life. This study aims to describe the quality of life among breast cancer patients and the role of socio-demographic, medical and psychosocial factors on their quality of life. Materials and methods: This questionnaire-based study was carried out for a period of one year between June 2016-17 at a university teaching hospital after obtaining the Institutional Ethics Committee approval. 78 patients undergoing treatment for breast cancer were interviewed using the EORTC QLQ-C30 Version 3.0 and QLQ-BR23 questionnaires after obtaining their informed consent. The data was ana-lyzed using SPSS Version 16. Results: From the QLQ-C30, mean Global Health status was 46.47, mean score in the functioning scale was 76.24, highest for â€œphysicalâ€™ and in the symptom scale was 63.25, highest for â€œfinancial diffi-cultiesâ€™. In QLQ-BR23, mean score in the functioning scale was 83.55, highest for â€œbody imageâ€™ and in the symptom scale was 37.24, highest for â€œsystemic therapy side effectsâ€™. Patients of the younger age group significantly complained more of the breast symptoms while the elderly were more dyspeic. The patients who were employed had more symptoms of nausea and vomiting and particularly had a more troubled future perspective of life when compared with the unemployed mainly consisting of homemakers who had disturbed role functioning. Many of the patients belonging to the lower socioeconomic statuses may need for more psychosocial support to be given by the healthcare providers to enhance the daily living of the patients. Table on socio-demographic profile and significance on functional and symptom scales: Event | Mean rank | p

Abstract Id: YUGP2332
Assessment Of P53 Immunoeexpression As A Prognostic Factor In Oral Cavity Squamous Cell Carcinoma.
Presenter - Dr. Jagadeesan G M
Co-author - prof.Subbiah shanmugam, prof .Gopu Govindasamy, Dr.Syed Afroz Hussain

ABSTRACT: BACKGROUND: Oral Squamous Cell Carcinoma (OSCC) is the sixth most common cancer in the world. Oral squamous cell carcinoma (OSCC) is the most common cancer among males and fourth among females with an annual incidence of 45,455 and 24,375 respectively. Oral cancer survival rate is less than 60%. The p53 gene located on chromosome 17p 13.1 known to regulate cell growth and proliferation. Mutations in the p53 tumour suppressor gene is the most common genetic alteration in human cancers which has been suggested to be involved in carcinogenesis. This study was done to determine the prognostic implications of p53 expression. PURPOSE OF THE STUDY: Our aim was to assess the p53 expression and response of Oral Squamous Cell Carcinoma to surgery, chemoradiotherapy as well as its implications in the recurrence. METHODOLOGY: Histopathologically proven retrospective Formalin fixed paraffin embedded (FFPE) OSCC tissue samples (n=100) were collected. All the cases had undergone multimodal treatment based on standard protocol based on the stage of the disease. All patients underwent surgical resection of the tumour with or without radical neck dissection, prechemoradiation and Definitive chemoradiation. Immunohistochemistry for p53 was done and was graded by a senior pathologist using the standard protocol. The survival benefits of overexpression or under expression of p53 was compared with the treatment modality. CONCLUSION: No significant correlation was found between the immunoeexpressions of the p53 and the recurrence was found.

Abstract Id: YUGP2334
Van Ness Rotationplasty -As Limb Salvage Procedure For Locally Advanced Extremity Osteosarcoma-Case Report
Presenter - Dr. Jagadeesan G M
Co-author - Prof Subbiah Shunmugam, Prof Gopu Govindasamy, Dr.P.Senthil kumar

Abstract: Introduction: Osteosarcoma is the most frequently occurring primary malignant tumor of bone in children and young adults with a high tendency to metastasize if not properly treated. The current treatment strategy for osteosarcoma includes neoadjuvant chemotherapy, surgical resection, followed by adjuvant chemotherapy. Limb salvage can be achieved through a number of options apart from the use of a prosthesis, including Van ness rotationplasty in which the foot is used as a neo-knee joint. There are very few documented cases of this technique in young patients with locally advanced extremity sarcomas, a 20 years old male patient who was previously treated outside for pathological fracture in lower third of distal femur with Open reduction and internal fixation was admitted and complete metastatic work up was done. After completing 3 cycles of neo adjuvant chemotherapy and taking future functional, psychological and social implications into consideration we performed limb salvage Van Ness Rotationplasty with vascular reconstruction at our institute. Histopathological analysis of tumor resection showed clear margins and at 1 and half years clinical review
Abstract Id: YUGP2342
Robotic Resections In Hepatobiliary Oncology - Indian Experience With Xi Da Vinci System
Presenter - Dr. Shraddha Patkar
Co-author - Dr Mihir Chandarana, Dr Sagar Kurunkar, Dr Mahesh Goel

Introduction: Minimal invasive surgery has proven its advantages over open surgeries in the peri-operative period. The FDA approved da Vinci robot in 2000. The latest version, da Vinci Xi system was introduced in 2014. It has a mobile tower-based robot with several modifications to improve the functionality, versatility and operative ease. None of the centers have reported exclusively on hepatobiliary oncology using the da Vinci Xi system. We report our initial experience and discuss the surgical technique Aims and objectives: To study the feasibility, advantages and discuss the operative technique of da Vinci Xi system in hepatobiliary oncology Materials and Methods: Data was analyzed retrospectively from a prospectively maintained database from June 2015 to May 2017. A total of 35 patients with suspected or proven hepatobiliary malignancies were operated. Total robotic technique using da Vinci Xi system was used. All the surgeries were performed by a single trained robotic hepatobiliary surgeon. Demographic details and peri-operative outcomes were noted. Procedures started on the Xi system and changed to either laparoscopic or open approach were considered as conversions Results: A total of 35 surgeries were performed during the above mentioned time period. 21 patients had a suspected gall bladder malignancy, 14 patients had primary or metastatic liver tumor. Median age was 54 years. Average duration of surgery was 225 minutes (60-360 min) with a median blood loss 150ml (range 50-3500 ml). The median post-operative stay was four days (range 2-21 days). The median nodal yield for radical cholecystectomy was seven (range 2-20). All the liver resections had negative margins. Five patients required conversion. Two of these developed post-operative morbidity. There was one mortality in our series. Conclusion: Robotic surgery for hepatobiliary oncology is fast gaining popularity. It has its merits over laparoscopic surgery. The Xi system provides distinct advantages over the previous versions. However, it has a learning curve, should be performed by a team with adequate training in robotic surgery combined with careful patient selection.

Abstract Id: YUGP2344
The Reality Of Cholangiocarcinoma In India: Experience Of Over 500 Patients From Tata Memorial Centre, Mumbai.
Presenter - Dr. Shraddha Patkar
Co-author - Dr Pravin S Kammar, Dr Shailesh V Shrikhande, Dr Mahesh Goel

Background: Cholangiocarcinoma is a disease with aggressive tumor biology and poor prognosis. Treatment options are limited with surgery still being the most effective treatment. However resectability rates are very low for Cholangiocarcinoma which makes it a disease with dismal prognosis. Methods: All patients diagnosed with intrahepatic cholangiocarcinoma (ICC) and perihilar cholangiocarcinoma (PHCC) who were registered at Tata Memorial Hospital between January 2012 and June 2016 were retrospectively analyzed. Demographic profile, interventions, treatment offered, resectability rates were recorded. Results: A total of 556 patients (331 patients of PHCC, 193 patients of ICC, Mixed 12, others 20) were evaluated at our institution. 21/556 (3.77%) patients did not reach multidisciplinary meetings due to various reasons. After evaluation 50/331 (15.5%) of PHCC and 39/193 (20.2%) patients could not be offered any cancer directed treatment (best supportive care) upfront or within 30 days of treatment. 86 (26%) patients of PHCC and 125(64.7%) ICC patients were metastatic at presentation. PHCC: 32.4% patients did not take offered treatment with lost to follow up being the most common cause (64.58%), 132 (39.8%)patients had resectable disease on imaging, 61 underwent exploration of which 44 were resectable. The overall resectability rate was 13.29% (44/331) ICC: 42 out of 193 (21.76%) patients did not take the offered treatment again loss to follow up being the most common cause. There were 61 cases of localized and locally advanced tumors, 52 of which were amenable for surgery. Out of 52 patients who were deemed resectable, 31 underwent exploration,23 had curative resection. The overall resectability rate was 12% (23/193) Conclusions: In India, large majority of cholangiocarcinoma patients present at advanced stage or in poor general condition to be unfit to receive any cancer directed treatment at all. Default. Surgery is the most effective treatment but less than 15% of cases can be considered for surgery. Awareness and early referral with centralization only can help in detecting this disease at a stage where treatment can offer a meaningful survival.

Abstract Id: YUGP2346
Adrenal Myelolipoma: A Management Dilemma
Presenter - Dr. Naresh Saidha
Co-author - Arijit Sen

Introduction: Adrenal myelolipoma is a rare, benign, mostly non-functional tumor of adrenal gland, picked up incidentally on investigations for an unrelated pathology. Radiological features are diagnostic for this condition. While observation is recommended for smaller lesions, opinion is divided regarding management of larger lesions. In this article we present a case report of a middle aged male with an incidentally detected adrenal myelolipoma. Case Report: A 41 years old male with no previously known comorbid conditions presented with the history of dysuria of 1 month duration to a district hospital. There was no previous history of urinary tract infection or urinary tract stone disease. USG abdomen revealed no abnormality in the urinary tract. However a 7 cm hypoechoic right adrenal mass lesion was incidentally detected. On abdominal examination there was no palpable lump. There was no renal angle tenderness or fullness. Contrast enhanced CT scan of the abdomen showed a mass lesion involving right adrenal gland with soft tissue and fat density (?91 HU) contents. Tissue planes with right kidney and liver were well defined. There was a heterogeneous post contrast enhancement in the arterial phase with washout in delayed phase. A radiological impression of adrenal myelolipoma was given. The 24h urinary cortisol was 155.85 ?g and plasma ACTH levels were 13.50 pg/ml, which were normal. His 24 h urinary catecholamines showed a small elevation in the levels of epinephrine 26.47 ?g/24 h (Normal 1.78±247 ?g/24 h). His blood pressure was normal. Although he was asymptomatic, keeping in view the size of the lesion and mild biochemical abnormality, the patient was offered surgery after a joint clinical discussion. Intra-operatively the lesion was seen as a well encapsulated tumor arising from the right adrenal gland. After ligating the vascular pedicles the lesion was excised in toto. Post operatively the patient made an uneventful recovery. On gross pathological examination the tumor was well encapsulated measuring 9A—6A—7 cms. External surface was covered with fat and cut surface revealed yellowish areas mixed with foci of blackish areas. Histopathology revealed mature adipocytes with mixed foci of mature bone marrow elements. Normal adrenal tissue was also seen. There
was no evidence of malignancy. A diagnosis of adrenal myelolipoma was established. Discussion Most of the adrenal myelolipomas are asymptomatic and are diagnosed as incidental finding during imaging. They occasionally present with pain due to large size or from spontaneous haemorrhage. They are known to be associated with associated with obesity, hypertension and diabetes. Imaging features are diagnostic. On ultrasonography, myelolipomas appear as a well-defined tumor with varying degrees of hyperechoic areas (fatty tissue) and hypoechoic areas (myeloid tissue). The demonstration of fat density (hypodense) within an adrenal mass by CT scan is virtually diagnostic. MRI shows homogenous hyperintense mass on T1 weighted images with an intermediate signal on T2 weighted images, suggesting fat containing lesions. The lesion enhances brightly after intravenous administration of gadolinium. Decrease in signal with fat suppression or phase cancellation is confirmatory. Management of small and asymptomatic myelolipomas is observation. Symptomatic myelolipomas should be treated with surgical excision as observation is unlikely to relieve symptoms. Larger myelolipomas (>4 cm) are associated with complications, hence surgical excision is preferred over observation. Our patient although asymptomatic, had a large myelolipoma with mild biochemical abnormality and hence merited surgical exploration. Conclusion Myelolipoma of adrenal gland is a rare tumor. Radiological investigations are the diagnostic modality of choice. Patients should be worked up for associated adrenal hormone over-production. Surgery is indicated for large, symptomatic or hormone producing myelolipomas.

Abstract Id: YUGP2366
Do Optimism Improves Cancer Survival A Meta - Analysis
Presenter - Ms. Saheera K t
Co-author - saheera k t, Dr. K manikandan

DO OPTIMISM IMPROVES CANCER SURVIVAL A META - ANALYSIS Abstract Objective: To provide a quantitative summary of role of optimism on cancer survival, and to present the year wise reporting aspects of the previous studies. Method: Electronic searches and manual searches of reference lists were done from review articles and retrieved papers. A coding manual was prepared which include the following variables: publication year, authors name, title of the studies, statistical analysis used, result and whether the study accepted/ rejected the role of optimism in cancer survival. Results: Twenty five articles from published journal between 1966 and 2027 were included in the present meta-analysis. Of these, only 11 studies are aimed to find out the direct relation between optimism and cancer survival and 6 of them proved significant relation except five that oppose the direct relation between optimism and cancer survival. 14 studies are aimed to find out the relation between cancer survival and the related concepts of optimism like pessimism, minimization/ denial, physical as well as mental health, emotional wellbeing coping style and benefit finding and found positive relation between the variable that may indirectly influence the survival. Three studies identified the psychosocial factors that influence cancer survival and didnâ€™t point out optimism as a psycho-social factors. Very few studies were found (only 10 in number) before 2006 and 5 of them didnâ€™t prove optimism as a factor in cancer survival. The recent findings from the remaining 15 studies proved significant relation between optimism and cancer survival. Conclusion: 20 out of 25 studies revealed a significant relation between optimism and cancer survival. But a definite conclusion about whether optimism predicts cancer survival seems premature, because of the lack of articles related to the topic. Future studies within the psycho-oncology should address the role of psycho-social factors in cancer survival and if it is proved should develop a psycho-social intervention module which can reach the needed people for betterment of the life. Key words: cancer, meta- analysis, optimism, psycho-social factors, survival.

Abstract Id: YUGP2370
Hypofractionation In Post Mastectomy Breast, How Safe Are We In Using Standard Tangentials ?
Presenter - Dr. NISMA FAROOQ
Co-author - BINDHU JOSEPH, MUHAMMED SHAFEEEQ N, S SATHIYAN

Hypofractionation in breast radiotherapy is gaining increasing relevance in routine clinical practices; however grey areas remain on its safety. Majority of data regarding the same pertains to treatment of the conserved breast. This study aimed to compare the use of standard tangentials versus field in field (FIF) conformal radiotherapy with the intent of evaluating if the later would provide a clinical advantage. Comparative plans for 10 post mastectomy patients using standard fractionation of 50 Gy in 25 fractions were generated and evaluated for dosimetric parameters pertaining target dose, homogeneity, conformity and dose to normal structures. The FIF 3D plan showed better homogeneity (p = 0.012), less hot spots V110% (p=0.000). There was significantly less dose to the heart mean dose (p=0.008), V70% (p=0.012). However dose to left anterior descending artery (LAD) was not significantly different (p = 0.241). The dose to ipsilateral lung V20 (p=0.002) as well as MD to whole lung (p=0.047) was markedly reduced. The parameters that did not achieve statistical significance was PTV coverage and conformity index. The significant parameters were evaluated in the hypofractionation schedule 40 Gy in 15 fractions. The average equivalent dose received by the heart is mean dose to the heart was 4.1 Gy for FIF vs 7 Gy for tangentials. The average V20 to ipsilateral lung was 34% vs 50 % and whole dose to lung was 9.1 Gy vs 10.6 Gy. The dose to contralateral breast was...
Abstract:

2.3 Gy vs 7 Gy: The results of this study suggest that there would be a significant benefit of using FIF 3D plans over regular tangential fields in the post mastectomy set up when considering hypofractionation. Key words: breast radiotherapy, field in field 3D conformal radiotherapy, hypofractionation

Abstract Id: YUGP2374
Supportive Care Among Indian Cancer Patients: A Qualitative Study
Presenter - Ms. Shweta Chawak
Co-author - Dr Mahati Chittum

Background: Social group are seen to contribute to health-related coping. They have found to enhance health-related coping and provide patients with information and resources in stress related situations. Supportive care looks beyond symptom management. This support is found to be approached from primary caregivers as well as from social network invisible to health care system. The aim of the study was to understand the patientâ€™s perception of seeking supportive care. Also, to understand the source of this supportive care. Method: Twenty-six patients undergoing cancer treatment at a hospital in Mumbai were recruited for this study. Semi-structured interviews were conducted to understand patientâ€™s perception of their supportive care and source of this care. The interviews were transcribed and analysed using Interpretive Phenomenological Analysis (IPA). Results: The themes emerging from the analysis were (i) emotional support (family as key support, family as a working unit, role reversal), (ii) instrumental or tangible support (immediate family for routine care, extended family and friends for care in critical conditions and financial support) (iii) informational support (family roleâ€‘ find a doctor, role of a physician- treatment information) (iv) companionship/ sense of belonging (family history of similar illness and fellow patients stories- reduced fear, sense of belonging, heightened empathy). Conclusion: The study indicated that patients have found to assign roles for supportive care. Patients were found to seek emotional and instrumental support from the immediate family and extended family and friends, and treatment-related support from their treating physician. Patients were also found to develop a sense of belonging with their fellow patients. The study implies the need to understand the social network not only to enhance patient-centered health care services but also to involve social support to increase patient involvement in their illness and treatment decisions. Keywords: Psycho-oncology; Supportive care needs, Cancer, Source of information

Abstract Id: YUGP2382
Acute Intracranial Haemorrhage - A Rare Causal Association With Rituximab: Case Report
Presenter - Dr. MUKESH RADHESHYAM BANG
Co-author - RAJA T., BALAMURUGAN M

Abstract:

Hematological malignancies comprise a diverse group of neoplasms, and may directly or indirectly (treatment related) lead to neurological complications. We report one of the first case reports of severe intracranial haemorrhage, a causal association with rituximab in an elderly patient with follicular lymphoma Stage II (below diaphragm) after excluding all other causes of ICH. 

Introduction: In adult patients with haematological malignancies, Intracranial haemorrhage (ICH) is the second most common complication after infection and is associated with high morbidity and mortality. Several comprehensive reviews have highlighted the various risk factors for ICH in cancer patients like hypertension, vessel wall abnormality, invasion or compression of vessels from a tumour in or adjacent to the brain, low platelet count or platelet dysfunction, coagulation factor deficiency, disseminated intravascular coagulation (DIC), sepsis, and hyperleukocytosis. Rituximab, is a medication used to treat certain autoimmune diseases and types of cancer. It is used for non-Hodgkin’s lymphoma, chronic lymphocytic leukaemia, rheumatoid arthritis, idiopathic thrombocytopenic purpura, and pemphigus vulgaris. Common side effects, which often occur within few hours of the medication being given, include rash, itchiness, low blood pressure, and shortness of breath. Other severe side effects include reactivation of hepatitis B in those previously infected, progressive multifocal leuкоencephalopathy, and toxic epidermal necrolysis, but nothing like haemorrhage. Case report: The Present case report describes 58 year female patient with permanent pacemaker (PPI) in situ since last 4 years but not on any antiplatelet, now presented with abdominal pain. CECT abdomen showed pre and para and retro aortic mass (likely conglomerate node mass), encasing the mesenteric vessels and mesenteric nodes, suggestive of lymphoma. On further evaluation, 2D Echo showed S/P PPI with normal LV size and function, no RWMA. Core needle biopsy from Para aortic node which confirmed Follicular lymphoma, grade II with CD20 +ve by HPE and IHC. PET-CT whole body showed hypermetabolic retroperitoneal, mesenteric and retrocrural nodal masses, with no other metabolically active disease elsewhere in the whole body survey. Imaging suggestive of lymphomatous involvement of nodes below the diaphragm (stage II). All routine blood index of coagulation profile were normal, viral markers were negative and bone marrow aspiration and biopsy showed no evidence of lymphoma involvement. After Cardiologist fitness, patient was started on Chemotherapy with CHOP-R regimen. Post 18 hours after completion of Rituximab, patient started complaining of headache, vomiting and suddenly patient developed right sided hemiplegia. CT Brain was done (MRI not done as patient was having PPI in situ) which showed acute intracerebral haemorrhage with subarachnoid haemorrhage. 3D CT Angio was done to rule out vascular abnormalities but imaging showed no vascular abnormalities. Coagulation profile and platelets were normal. Patient was managed with IV fluids, anti-hypertensives, antiepileptics and antiedema measures. Patientâ€™s general condition improved later and power in right upper and lower limb also improved. Discussion: Follicular lymphoma is the most common of the indolent (slow-growing) non-Hodgkin’s lymphomas, and the second-most-common form of non-Hodgkin’s lymphomas overall. Rituximab is a monoclonal antibody against the protein CD20, which is primarily found on the surface of immune system B cells. When it binds to this protein it triggers cell death. In 2010, rituximab was approved by the European Commission for first-line for maintenance treatment of follicular lymphoma who are CD 20 +ve. Rituximab is used to treat cancers of the white blood cell system such as leukemias and lymphomas, including non-Hodgkin’s lymphoma and lymphocyte predominant subtypes of Hodgkin’s Lymphoma. Serious adverse events related to rituximab, which can cause death and disability, includes severe infusion reaction, cardiac arrest, cytokine release syndrome, tumour lysis syndrome, causing acute renal failure, Infections, Hepatitis B reactivation, other viral infections, Progressive multifocal leuкоencephalopathy (PML) Immune toxicity, with deletion of B cells in 70% to 80% of lymphoma patients, pulmonary toxicity, bowel obstruction and perforation but nothing related to intracranial hemorrhage mentioned as a side effect in literature. After literature search, we found only one case report by Ganguly S showing acute intracerebral hemorrhage in intravascular lymphoma: a serious infusion related adverse event of rituximab and that to in a case of CNS lymphoma. We discussed with patient and relatives about the rare causal association of Rituximab with Intracranial haemorrhage and advised to continue chemotherapy without adding Rituximab. Conclusion: Rituximab is a chimeric monoclonal antibody against the protein CD20, infusion related adverse effect and some serious adverse effects does occur with Rituximab. We report one of the first case report documenting intracranial hemorrhage, a causal association with rituximab. Caution should be used in selective patient populations, such as elderâ€™s and patients with other comorbidities. KEYWORDS: Intracranial hemorrhage, Follicular lymphoma, Rituximab.
Abstracts

InnovaaÈ Interim Results Of A Randomized Phase II Trial Comparing Interval Versus Neoadjuvant Chemotherapy In MRI-Defined High Risk Rectal Cancer
Presenter- *Prof. Ramakrishnan Sheshadri
Co-author - Arunkumar, Shirley S, Ganesan TS

Aim: The current standard of care for locally advanced rectal cancer is neoadjuvant chemoradiation followed by surgery and adjuvant chemotherapy. The aim of the randomized INterval or NeOadjuvant chemotherapy in rectal cancer (INNOVA) trial is to compare the efficacy and safety of interval chemotherapy with neoadjuvant chemotherapy in MRI defined high risk rectal cancer. We present the interim results of the trial. Methods: This is a phase 2 parallel arm randomized controlled trial. Patients with non-metastatic resectable low or mid rectal cancer with MRI defined high risk features (threatened mesorectal fascia, any T3 tumor in the lower rectum, T3c or T3d in mid rectum, N2 disease, extramural vascular invasion) are randomized in a 1:1 ratio to receive either 3 cycles of capetabine and oxaliplatin (CAPOX) chemotherapy followed by concurrent chemoradiation (50.4 Gy and capetabine) and surgery (Arm A) or chemoradiation followed by 3 cycles of CAPOX and surgery. All patients receive 3 cycles adjuvant CAPOX after surgery. The primary end-point is the pathological complete response (pCR). This is a two phase study with 42 patients randomized in the first phase. If at least 2 pCR is observed in either arm, the trial proceeds to the second phase where an additional 40 patients will be randomized. The trial is registered with CTRI (No.:2015/01/005385). Results: A total of 178 patients were screened of whom 42 were randomized in the first phase. Chemoradiation has been completed in 33 patients of whom 6 had Grade 3 toxicity (skin-6 and neutropenia-1). No grade 3-4 toxicity was seen after delivery of 157 cycles of chemotherapy. Surgery was performed in 25 patients till date and 19 patients have completed the protocol treatment. No serious adverse events occurred so far. A pCR was observed in 7 (28%) patients (4 in Arm A and 3 in Arm B). The trial has proceeded to the second phase. Conclusion: The interim results of the trial support the feasibility of both interval and neoadjuvant chemotherapy in high risk low or mid-third rectal cancer. The high rate of pCR is encouraging. Conflict of interest: Nil

Abstract Id: YUGP2392
Redefining Health Care: Addressing Quality Of Life Among Breast Cancer Survivors, A WomenÈ™S Perspective.
Presenter- *Dr. Nataraj Naidu
Co-author - Somasekhar S P, Shabber S Zaveri, Ashwin

Background: A comprehensive health care is defined by its holistic approach. The decision of breast conservation vs mastectomy is very crucial not only for the women with breast cancer, but also the surgeons, as it challenges the self-esteem of a woman, having a great psychosocial impact. Aim: To assess the quality of life among the breast cancer survivors after confirmation and post-surgery and to identify medical and socio-demographic predictors of QOL among them. Methods: A longitudinal study involving 126 patients of breast cancer for a period of 2 year from May 2015- June 2017 was undertaken in Manipal comprehensive cancer care unit. The enrolled women were interviewed at the confirmation of diagnosis and at 6 months and 1 year. The quality of life was assessed by the European organization for research and treatment of cancer and quality of life (EORTC-QLQ-C30) and breast cancer specific complementary measure (EORTC-QLQ-BR23) questionnaire along with various medical and socio-demographic variables. Both the scales assess the items from functional and symptom scales, however the QLQ-C30 in addition also measures the global health status. The multi-variate analysis for measuring significant predictors was employed. Results: The mean age of breast cancer diagnosis was 54.6 +7.3 years. Majority of respondents were Hindu by religion 62%, followed by Muslims 34% and others 3%. Nearly 64% of the respondents were in the stage III and stage IV of cancer and required mastectomy. The mean score for global health status was 63.4+18.4 and of functional scale was highest for cognitive, 78.3+19.4, followed by emotional items. However, the mean score for symptom scale by QLQ-C30 was recorded highest for financial difficulties 42.3+22.6. For QLQ-BR23, the mean score for functional scale was highest for body image, with 79.3+22.6 and the mean score for the symptom scale was highest for hair loss symptoms, 32.8+22.6. The predictors for global health status were age, emotional support and stage of cancer. Conclusion: The quality of life among breast cancer patients reflected by the global health status have a significant impact with age, emotional support and stage of cancer. Addressing them have a greater impact in betterment of oncological and long term outcomes. The EORTC-QLQ questionnaires can be employed in Indian context with greater precision.

Abstract Id: YUGP2400
Lung Density Change After Sabr: A Comparative Study Between Tri-Co-60 Magnetic Resonance-Guided System And Linear Accelerator
Presenter- *Dr. Eunj Kim
Co-author - Hong-Gyun Wu, Jong Min Park, Jung-in Kim

Background: Radiation-induced lung damage is an important treatment-related toxicity after lung stereotactic body radiotherapy (SBRT). After implementing a tri-60Co magnetic-resonance image guided system (ViewRay; ViewRay Inc., Cleveland, OH), we compared the associated early radiological lung density changes to those associated with a linear accelerator (LINAC). Methods: Eight patients treated with ViewRay were matched 1:1 with eight patients treated with LINAC. Prescription doses were 52 Gy or 60 Gy in four fractions, and lung dose-volumetric parameters were calculated from each planning system. The first two follow-up computed tomography (CT) scans were taken at median six weeks (range 4â€“7 weeks) and then at 21 weeks (range, 16â€“31 weeks). Those were co-registered with the planning CT through deformable registration software, and lung density was measured by selected isodose levels (0.5â€“48 Gy). Results: Tumor size was matched between the two groups, but the planning target volume of ViewRay was larger than that of LINAC (p = 0.065). With regard to clinically relevant dose-volumetric parameters in the lungs, the ipsilateral mean lung dose, V5 Gy and V10 Gy were significantly poorer in ViewRay plans compared to LINAC plans (p = 0.027, 0.038, and 0.01, respectively). Increased lung density was not observed in the first follow-up scan compared to the planning scan. A significant change of lung density was shown in the second follow-up scan and there was no meaningful difference between ViewRay and LINAC for all dose regions. In addition, no patient developed clinical radiation pneumonitis until the second follow-up scan. Conclusions: Although the plan quality of ViewRay was inferior to that of LINAC, there was no significant difference in the early radiological lung damage between ViewRay and LINAC for lung SABR. A longer follow-up is needed to assess late lung toxicities.

Abstract Id: YUGP2402
Intensity-Modulated Radiotherapy Reduces Acute Gastrointestinal Toxicity Compared To 3-Dimensional Conformal Radiotherapy In Locally Advanced Rectal Cancer Patients Treated With Neoadjuvant Chemoradiation: A Systematic Review And Meta-Analysis
Presenter- *Dr. Chan Woo Wee
Co-author - Hong-Gyun Wu, Eui Kyu Chie, Jong Min Park

Background: To compare the acute gastrointestinal (GI) toxicity profiles of intensity-modulated radiotherapy (IMRT) and 3-dimensional conformal radiotherapy (3D-CRT) in locally advanced rectal cancer patients treated with neoadjuvant concurrent chemoradiation (NA-CCRT), using systematic review and meta-analysis. Methods and Materials: Literature search was performed with PubMed and
Background and Objectives: Angiogenesis is a fundamental event in the process of tumor growth and metastases. The vascular endothelial growth factor (VEGF) pathway is well established as one of the key regulators of this process. VEGF-A has been found to be an independent poor prognostic indicator for disease free survival and overall survival. Hence this study was undertaken to study the association of VEGF-A in relation to demographic parameters, stage, histopathology and IHC markers (ER/PR/HER2neu/Ki-67) and outcome especially in Indian women. Methods: 64 consecutive breast cancer cases histopathologically diagnosed from January 2010 to June 2010, who had ER/PR/HER2neu/Ki67 markers and who had accepted for standard treatment, were included in the study and followed up till June 2015. Outpatient and inpatients records were studied, clinico-pathological parameters (age, parity, menopausal status, family history, TNM stage, grade, histology, LVI, PNI and lymph nodes) were noted. The patientâ€™s pathological slides were extracted from the archives, reviewed again by pathologists for histopathological features and IHC markers (ER/PR/HER2neu and Ki-67). The patientâ€™s pathological tissue blocks were extracted from the archives. Immunohistochemical staining was performed with one step polymer HRP (antigen retrieval system) method using VEGF-A biogenic polyclonal kit. All cases were followed up for 5 years (from June 2010 to June 2015). The association of VEGF-A expression with clinico-pathological parameters and outcome was studied using statistical analysis- CHI SQUARE TEST and using R-software. Survival curves were constructed using the Kaplan Meier product limit method and statistical significance was assessed using the log rank test. Results: In our study, the median age of presentation was 52.50 years, out of which majority were in the age group of 51-60 years. 76.6% patients had attained menopause, ER positivity was seen in 56.2%, PR positivity in 54.7% and Her2neu in 31.2% and high Ki67 expression was seen in 46.9%. VEGF-A expression was seen in 95.3% cases of breast cancer patients. VEGF-A expression was not associated significantly with parameters like age, menopause, parity, family history and multicentricity. VEGF-A expression was not associated significantly with histopathologic parameters like tumor size, lymph nodes, tumor grade, LVI, PNI, estrogen receptor, progesterone receptor; Ki67 and Her2neu. VEGF-A expression was not associated significantly with the stage of the breast cancer, chemotherapy and hormonal therapy. VEGF-A expression was not associated significantly with the survival. CONCLUSIONS: The heterogeneous nature of breast cancer with several different subtypes with different molecular profiles, biological behaviour, and risk profiles poses a challenge for therapeutic decision making process. VEGF-A expression was no significant statistical association with prognostic parameters like tumour stage, grade, IHC markers (ER/PR/HER2neu/Ki67) and outcome.

Abstract Id: YUGP2414
Breast Cancer: Long Term Outcome From Chennai
Presenter - Dr. Manikandan Danashkodi
Co-author - Venkatraman Radhakrishnan, Prasanth Ganesan, Rama Maurya

Background: This analysis was performed to identify prognostic factors that correlate with outcome. Methods: We analyzed data of 4577 patients with invasive breast cancer who were treated between 2006 â€“ 2013 in Cancer Institute, Chennai. Results: The median age at diagnosis was 50 years. Females constituted 99.3% and rest were males. Clinical Stage I, II, III, IV and unknown (UK) were 2%, 39.2%, 46.7%, 11.7% and 0.4% respectively. The histology was ductal, lobular, mixed and others in 94.1%, 1.1%, 1% and 3.8% respectively. Grade 1, 2, 3 and UK were 0.9%, 22%, 65.6% and 11.5% respectively. Luminal A, Luminal B, Her2 enriched and triple-negative breast cancer (TNBC) were 7%, 53%, 32.5% and 7.5% respectively. 26% underwent straight surgery and post-operative therapy was chemoradiotherapy (80%), radiation (37%), hormonal therapy (57%) and observation (15%). Locally advanced breast cancer (LABC) was operable in 30% and inoperable in 70%. The median size of tumor in stage III disease was 6.5cm (range 1 â€“ 25cm). Neoadjuvant therapy was chemoradiation, chemotherapy (CT), CT followed by chemoradiation, only radiation or only hormones in 75.3%, 19%, 1.7%, 2.4% and 1.6% respectively. CT was anthracycline-based, CMF, anthracycline plus taxane and taxane in 69%, 15%, 13.2%, 2%, 0.5% and 0.3% respectively. 18.2% of patients treated with neo-adjuvant CT and 26.5% of patients treated with neoadjuvant chemoradiation achieved complete pathological response (PCR). The 5-year DFS for stage I, 2A, 2B, 3A, 3B, 3C and 4 was 80%, 85%, 84%, 76%, 54%, 39% and 22% respectively. 23% of patients had recurrence of disease. In the multivariate analysis for stage III disease, neoadjuvant CT (HR 0.48, 95% CI 0.31 â€“ 0.75, P < 0.05) and PCR (HR: 0.49, 95% CI 0.34 â€“ 0.70, P < 0.05) had decreased risk and lympho-vascular invasion (LVI) (HR: 2.32, 95% CI 1.65 â€“ 3.26, P < 0.05) had increased risk of death. Conclusion: LABC is the most common presentation which is often inoperable. A significant proportion of our patients were Her2 enriched (32.5%). Concurrent chemoradiation produced a superior pathological response when compared to neoadjuvant CT which translated to a significantly improved survival benefit. Neoadjuvant CT, PCR, and LVI correlated with survival.

Abstract Id: YUGP2416
Cytoecdutive Surgery in Advanced Ovarian Cancer Of Low-Mid Malignant Potential
Presenter - Dr. BISWAJIT DASH
Co-author - SHYLASREE TS, BHANDARE MANISH, KUMAR NEHA

Cytoecdutive surgery in advanced ovarian cancer of low-mid malignant potential presentation is a beneficial option for selected patients. Aim: To evaluate the feasibility and outcome of Cytoreductive Surgery In Advanced Ovarian Cancer Of Low-Mid Malignant Potential. Materials and Methods: A total of 26 patients with advanced ovarian cancer of low-mid malignant potential treated with Cytoreductive Surgery In Advanced Ovarian Cancer Of Low-Mid Malignant Potential from October 2006 to December 2015, were included in this study. Neoadjuvant chemotherapy (paclitaxel and carboplatin) was given to all patients. Results: The median age of patients was 45 years. Seventy-one percent were in stage III and 29% in stage IV. Percentage of patients with grade 1, 2, 3 and UK were 27%, 65%, 7% and 1% respectively. Grade 1, 2, 3 and UK were 27%, 65%, 7% and 1% respectively. The median size of tumor was 7 cm (range 2 – 12 cm). The patients were treated with Cytoreductive Surgery In Advanced Ovarian Cancer Of Low-Mid Malignant Potential. The objective Cytoreductive Surgery In Advanced Ovarian Cancer Of Low-Mid Malignant Potential was achieved in 22 patients (84.6%). The median number of surgical procedures was 2 (range 1 – 5). The median number of days of hospital stay was 8 (range 3 – 28). The median number of postoperative complications was 1 (range 0 – 4). The median follow-up period was 20 months (range 12 – 36 months). Conclusion: Cytoreductive Surgery In Advanced Ovarian Cancer Of Low-Mid Malignant Potential is a feasible and effective option for selected patients with advanced ovarian cancer of low-mid malignant potential.
and tendency for late recurrences. Primary Cytoreductive surgery (CRS) in advanced low grade disease is probably the option and is justified clinically and to some extent financially as the survival advantage is larger and longer than high grade ovarian neoplasms. Hormonal treatment with tamoxifen or letrozole has shown some beneficial effects in low grade serous ovarian neoplasms in adjuvant/ recurrent setting. We report perioperative outcomes and economic burden of such surgery performed at TMH, Mumbai which has subsidized care for patients. Methods All patients with extensive low grade/sex chord ovarian cancer who underwent CRS over a period of 12 months (July 2016- June 2017) were analyzed retrospectively from the surgical database. CRS consisted of total/partial peritonectomy and visceral resection procedures by Sugarbaker’s technique [1]. Data was collected on patient demographics, disease and surgical details, perioperative management, complications, final histopathology and average cost of inpatient treatment. Results A total of eight patients with extensive disease underwent CRS over a period of 12months, out of which three were private (B) category and five were general category (C). The median age of the patients at the time of presentation was 40 yrs (Range 28 – 52 yrs).2 patients had a performance status of ECOG 0 and 6 patients had ECOG 1. All 8 patients had a histologic diagnosis preoperatively. Median preoperative CA125 (U/ml) was 46 (Range 14 -554). Final FIGO stage was Stage III aë IV in all 8 patients. Six patients had low/intermediate grade serous ovarian neoplasms and two patients had sex chord tumor (Sertoli cell and granulosa cell tumor). All the serous ovarian neoplasms invariably tested positive for ER (ranging from 25 aë 90 %), while PR was positive (5 % ) in only a single case. Strong positivity for PAX8/ WT 1 and weak positivity for P53 was demonstrated in 5 out of 6 low / intermediate grade ovarian neoplasms. The serous tumors had low MIB of 20 aë 25 % 6 out 8 patients had received prior treatment with chemotherapy +/- surgery prior to referral to our hospital, with average 3 cycles of P + C (range 2 aë 6 cycles) but with suboptimal response. The mean weighted PCI was 13 (Range 9 aë 25). All patients had complete cytoreduction (completeness of cytoreduction score of CC-0/1). The median operating time was 9.5 hrs (range 6.5 aë 10.5 hrs). All 8 patients had adnexectomy, 7 patients had hysterectomy and 7 patients underwent omentectomy in addition. All 8 patients underwent pelvic peritonectomy, 3 patients had additional paracolic peritonectomy and 7 patients underwent additional diaphragmatic stripping. 5 patients needed gastrointestinal tract resection (total colectomy in 3 patients, 2 patients had ileal resection and anastomosis and stoma in 2 patients). 2 patients required additional gastric wedge resection along with other bowel resection procedures. None of the patients required splenectomy, pancreatectomy, hepatectomy ,pleurectomy or resection of lesser omentum/portalhepatis. 3 patients needed a chest tube to be inserted due to diaphragmatic perforation as the disease was stuck to the diaphragm. Median blood loss reported was 2.7 L (Range 1.5 -6L). 4 patients required PC transfusion and 3 patients required FFP transfusion, however none of them requiring massive transfusion (>10 RBC / 24 hrs ). 3 patients were extubated in the operation theatre whereas 5 patients were extubated in the ICU. Median postoperative ventilation required was 1 days ( Range 0 -7 days ). Chest tube was removed in the postoperative period within a span of 3 aë 5 days. Median stay in ICU was 2 days (Range 1 aë 10 days) and median hospital stay was 16 days (range 10 aë 28 days ). There were no major intraoperative complications. Seven patients had minor post operative complications (DindoClavin Grade 1-2). Grade 3 complication was seen in one patient who developed SIUR, Delirium, Wernickes encephalopathy and required tracheostomy for prolonged intubated state (6 days). All patients were given heparin prophylaxis. None of the patients had thrombosis or pulmonary embolism in the post operative period. 1 patient had a prolonged ileus managed conservatively. None of the patients had neither any peripheral sensory motor neurologic event nor any of them had symptomatic/asymptomatic lymph cysts. 1 patient had a burst abdomen with contained enterocutaneous fistula which healed by secondary intention. There was no readmission or relaparotomy for complications. We did not have any perioperative mortality in our series. Median follow up period was 3 months (range 0 aë 8 months) after completion of treatment. There has been no demonstrable recurrence so far and all patients are alive without disease. The average cost of surgery was approximately INR 80,000 in the general (C) category and INR 9 lakhs in the private category. Conclusion CRS has acceptable morbidity and is the standard of care for advanced low grade cancer as the biological behaviours is good and is not responsive to chemotherapy. These patients are young and deserve the treatment. However the cost of surgery needs to be addressed for it to be affordable to all classes of the society to prevent disparity of care. References 1. Sugarbaker PH. Peritonectomy procedures. Ann Surg. 1995;221(1):29–42. doi: 10.1097/00000658-199510000- 00004. [FMC free article][PubMed][Cross Ref]
Abstract Id: YUGP2428
Prognostic Connotations Of Brms1 Expression In Human Breast Cancer And Its Role In Tumor Metastasis
Presenter - Dr. Richa Singh
Co-author - Madan Lal Brahma Bhatt, Sanjeev Misra, Saurabh Pratap Singh

Breast Cancer (BC) is a major health issue worldwide. Hence, increasing attention of the scientific community is towards identifying novel molecular targets in its management. Metastasis confers obstacle to conventional treatments. Hence, we aimed to determine the gene and protein level expression of BRMS1 in breast cancer and its prognostic significance. Eighty-three histologically proven cases of BC and a similar number of controls (18-70 years) were included. Quantitative Real-Time Polymerase Chain Reaction (q-RT PCR) and immunohistochemistry (IHC) were used to investigate BRMS1 expression at gene and protein levels, respectively and were statistically analyzed. (i) BRMS1 expression levels were strongly correlated with TNM staging, histological grade and advanced stage (p<.05); (ii) Lastly, BRMS1 significantly correlated with overall median survival of BC patients (P = 0.04). Conclusively, loss of BRMS1 may be beneficial to tailor aggressive therapeutic strategies for such patients.

Abstract Id: YUGP2435
The Clinical Significance Of Plasma Epstein-Barr Virus DNA In Nasopharyngeal Cancer In A Non-Endemic Area
Presenter - Ms. Huili Wang
Co-author - Xiaodong Huang, Yuan Qu, Kai Wang

Background It has been confirmed that Epstein-Barr virus is associated with the occurrence and development of the nasopharyngeal carcinoma. We investigated the clinical significance of plasma concentrations of Epsteinâ€™s virus (EBV) DNA in patients with nasopharyngeal carcinoma who are not in the district of high incidence. Method From October, 2013 to December, 2016, 471 consecutive patients with NPC treated in our hospital were analyzed. The correlation between EBV â€™ DNA before treatment and staging, tumor burden was analyzed. The survival rate of EBV-DNA before and after treatment was analyzed. Results The median copies of pretreatment plasma EBV-DNA in patients with T > II, III or IV phase were 0/ml (0-2310), 0 / ml (0-46900), 459/ml (0-49400), of which 20 patients was metastasis pretreatment, and the median copies was 924 / ml (0-224000). Plasma EBV-DNA is positively correlated with T stage, N stage, M stage, clinical stage and tumor burden, which is statistically significant. Overall survival (p=0.007), progression-free survival (p=0.003) and distant metastasis-free survival (p=0.001) were significantly low among patients with pretreatment plasma EBV DNA concentrations more than 1300 copies per milliliter than among those with concentrations of less than 1300 copies per milliliter. Patients with detectable plasma EBV DNA had significantly worse overall survival (p=0.0016), progression-free survival(p=0.000) and distant metastasis-free survival (p=0.000) than patients with undetectable EBV DNA after the completion of radiotherapy. But Cox multivariate suggests that only T stage and undetectable EBV DNA after the completion of radiotherapy were independent prognostic factors for OS, however undetectable plasma EBV-DNA after the completion of radiotherapy were independent prognostic factors for OS, however undetectable plasma EBV-DNA after the completion of radiotherapy were independent prognostic factors for OS, however undetectable plasma EBV-DNA after the completion of radiotherapy were independent prognostic factors for OS, however undetectable plasma EBV-DNA after the completion of radiotherapy were independent prognostic factors for OS, however undetectable plasma EBV-DNA after the completion of radiotherapy were independent prognostic factors for OS, however undetectable plasma EBV-DNA after the completion of radiotherapy were independent prognostic factors for OS, however undetectable plasma EBV-DNA after the completion of radiotherapy were independent prognostic factors for OS, however undetectable plasma 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Abstract Id: YUGP2453
The Role Of Routine Distress Screening - A Necessary Component In Comprehensive Cancer Care
Presenter - Ms. Michelle Normen
Co-author - Michelle Normen, Vaishnavi R Kanzal,

Introduction: Distress is classified as the sixth vital sign, but often goes undiagnosed and is also an unpleasant emotional experience that patients refrain expressing about unless probed. The prevalence of distress has been shown to cause difficulties and challenges to patients and their caregivers through the entire disease trajectory (Bultz, B.D., Johansen, C. 2011). In Canada, a national approach to implement distress screening was found to be both feasible and beneficial that would ultimately facilitate collaboration and give patients an opportunity to have holistic person centered care (Bultz, B. D., et.al, 2011). Even though the NCCN guidelines mandate for routine distress screening, only 20% of NCCN member institutions screen patients for distress while 37.5% of those institutions conducting routine screening relied solely on interviews (Jacobson, P.B., Ransom, S. 2007). The Distress Thermometer was identified as a simple and effective screening instrument for detecting distress and was found to be a first step toward appropriately referring those in need of psycho-social intervention among Iranian cancer patients (Mansourabadi,A.et,al, 2014) The successful implementation of screening for distress is extremely challenging and varies based on the uniqueness of local jurisdictions and hence, often poses difficulties when having to incorporate it into existing cancer care systems. A pilot single day distress screening study identified distress (41.4%) among Out Patient Department (OPD) patients, demonstrating the need to incorporate routine distress screening to evaluate patients, although manpower issues remained a struggle along with a plan to initiate psycho-oncology services (Dessai, S.B. et.al, 2015). Since, our hospital mandates routine distress screening as a hospital protocol, it becomes a vital tool to assess and identify distress and subsequently provide psychological support to patients and their families. Materials & Methods: This was a retrospective study that focused on assessing the distress of those patients who reported to the Out Patient Department (OPD) of the hospital. When patients come in for consultations to the OPD, they have to undergo initial screening procedures which comprise of the Nursing Initial Assessment (NIA) which record patient vitals and a psychological distress screening that uses the NCCN Distress Thermometer (DT). Since this is a novel concept in cancer hospital, the Psycho-oncology services team conducted sensitization sessions to inform and educate health care professionals and supporting staff regarding the screening procedure and its objectives. The data used for this study was collected between January and June 2017. The NCCN Distress Thermometer and the problem checklist were translated into Kannada, Hindi and Tamil, to aid in patientâ€™s comprehension of the screening tool. The screening is most often self-administered unless the patient is illiterate or finds it difficult to understand the questions and takes about 5 to 7 minutes to be completed after which patients are sent for their consultations to their respective physicians. Those patients reporting a score of 4 or higher were classified as having Moderate to Severe distress levels. These patients were then flagged off to the respective physician and based on the physicianâ€™s clinical judgment and the distress score were referred to Psycho-oncology services for a consultation. Repeat assessments were conducted if patients came in one week after their initial distress screening. The study used Statistical Package for Social Science (SPSS) Version 16 software. Descriptive and inferential statistics were used to analyze the data. Results: A total of three hundred and thirty four patients (N=334) underwent the distress screening in the OPD. These were the percentage of patients for various departments at the hospital: Breast Oncology (23%), General Medicine (27%), Medical Oncology (18%), Hemato-Oncology (13%), Head & Neck Oncology (12%), Gynec-Oncology (8%), Radiation Oncology (6%), Pain & Palliative care (5%), GI & HPB surgical Oncology (2%), Gastroenterology (3%), etc. Gender wise distribution found a majority of female patients (62%) and remaining male patients (38%). Majority of the patients were between the age group of 40-59 years (40%). The regional distribution of patients found a majority of patients from Bangalore (78%) and the remaining (22%) from Karnataka, other parts of India and a few foreign nationals. Based on the NCCN DT patients reported experiencing â€œModerate Distressâ€™ (39%), â€œNo Distressâ€™ (29%), â€œMild Distressâ€™ (18%) and , â€œExtreme Distressâ€™ (3%). The study also compared distress levels based on gender and age of the patients. Independent sample t-test was used to compare Distress levels with gender which showed no significant gender differences (t=0.727, p>0.05) among patients reporting distress. There was also no significant difference (t= 0.416, p>0.05) in the age of patients and distress levels reported. Conclusion: In conclusion it is observed that patients report and undergo significant levels of distress (>4 score) which if identified through routine distress screening can be an indicator for psycho-oncology support services to intervene. The role of initial distress screening as a predictor of psychological distress is truly an essential component for providing comprehensive cancer care to patients and their families in order to understand the patient holistically. Health care professionals are a key source of referrals and hence, it is important to educated and stress the need to identify distress at an earlier stage. Conflict of Interest The authors have declared no conflict of interest

Abstract Id: YUGP2461
Intra-Operative Frozen Section Consultation Of Head And Neck Cancers: A Prospective Analysis
Presenter - Dr. Priya T Rajan
Co-author - Dr Shirley Sundersingh ,

Frozen section consultation in head and neck cancer management plays a role in diagnosis, margin evaluation and nodal status, as all have an immediate impact on further management. In this prospective study, we sought to analyze the spectrum of cases that present for intra-operative assessment among head and neck cancers and assess the error rates and cause for inaccuracy. Having a large number of cases in our academic institution, this study would enable increasing the sensitivity of frozen reports and re-instill confidence in the operating surgeons. Frozen section reports were informed to the operating surgeon orally with a read back policy. The bits were then processed and permanent sections were evaluated and included in the final report. In case of discordant reports, frozen section slides were retrieved and cause for error in reporting assessed and documented. A total of 134 cases of head and neck malignancies were consulted intra-operatively from July 2016 to June 2017. Majority of the cases were squamous cell carcinomas of the oral cavity, followed by tumours of thyroid, salivary glands and skin. 10 discordant results were seen in all which amounted to an error rate of 8.2%. Indication for FS Number of consultation discordant reports False negative False positive Error rate Resection margins 6 3 3 5% Diagnosis 3 0(discordant-1) 2 8.3% Nodal status 1 1 0 4.5% In conclusion, intra-operative consultation by frozen section analysis is a reliable way to aid in decision making with a high rate of concordance with permanent sections. Source of errors included wrong interpretation, superficial sectioning and artefactual distortions. It was observed that though the accuracy rates were comparable to other studies, chances of discordance can be minimized by taking additional deeper sections during frozen section consultation for visibly close margins or distorted sections.

Abstract Id: YUGP2469
Abstracts

Rainbow: A Global, Phase 3, Double-Blind Study Of Ramucirumab (Ram) + Paclitaxel (Ptx) Vs Placebo (Pl) + Ptx In Advanced Gastric And Gastroesophageal Junction (Gej) Adenocarcinoma Following Disease Progression On First-Line Platinum- And Fluoropyrimidin
Presenter - Ms. Hetal Hariya

Basis: RAINBOW trial demonstrated that RAM+PTX significantly improved overall survival (OS), progression-free survival (PFS) and objective response rates (ORRs) in patients (pts) with second-line gastric and GEJ adenocarcinoma. Methods: Pts with disease progression on platinum- and fluoropyrimidine-based chemotherapy were randomized 1:1 to receive RAM (8 mg/kg) or PL on Days (d) 1 and 15 plus Ptx 80 mg/m2 IV on d 1, 8 and 15 of a 28-day cycle. Endpoints: OS (primary) and PFS, ORR, and safety (secondary). Results: Baseline characteristics were well balanced. Grade ?3 AE incidence was higher in RAM+PTX arms for both age groups and similar across age groups. Grade ?3 AEs occurring in ?10% of pts and at higher rate in RAM+PTX arm are listed (Table).

Abstract Id: YUGP2471
Characterizing Tumor Responses From Rainbow, A Randomized Phase 3 Trial Of Ramucirumab (Ram) + Paclitaxel (Pac) Vs Placebo (Pbo) + Pac In Patients (Pts) With Previously Treated Advanced Gastric Or Gastroesophageal Junction (Gej) Adenocarcinoma
Presenter - Ms. Hetal Hariya

Basis: In RAINBOW, OS and PFS were improved for pts with previously treated gastric/GEJ adenocarcinoma in the RAM + PAC arm. Objective response rate was also significantly improved: 28% (92/330) RAM + PAC vs 16% (54/335) PBO + PAC (P=0.001). Timing and duration of responses and quality of life (QoL) are described. Methods: Patients were randomized 1:1 to RAM 8 mg/kg or PBO on days 1 and 15 + PAC 80 mg/m2 on days 1, 8, and 15 (28-day cycle). Radiographic assessment of disease per RECIST v1.1 and assessment of QoL with the EORTC QLQ-C30 were done at baseline and 6-wk intervals following the first dose of study therapy. Results: Median TTR was 6.7 wks (range 4.3-33.3) for RAM + PAC and 6.6 wks (5.1-37.1) for PBO + PAC pts. A majority of RAM + PAC pts (58% [53/92]) and PBO + PAC pts (61% [33/54]) responded by the first 6-wk assessment. Of these responders, 11% (6/53) and 6% (2/33) were still responding at 12 mos. Median DoR was 4.4 mos (95% CI 4.1, 5.5) in the RAM + PAC arm and 2.8 mos (95% CI 2.1, 4.2) in the PBO + PAC arm (HR=0.66, 95% CI 0.45, 0.97, P=0.332). At 6 wks, rates of improved/stable QoL scores among responders were similar between treatment arms and higher among the responders (73% RAM + PAC vs 74% PBO + PAC) than in the intent-to-treat population (53% vs 50%). Conclusions: Patients with advanced gastric/GEJ cancer showed an improved and more durable response rate with RAM + PAC. For the majority of pts, response occurred within the first 6 wks of therapy and was associated with QoL benefit. Disclosures: This study was supported and conducted by Eli Lilly and Company, Indianapolis, IN, USA. This is an encore of an abstract presented at the ASCO-GI; San Francisco, CA, USA; Jan 21-23, 2016.

Abstract Id: YUGP2499
Salvage Treatment For Neck Lymph Node Recurrences After Radiotherapy Using Cyberknife Radiosurgery Or Stereotactic Radiotherapy
Presenter - Dr. Daijiro Kobayashi
Co-author - Hiro Sato, Jun-ichi Saitoh, Shin-ei Noda

[Purpose/Objective] Neck lymph node (LN) recurrences in irradiated field occur in 10 to 25%, which are important pattern of failure for cancer patients. Nevertheless, there are only few reports about salvage re-irradiation for LN recurrences. We investigated the efficacy and toxicity of Cyberknife (CK) treatment for neck LN recurrences after conventional radiotherapy (CRT). [Material/methods] Between 2008 and 2014, 16 patients with neck LN recurrences after CRT were treated with CK in our institution. All of the recurrences were unsuitable for other treatment due to medical reasons. The treatment fractions were decided depending on tumor and surrounding critical structures volume. The dose to the 10 cm^3 of skin and mucosa was limited to be < 14 Gy given as stereotactic radiosurgery (SRS) to avoid adverse effects. Local control (LC) and overall survival (OS) were estimated using the Kaplan-Meier method. [Results] The follow up period after CK ranged from 2 to 53 months (median, 19 months). The previous CRT dose ranged from 50 to 70 Gy (median, 70 Gy). Neck dissection had been performed for 6 patients (38%) before CK. The target volume ranged 0.05 to 91 cm^3 (median, 1.2 cm^3). The prescribed isodoses ranged from 49 to 89% (median, 64%) for the target. The intended prescribed marginal dose was ranged 18 to 40 Gy in 1 to 8 fractions. The marginal dose as EQD2 (a/b = 10) ranged from 40 to 58 (median, 50 Gy). SRS, the 3-fraction, 5-fraction, 6-fraction and 8-fraction radiotherapy was administered to 46, 8, 3, 1 and 1 lesion, respectively. The local recurrence was observed in 10 lesions of 7 patients. The 1-year LC and OS rate was 83% and 63%, respectively. Fatal bleeding was observed in one patient who had huge (91 cm3) and widespread tumor invasion to carotid artery before CK. The 1-year LC with the target volume >1.0 cm^3 was significantly higher than with the target volume ?1.0 cm^3 (p = 0.013). There is no significant difference in the 1-year LC due to the marginal dose for SRS (? 20 Gy versus > 20 Gy). [Conclusion] CK for neck LN recurrences were performed safely and feasibly in...
most cases. Thus, CK is a candidate as a salvage treatment. We have to pay much attention to large and wide spread tumor invasion before CK.

Abstract Id: YUGP2505
Free Radial Forearm Flap For Tongue Reconstruction: Assessment Of Functionality Of Neo Tongue With Respect To Speech, Deglutition And Mobility
Presenter- Dr. Mohammed Khurram
Co-author - MOHD YASEEN, NAZIA UMME HABIBA,

ABSTRACT Introduction Speech and swallowing are dependent on the shape, size, and mobility of the tongue. These functions can be profoundly disturbed by resection of tumors that involve the anterior 2/3rd of the tongue. The primary goal of this study was to determine flap survival, postoperative swallowing, functionality of neo-tongue (intelligibility, deglutition, and tongue mobility), and airway results achieved in patients undergoing glossectomy and reconstruction with free radial forearm flap. Materials and Methods Eighteen patients (14 male and 4 female) with squamous cell carcinoma involving lateral aspect of tongue had undergone hemiglossectomy, modified neck dissection and reconstruction with a radial artery free flap from the non dominant forearm. Sixteen of them received postoperative radiotherapy. The age of the patients ranged between 30 and 80 years. Flap dimension ranged from 6x5 cm to 8x 7 cm. Vascular anastomosis performed in an end-to-end manner with 8-0 Ethilon® under microscopic magnification and venous anastomosis was done either end to end or end to side (if large neck veins were selected).

Results All flaps showed complete survival. Fourteen patients (78%) reported improved deglutition and speech following reconstruction as compared to their previous (tumour) state, while 3 patients (17%) reported neither improvement nor decreased functions while one patient (6.81%) had disease progression. Lymph node (77.27%) had partial response, 5 patients (11.36%) had complete response. Lymph node evaluation was done by PET/CT scan. Out of 44 patients, 34 patients had positive nodes and they were treated with positive nodes (2 field or 3 field was done). In 10 patients (35.71%) a value of 2.0 or more in other sites was considered to indicate malignancy. F18-FDG PET findings were validated by pathologic examination of resection specimens of 2 field or 3 field lymphadenectomy as the gold standard. The LNs were separated from the esophageal specimens in accordance with the guidelines of the Japanese Society for Esophageal Diseases (JSED), and examined by experienced pathologists after H and E staining. The diagnosis by PET/CT and pathological examination were compared across different levels to calculate diagnostic accuracy. Sensitivity, specificity, positive predictive value, negative predictive value, and diagnostic accuracy of PET/CT scan was calculated using statistical software SPSS version 15.0, IBM, United states and Open Epi ver. 2.3. The confidence intervals for specificity and sensitivity were calculated after comparing with standard. P value of less than 0.05 was taken as significant level.

Results: Total 61 evaluable subjects who had biopsy proven squamous or adenocarcinoma and met inclusion criteria of our study were included and data was analyzed prospectively. 17 patients (27.87%) underwent primary surgery after PET/CT, 44 patients underwent neoadjuvant treatment, followed by PET/CT and surgery. Thirty two patients (52.46%) had neoadjuvant chemotherapy with 2 or 3 cycles with combination of cisplatin/carboplatin, 5 Fluorouracil, paclitaxel/docetaxel, and epirubicin in different combinations and 12 patients (19.67%) underwent neoadjuvant concurrent Chemoradiotherapy followed by surgery. Surgery in both groups was Esophagectomy (Mc Keown’s 3 stage/ Ivor Lewis/ esophageagastrectomy by Garloc’s approach/ Transhiatal esophagectomy) performed by VATS- video assisted thorascopic surgery + laparoscopy/ open abdominal approach, Thoracoabdominal approach or Transhiatal esophagectomy by open/ laparoscopic method. Lymph node dissection either 2 field/ 3 field was done. In those patients who underwent neoadjuvant treatment, response evaluation was done by PET/CT scan. Out of 44 patients, 34 patients (77.27%) had partial response, 5 patients (11.36%) had complete response, 2 patients (4.54%) had stable disease, and 3 patients (6.81%) were found to have disease progression. Lymph node...
diseases. 56 patients (91.80%) underwent 2 field lymph node dissection, i.e. mediastinal plus abdominal nodes which included Right and left recurrent laryngeal nodes, upper paraesophageal, mid paraesophageal, lower paraesophageal, subcarinal nodes, right and left peribronchial nodes, right and left hilar, inferior pulmonary ligament nodes, aortopulmonary window, paracardiac, lesser curvature, left gastric artery, celiac nodes, common hepatic nodes and Splenic nodes. 5 patients (8.20%) underwent 3 field lymph node dissection which included upper paratracheal, lower cervical nodes. The diagnosis by PET/CT and pathological examination were compared across different levels to calculate diagnostic accuracy. If the lymph node station had metastatic or more metastatic LNs, it was defined as positive for the examination. The fields without lymphadenectomy were excluded from the comparison. Total of 976 lymph node stations were analyzed. Total 1302 lymph nodes were dissected among all stations. Mean number of lymph nodes dissected per patient was 22. Out of 1302 lymph nodes dissected from 976 stations altogether, 130 (9.98%) nodes were positive for metastasis on histopathological examination. The sensitivity, specificity, positive predictive value, negative predictive value, and diagnostic accuracy of PET/CT scan was calculated using statistical software SPSS version 15.0, IBM, United States and Open Epi ver 2.3. Qualitative data variables were presented with the help of Frequency and percentage tables. The confidence intervals for sensitivity and specificity were calculated after comparing with standard. P value of less than 0.05 is taken as significant level. In patients who underwent primary surgery, the sensitivity, specificity, PPV, NPV and diagnostic accuracy were 61.54%, 90%, 42.11%, 95.19% and 86.99% respectively. Sensitivity, specificity, positive predictive value, negative predictive value and diagnostic accuracy of PET/CT scan done before neoadjuvant treatment were 35.29%, 76.89%, 25.71%, 83.98% and 69.2% respectively. Sensitivity, specificity, positive predictive value, negative predictive value and diagnostic accuracy of PET/CT scan done after neoadjuvant treatment 27.12%, 89.08%, 34.04%, 85.47% and 78.43% respectively. On comparing the results with respect to histological type of esophageal carcinoma, diagnostic accuracy of PET/CT in squamous carcinoma was 91.01%, 76.16 % and 82.67 % and in patients with adenocarcinoma was 76.47 %, 57.69 % and 70.34 % respectively, for primary surgery, before neoadjuvant treatment and after neoadjuvant treatment groups. Thus accuracy was better for squamous carcinoma, which is consistent with international literature. Conclusion: Overall diagnostic accuracy of PET/CT in preoperative nodal staging of esophageal cancer is 86.9%, 69.2% and 78.43% in primary surgery, pre-neoadjuvant treatment and post-neoadjuvant treatment groups respectively. Subset analysis revealed higher diagnostic accuracy in squamous cell carcinoma as compared to adenocarcinoma. Thus, preoperative PET/CT has higher yield for squamous carcinoma of esophagus. High specificity of PET/CT for nodal assessment may help in surgical decision-making with respect to the extent of lymph node dissection during curative surgery for carcinoma esophagus. Thus, in circumstances where high morbidity is anticipated due to extensive lymph node dissection, the extent of dissection may be limited. Although the diagnostic accuracy is good, PET/CT alone may be insufficient in surgical decision making, due to its lower sensitivity. Low sensitivity may be due to the presence of inflammatory mediastinal nodes (e.g tuberculosis), especially seen in the Indian subgroup of patients, which can be falsely interpreted as positive on PET/CT. Hence, indications for surgical treatment should be carefully considered in conjunction with the other examinations. However, PET/CT can be recommended for nodal response assessment after neoadjuvant treatment. Large, multicenter, and prospective studies with strict standardization of PET-CT protocols may be needed to investigate the value of PET-CT for regional nodal metastases in esophageal cancer patients.

Abstract Id: YUGP2531
Micronuclei As A Biological Dosimeter To Assess Dose After In Vivo Radiation Exposure In Head And Neck Cancer Patients
Presenter- Dr. Rashmi Kulshrestha
Co-author - DR. ARUN KUMAR RATHI, DR. KISHORE SINGH, DR. SEEMA KAPOOR

Aims & objectives: The current study was undertaken to estimate the doses received by peripheral blood lymphocytes of patients of Head & Neck Squamous Cell Cancer undergoing radiotherapy by measuring the frequency of Micronucleated cells (MNC) in blood . Materials and methods : A total of 25 patients were irradiated with a daily fraction of 2 Gy, consecutively for 5 days every week for 6-7 weeks. MNC frequencies were assessed in these patients by analyzing blood samples taken before starting treatment (day 0), during course of radiotherapy(on day 1, day 5, day 15,day 25), at the end of treatment and 6 weeks after end of treatment. Cultures established in duplicate using Cytochalasin-B (mycotoxin) as per standard protocol and Micronuclei yield calculated in binucleated cells. Results : The means of Micronuclei for all the 25 patients as per analysis were plotted against incremental doses of radiation and increased MNC frequencies were observed in cells during treatment. To determine association of increase in mean Micronuclei, Analysis of variance (One way ANOVA) with Bonferroni test was applied. A dose dependent increase of Micronuclei is seen in lymphocytes of head and neck cancer patients undergoing RT. Conclusions: Our study confirmed that radiotherapy has a potent clastogenic effect on circulating lymphocytes of head-and-neck cancer patients.The Micronuclei yield significantly increased with each successive fraction of radiation however the Nuclear Division Index decreased significantly with cumulative doses of radiation. Biological dosimetry done in peripheral lymphocytes may help to optimize dose of radiation , may be useful to assess response, maybe useful for individual therapy change and to determine the risk of developing future secondary tumors in irradiated HNSCC patients.

Abstract Id: YUGP2539
Doing Vascular Endothelial Growth Factor-A Has Any Impact On Treatment Decision In Colorectal Cancers?
Presenter- Dr. SONAL DHANDE
Co-author - Dr. P.P Bapsy, Dr. Swarna Shivakumar, Dr. Poonam Maurya

BACKGROUND: Angiogenesis is fundamental event for colorectal tumor growth and metastatic dissemination. VEGF-A is a well characteristicangiogenic factor and independent poor prognostic for DFS and OS. Dramatic tumour suppression has been reported with anti-angiogenic agent. This study is undertaken to know the importance of VEGF-A expression status of colorectal cancer in Indian scenario to determine VEGF-A expression correlation with other prognostic factors like staging, histopathologic features and treatment response and survival. METHODS: 50 patients histopathologically diagnosed from January 2010 to December 2013 were included and followed up till June 2016. Patient details, pathology and medical records were obtained from the hospital information system. Immunohistochemistry staining was done for VEGF-A kit: Biogen One step polymer HRP&interpretation was done as: 0-10%-negative, 10-25%=1+, 25-75%=2+, >75%=3+.Cross tables were made to know the frequency distribution of the variables. The cross tables used for frequency distribution of variables were tested by using Chi-square test where expected frequency was more than 5, otherwise Fisher exact test was used with 95% confidence level. The time to treatment failure was estimated with the use of the Kaplan-Meier method. SPSS Software was used to analyse data. All p-values resulted from two-sided statistical tests and p < 0.05 was considered to be significant. RESULTS: The mean age of patients with colorectal cancers in our study was 60.26 years.VEGF-A expression was present in 33 patients (66%). The sub-categorization revealed 7, 11 & 15 patients with VEGF-A staining of 1+, 2+ and 3+ respectively. 22 patients (44%) had stage III while stage IV was seen in 16 patients (32%). Metastatic pattern revealed that majority of the patients had liver & lung (10% patients) followed by liver with bone and liver with peritoneum.
Out of the total 50 patients, 35 patients (70%) had left sided colon primary while 15 patients (30%) were right sided colon primary. Right sided colon primary tumours showed high VEGF-A expression in 12 patients (80%). In our study high VEGF-A expression was associated with higher tumour stage, lymphovascular invasion, serosa invasion, metastasis and death but was statistically not significant. The response to treatment assessment in subgroups of rectal cancer and metastatic colorectal cancer patients revealed VEGF-A expressed tumours had low CR rates and higher relapse rate in colon cancer patients who had received adjuvant chemotherapy. The tumours with VEGF-A expression showed shorter time to treatment failure and statistically significant with p value 0.03. CONCLUSION: VEGF-A expression was significantly associated with shorter time to treatment failure in our study. There was no correlation found between the VEGF-A expression and all known prognostic factors may be due to relatively small sample size. The correlation of VEGF-A expression which done by cost effective method of immunohistochemistry is a reliable surrogate biomarker of disease outcome, especially in a resource poor setting like India. It is also beneficial to determine stage II node negative colorectal cancer patients with high risk of relapse who can benefit from adjuvant chemotherapy in our country.

Abstract Id: YUGP2541
Cytoreductive Surgery And Hyperthermic Intraoperative Chemotherapy For Treatment Of Peritoneal Carcinomatosis- Our Initial Clinical Experiences And Review Of Early Postoperative Outcomes:

Presenter- *Dr. Vimalathithan Seeralan*
Co-author - Prof Dr Rajasundaram, DrGanesh Babu,

INTRODUCTION: The aim of this study is to present our initial experience in peritoneal carcinomatosis by treatment details of CRS and HIPEC and also review the post-operative morbidity & complications in our series in the light of current literature. METHODS: Data of 25 consecutive patients who were treated for peritoneal carcinomatosis in Gleneagles Global Health City, Chennai were retrospectively reviewed. Treatment indication and management were evaluated at the multidisciplinary Team. All patients underwent CRS and HIPEC with the aim of complete cytoreduction. Perioperative complications were classified according to Clavien-Dindo classification, and HIPEC-related side effects were identified using National Cancer Institute Common Terminology Criteria for Adverse Events (CTCAE) criteria. RESULTS: The mean age was 59.The mean Peritoneal Carcinomatosis Index was 14 with a mean operative time of 650 minutes. Perioperative morbidity and HIPEC-related toxicity were observed in 8(32%) and two patients (8%) respectively without any perioperative mortality. During a mean follow up of 13 months, overall and disease-free survival rates were 100% and 84%, respectively. According to Clavien-Dindo classification perioperative complications in our patients are grade 0, 1, 2 and 3 are 32%, 28%, 28% &12 % respectively. CONCLUSION: Careful perioperative evaluation, proper patient selection and multidisciplinary approach & application of HIPEC in patients with full CRS are essential for success in curative treatment of peritoneal carcinomatosis. Compatible with the literature, surgical outcomes of the presented series are very encouraging for this treatment modality with minimal complications that have been recently popularized in our country.

Abstract Id: YUGP2543
Is Neutrophil Lymphocyte Ratio A Potential Prognostic Biomarker In Advanced Breast Cancer In Low Socioeconomic Countries?

Presenter- *Dr. SONAL DHANDE*
Co-author - Dr. P.P.Bapsy, Dr. Poonam Maurya, Dr. Lepakshi

Background: Breast cancer new AJCC staging incorporates tumour grade and biological markers like ER/PR and HER-2 neu as prognostic factors for treatment decision. The inflammatory response plays a vital role in the development and progression of breast cancer. It subverts adaptive immune response and alters response to chemotherapeutic agents. Neutrophil-lymphocyte ratio (NLR) was proposed as potential prognostic factor for cancers. Recent studies had looked for NLR as prognostic factor in breast cancer patients, hence conducted this study to evaluate the impact of NLR, a simple and cost effective method on different clinicopathologic characters of breast cancer and treatment outcome. Methods: 141 patients diagnosed as advanced breast cancer from January 2009 to December 2011 at Apollo hospital medical oncology department, were analyzed retrospectively and followed up for 5 yrs till December 2016. NLR was calculated based on pre-treatment hemogram. NLR was defined as the neutrophils divided by lymphocytes and NLR cut-off values of 3 were used. Kaplan Meier method was used to analyze treatment response by RECIST criteria 1.1. Clinico-pathologic factors were analyzed by Cox hazard model. Significant level was p < 0.05. RESULTS: Out of 141 study population, 88 (62%) had Low NLR of 3. 32(60%) were of

Abstract Id: YUGP2545
Does Her2Neu Overexpression Influence Prognosis Of Hormone Receptor Positive Breast Cancers?

Presenter- *Dr. Poonam Maurya*
Co-author - Dr P P Bapsy, Dr Swarna Shivkumar, Dr Sonal Chandrakant Dhande

Introduction The heterogeneous nature of breast cancer is depicted with genotypic and phenotypic diversity. Her2neu positivity is seen in 15-20% of the breast cancers and is associated with increased tumour aggressiveness with decreased DFS and OS. Molecular subclassification of breast cancer is increasingly emphasized in the personalized care of breast cancer. We evaluated the role of Her2neu expression or amplification in prognosticating breast cancer. Methods and materials We retrospectively evaluated 192 breast cancer patients at our institute from 1st January 2008 to 31st The patients were subcategorized into four groups, namely: hormone receptor positive group (ER+PR+ Her2neu0), Triple positive group, triple negative group and the ER0PR0 Her2neu+ group. The prevalence of high Ki67, grade 3 tumours and lymph node positivity was noted across all the groups. The 5 yr OS and 5 yr PFS was calculated in each group. Results The prevalence of high Ki67 and grade 3 tumours was highest in the triple negative breast cancer group (87.5%, 83.3%) followed by ER0PR0 Her2neu+ group (84.4%, 78.1%), triple positive group (72.7%, 63.6%) and in the ER+PR+Her2neu0 group (38.2%, 35.3%). The 5 yr OS was highest (92%) in the ER+PR+ Her2neu0 group followed by ER0PR0 Her2neu + group(72%), triple positive group (68%) and least was in the triple negative group (39%). The 5 yr PFS was 86% in the ER+PR+ Her2neu0 group, followed by 81% in the ER0PR0 Her2neu+ disease, 56% in the triple positive group and 24% in the triple negative breast cancer. The 5 yr OS and 5 yr PFS was statistically significant (p

Abstract Id: YUGP2547
Comparison Between Static And Dynamic Imrs In Srs Planning:
Single Institution Retrospective Analysis

Presenter- *Dr. Ashwini Gopal*
Co-author - Deleep G, Krishnam Raju A, Abdullah A

OBJECTIVE:Comparison between SRS plans done by static IMRT (BRAINLAB) and dynamic IMRT (RAPID ARC) in terms of dosimetry, treatment time and MU delivered. MATERIALS AND METHODS: Treatment plans of 44 patients (22 planned by static IMRT and 22 by dynamic IMRT) were retrospectively analysed and compared for V5Gy, V8Gy, V10Gy, integral dose in brain(excluding PTV), treatment time and monitor units (MU) delivered. All patients were treated in Variian Novalys Tx and planning was done in Brainlab TPS version iPlan RT Dose 4.5.4 for static IMRT and Eclipse version
Abstract Id: YUGP2554

Extended Cervico-Mastoid Versus Cervicomastoidofacial Incision For Parotid Surgery: Comparative Study

Presenter - Dr. SUNIL KUMAR
Co-author - H. P. SINGH, V. VERMA, A. MISHRA

Purpose: To compare the functional and cosmetic outcome of parotid surgery using extended Cervicomastoid and cervicomastoidofacial (modified Blairâ€™s) incision with or without sternocleidomastoid obliteration. Methods- Patients with benign parotid tumors underwent parotidectomy (superficial/total) via cervicomastoidofacial (modified Blairâ€™s incision) and extended Cervico-mastoid incision with or without sternocleidomastoid obliteration. Patients were followed for 6 months to 1 year following surgery. Information on the basis of symptoms, patient satisfaction, subjective Freyâ€™s syndrome, retromandibular and pre-auricular depression and scar was studied on a 0-5 visual analogue scale (VAS) and analyzed. Results- Out of total 39 parotidectomies, 18 (46%) were operated via cervicomastoidofacial (modified Blairâ€™s) incision and 11(28%) via extended cervico-mastoid reconstruction, 11(28%) via extended Cervico-mastoid incision with sternocleidomastoid flap reconstruction and 10 cases (26%) were operated via cervicomastoidofacial incision with sternocleidomastoid flap reconstruction. On the basis of visual analogue scale satisfaction level in patients operated via cervicomastoidofacial incision without sternocleidomastoid flap reconstruction was less in comparison to patients operated via extended Cervico-mastoid incision with sternocleidomastoid flap reconstruction. Discussion- The cervicomastoidofacial incision (modified Blairâ€™s incision) is frequently used for parotid surgery which offers excellent surgical exposure to the parotid gland, but leaves a visible scar in pre-auricular area. Alternatively a more cosmetic Extended Cervico-mastoid incision can be considered along with sternocleidomastoid flap reconstruction to prevent the Freyâ€™s syndrome. Conclusion- Extended Cervico-mastoid incision is cosmetically better as there is no facial scar. In addition obliteration of parotid defect using sternocleidomastoid muscle flap gives excellent cosmetic as well as functional outcome in terms of retromandibular depression and Freyâ€™s syndrome.

Abstract Id: YUGP2558

Use Of Free Vascularised Grafts In Reconstruction Of Perioral Surgical Defects In Oral Cancer

Presenter - Dr. Mishal Shah
Co-author - dr mishal shah, dr akash tiwari, dr shamshuddin virani

BACKGROUND: Since the advent of the modern microvascular techniques, the radial forearm free flap (RFFF) and the vascularized fibular free flap (VFFF) have become reliable methods for reconstructing perioral defects. The purpose of this study is to evaluate our experience with the use of both free flaps in the reconstruction of oral cavity defects after oral cancer surgery. PATIENTS AND METHOD: Over a 4-year period, 350 patients of oral cancer treated in our department were reconstructed by means of microvascularized free flaps. A total of 162 patients underwent reconstruction using RFFFs; 178 patients underwent reconstruction using VFFFSs with skin paddles. RESULTS: Of the 162 patients who received RFFFs, 6(4%) developed necrosis at the end of the postsurgical period, and 29(18%) patients developed complications of the donor site. Of the 178 patients who received VFFFSs, an overall flap survival rate of 95.7% was achieved, and complications at the donor site occurred in 40(23%) patients. CONCLUSION: Our results reveal that the RFFF is a reliable method for reconstructing a wide range of oral cavity defects with an acceptably low morbidity rate. It provides adequate bulk and pliability, enabling the reconstruction of a wide variety of locations within the oral cavity. The VFFF allows good reconstruction of composite mandibular defects with acceptable cosmetic and functional outcome.

Abstract Id: YUGP2562

Safety And Efficacy Of Tracheal Stenting With Emphasis On Technique.

Presenter - Dr. PARESH PATEL
Co-author - Dr. Suyashulkarni, Dr. Nitin Shetty, Dr. Ashwin Polnaya

Objectives: Most patients with lung cancer, esophageal cancer and some with nodal disease suffer from acute breathing disorder due tracheo-bronchial narrowing. These patients are at further risk and even not fit for palliative chemotherapy or radiotherapy. Stenting of airway provides immediate relief of airway obstruction and plays a major role in palliation. Here we are going to discuss, predominantly technique and role of interventional radiology and bronchoscopy in airway management. Material and Methods: 40 patients have undergone tracheal stenting over a period of 5 years from 2011 to 2015. Patients who undergone stenting had post operative tracheo-bronchial narrowing. These patients are at further risk and some with nodal disease suffer from acute breathing disorder due invasive esophageal carcinoma, patients having infective etiology like Kochê€™s with mediastinal and hilar nodes causing tracheo-bronchial narrowing. Patients either had stridor and difficulty in breathing while some where empirically stented to avoid progression of collapse. Pre procedure CT scan with 3D reconstruction was done to evaluate the degree and length of stenosis for stent sizing. Procedure was done under fluoroscopy and bronchoscopy guidance along with thoracic surgery team under general anaesthesia. Pre stenting balloon dilatation was also done. Stent was deployed by over the wire (0.035â€³Amplatz extra stiff) technique. Depending upon the lumen diameter 20x40mm, 18x40mm, 14x40mm or 10x40mm balloon was used. Uspized stent generally 20x80 and 20x60mm Nit covered tracheal stent was used. Observation and result: Optimal placement of stent was done by noting the level of carina and glottis. Post procedure improvement in airway diameter was monitored along with resolution of stridor and better saturation. Post procedure CT scan with 3D reconstruction was done to evaluate placement of stent. Post tracheal stenting there was significant improvement in stridor with good outcome. Conclusion: Tracheal stenting is safe and effective with high technical success. Combined approach of using rigid and flexible bronchoscope along with fluoroscopy guidance to place tracheal stent is an optimal method.
Abstracts

Introduction: Non-invasive modalities, which increase our level of confidence when differentiating between benign and malignant breast lesions, would be useful to decrease the incidence of unnecessary breast biopsies. Materials and Methods: A prospective, observational study was conducted on 192 women with 199 lesions presenting with sonomammographically detected BIRADS 2-5 lesions for the purpose of USG guided biopsy. The study was intended to prospectively compare the ability of strain and shear wave elastography in the differentiation between benign and malignant breast lesions. Results: One hundred and ninety two patients with one hundred and ninety nine breast lesions were included for final analysis of which 80 were benign and 119 were malignant. Using a cut-off between BI-RADS 3 and 4, B mode ultrasound returned a sensitivity of 89.9%, specificity of 52.6%, predictive value of positive test of 73.7 % and diagnostic accuracy of 74.8 %. Using a cutoff between elastographic scores of 3 and 4, the sensitivity obtained was 84.9 % while the specificity was 78.8%, the predictive value of positive test was 85.6% and the diagnostic accuracy was 82.41%. For a strain ratio cut-off of 3.91, sensitivity was 81.5 %, specificity 78.8%., PPV 85.12 % and diagnostic accuracy 80.4%. For a SW mean cut off of 109.7 kPa sensitivity was 89.1 %, specificity 78.8%, PPV 86.2 % and diagnostic accuracy 84.92%. Elastography has higher specificity and a significantly higher positive predictive value than B-mode ultrasound in distinguishing benign from malignant masses. Among the elastographic techniques both had similar specificity with shear wave elastography showing greater sensitivity. Among the individual elastographic parameters SWmax showed the highest sensitivity and positive predictive value. When combined, a combination of SWR and USG provided greatest sensitivity and positive predictive value when compared with ultrasound alone. Conclusion: Thus, elastography, by increasing the confidence of diagnosis of breast lesions could potentially help minimize biopsy rate on benign breast masses and needless recalls/ re-examinations, especially in patients with BI-RADS 3/4 lesions.

Abstract Id: YUGP2576
Psychological Wellness Of Cervical Cancer Patients: Role Of Health Beliefs And Psychosocial Resources
Presenter- Prof. Neena Kohli
Co-author -

The present study analyzed the role of health beliefs and availability of psychosocial resources in psychological wellness (PSYW) of cervical cancer patients . The sample consisted of 30 rural cervical cancer patients undergoing treatment at a local hospital in Allahabad. The age range of the sample was 40 to 65 years. 90% of the women were illiterate and belonged to lower socio-economic status. Data was collected at three time points (i). initial phase of treatment (ii). intermediate phase of treatment and (iii) Follow-up stage. All the patients were Stage-III patients and the modality of treatment was radiotherapy. Data was collected through a semi-structured interview schedule. Information pertaining to demographics (age, education, marital status, family income, place of residence, number of children), health beliefs (eight causal and eight recovery beliefs rated on a 5-point scale) five psychosocial resources (optimism, perceived controllability, purpose in life, emotional and instrumental support) assessed through validated scales and psychological wellness (a 24 items self-developed scale was used) was obtained. Psychological wellness scale assessed the level of anxiety and depression of patients. Analyses showed that health beliefs, psychosocial resources showed significant associations with psychological wellness. Result of regression analysis showed that cultural beliefs such as God, fate and karma, emerged as significant predictor of psychological wellness. The implications of the findings would be discussed.

Abstract Id: YUGP2584
Comparison Of Immediate Surgical Outcomes Of Laparoscopic Versus Robotic Radical Hysterectomy For Stage1 Cervical Cancer: Single Surgeon’s Experience In A Tertiary Cancer Center.
Presenter-* Dr. Richa Bansal
Co-author - Richa Bansal,

Background : Multiple studies have described the feasibility, efficacy, safety, and adequacy of laparoscopic approach in the management operable early cervical cancer. More recently, robot-assisted management of gynecologic malignancies is being increasingly used as a promising new technique. Learning curve from an experienced open surgeon to robotic surgery has been quoted as 20 to 25 cases. There is no data on the learning curve from an experienced laparoscopic surgeon to robotic surgery. There is some data on extrapolating the soft skills of instrument handling learnt during laparoscopic surgery which can be transferred to robotic surgery. Methods: Retrospective audit of consecutive cases of radical hysterectomy and BPLND performed (robotic and laparoscopic approach) by a single surgeon in the same time period ( year 2016 ). Data was analyzed and compared for surgical safety, surgical adequacy, complications and other patient related factors. Results : Total no patients planned for radical hysterectomy in both groups was 28 ( 17 in robotic group and 11 in laparoscopic group ). 5 patients in the robotic group and 3 in laparoscopic group had pelvic lymph nodes positive and radical hysterectomy was witheld and referred for primary concurrent chemoradiation. 12 patients underwent Robotic radical hysterectomy and 8 patients underwent laparoscopic radical hysterectomy during the year 2016. Demographic, Clinical, operative and pathology details were compared between the two groups. Mean age was 52 years for robotic group ( range 31 â€“ 73 years ). 51 years for laparoscopic group ( range 30 â€“ 67 years ) and mean BMI was 25kg/m2 in robotic ( range 19 â€“ 34kg/m2 ) and 24kg/m2 in laparoscopic groups( range 19 â€“ 31 kg/m2 ) and were comparable between the 2 groups. Majority of the patients in both groups were ASA grade II. Mean operating time in the robotic group was 230 minutes ( range 180 â€“ 420 ) and in the laparoscopic group was 260 minutes ( range 240 â€“ 345 ) in the laparoscopic group. The estimated blood loss was around 200ml in both the groups. There were no major intra or postoperative complications in both the groups. One case was converted to open surgery in the robotic group due to excessive bleeding from the parametrial veins. Mean postoperative stay for the robotic group was 5 days ( range 3 â€“ 10 days ) and for laparoscopic group was 4 days ( range 3 â€“ 5 days ). One patient in the laparoscopic group had incomplete voiding of urine in the postoperative period requiring intermittent self catheterization. Mean largest dimension of the tumor size was comparable in both the groups ( 2.6 cm in the robotic group and 2.7 cm in the laparoscopic group ). Mean pelvic LN yield was 23 in the robotic group ( range 9 â€“ 39 ) and 19 in laparoscopic group ( range 15 â€“ 33 ). Vaginal and parametrical margins were adequate on the final histopathology report for all patients who underwent radical hysterectomy in both the groups. One patient in the robotic group had adequate margins but had disease in the parametrium in the final histology. 7/12 ( 58% ) patients in the robotic group and 5/8 ( 63% ) patients in the laparoscopic group did not require any adjuvant treatment after surgery. 3/12 ( 25% ) patients in robotic and 3/8 ( 37% ) patients in laparoscopic group required small field pelvic RT for the presence of intermediate risk factors in the final histology as per hospital guidelines. Conclusion : Robotic radical hysterectomy is safe with comparable surgical outcomes when compared to laparoscopic radical hysterectomy. Learning curve for robotic surgery especially for complex procedures like radical hysterectomy may be shorter for an established laparoscopic surgeon.

Abstract Id: YUGP2588
Malignant Melanoma Of Vulva With Multiple Metastasis; A Case Report And Review Of Literature
Presenter- *Dr. Sangeeta Pankaj

Abstract Id: YUGP2589
S141
INTRODUCTION Vaginal primary malignant melanoma is a rare and very aggressive tumor. It accounts for 3.3%–0.8% of all malignant melanomas, 2.6%–5% of female genital tract melanomas, and less than 3% of all vaginal malignancies. About 250 cases have been reported in the English literature. Cancer of the vulva is an uncommon disease and accounts for approximately 4% of cancers of the female reproductive organs and 0.6% of all cancers in women. Another rare form of melanoma arises from the mucosal epithelium lining the respiratory, alimentary, and genitourinary tracts. These melanomas are called mucosal melanomas and account for approximately 1 percent of all melanomas. Mucosal melanomas usually occur in the older age group and more commonly in females as compared to males, mainly due to the development of disease in the female genital tract. Approximately 3% of all melanomas are located in the genital tract. Melanoma of the vulva accounts for 5.7% of invasive vulvar cancers and has an estimated annual incidence rate of 1 per 1,000,000 women. The disease can affect women of all ages but is more common in the older population, with almost half of the patients aged 70 years or older. More than 90% of melanomas occur in white women. Primary melanomas of the female genital system are extremely rare (2.3%) and reported to occur in the vulva, vagina, uterus, cervix and ovaries. Melanomas of the female urogenital tract occur primarily in the vulva and vagina (95% and 3%, respectively) and cervical melanoma is least common.3. Despite its rarity, vulvar melanoma is the second most common after squamous cell carcinoma and represents between 1–10% of vulval malignancies.4 The disease can affect women of all ages but is more common in older population, with almost half of the patient aged 70 years and in almost ninety% cases occur in the white race. Most common site of origin are clitoral area and labia majora followed by labia minora and peri-urethral area, while vaginal introitus is the least common. Although the biological behavior of vulval and vaginal melanoma is similar to cutaneous melanoma, the prognosis of vulval melanoma is very poor because of high risk of local progression as well as distant metastases. The origin of the tumor is from melanocyte and approximately 10% arising in preexisting vulval naevi. The naevi that are blue black in colour have a jagged or fuzzy border and are larger than 1 cm there. If there is even slightest suspicion of melanotic change, the affected area has to be removed completely and has to be examined histopathologically and with immunohistochemistry. S-100-Protein, HMB 45 & Melan-A. CASE REPORT A 40 years old married female with seven full term vaginal deliveries presented in gynecological oncology OPD in regional cancer center of IGIMS Patna in January 2016 with complaints of itching and mass over perineum for one year and gave history of bleeding per vaginum and pain lower abdomen for three months. She was referred from urology department with a biopsy report of vulva showing malignant melanoma. Her abdominal hysterectomy was done 15 years back for menorrhagia not responding to medical treatment. On abdominal examination multiple right inguinal lymph nodes were enlarged, fixed, hard and non tender. No other lump was palpable. Local examination revealed a growth of 4 x 5 cm on right vulva which was extended to lower vagina. Growth was brownish to black colored, friable and bleed on touch (Fig. 1). Routine blood investigation including chest x-ray were normal. CT scan of abdomen and pelvis showed small nodule (9mm) in lower lung likely metastasis, with multiple enlarged lymph nodes in para aortic and aortocaval region. Multiple enlarged right inguinal lymph nodes were present with largest one measuring 5.5 x 4.0 cm (Fig. 2). The patient had lung metastasis with aortic and para-aortic lymph node enlargement diagnosed as malignant melanoma grade IV. She was referred to radiotherapy department of our hospital for further management. Patient was put on oral telozolamide, she was and on follow up for six months but she did not report after six months. Fig 1. Clinical picture of vulval melanoma Fig. 2 C-T Scan showing enlarged lymph nodes DISCUSSION Malignant melanoma of the vulva is the second most common maαignancy of the vulva, but accounts for only 5 to 11% of all melanomα cases. The disease is usually diagnosed in the sixth and seventh decades of life and the initial symptoms are generally vulvar lesions, pruritus or bleeding. Melanomas are characteristically black in color, however there are amelanotic melanomas that are not pigmented and create confusion with the squamous cell carcinoma of vulva.6 The biological behavior of primary vulval and extra-genital cutaαeous malignant melanoma appeared to be comparable. However, some studies have shown that the overall prognosis of the vulvar melanoma patients is generally poor as compared with cases of cutaneous melanoma and invasive vulvar carcinoma, due to a higher tendency to αwarz regional and distant metastasis. A small primary lesion on histological examination is usually less than 1 cm, but when it is < 2 cm with subclinical invasion less than 1 mm, the epithelial stromal junction has essentially no risk of lymph node metastasis. Consequently, these lesions can be treated with wide local excision and adequate tumor free margin should be removed not only on the skin but also from deeper margins. In larger lesions (stage IB or greater or with stromal invasion > 1 mm), the incidence of ipsilateral inguinal lymph node involvement increases because of the greater depth and size of the lesion. Consequently, in these stages vulvectomy along with inguinal lymphadenectomy is the primary surgical procedure. Inguinal lymphadenectomy is generally performed through a separate small inguinal incision, removing all the lymph nodes above the cribriform fascia. If the results of ipsilateral lymph nodes are negative on frozen section, then a modified partial vulvectomy is the only treatment necessary but if the results are positive, then it is suggested to remove the lymph nodes on the contralateral side as well.7 In the predominantly retrospective literature on women with vulvar and vaginal melanoma, there has been little consistency in the use of macro staging or micro staging systems. In addition, older series of patients with vulvar melanoma often used the older FIGO staging, in which regional lymph nodes were assessed clinically, not surgically. Also, AJCC staging appears to be more predictive of outcome than FIGO staging. Age of the patients, stage of the disease and lymph node involvement are the significant predictors of survival for these patients. In patient with positive lymph nodes five year disease free survival is 24% compared with 68.3% for those with negative lymph nodes.4 In a population based study of 219 women, multivariate analysis showed that tumor thickness, ulceration, and clinical amelanosis were independent predictor of poor survival in stage I patients. Surgery is the main treatment for vulval melanoma. There are trends toward less extensive resection, as no difference has been found in survival rates between patients treated with radical compared to conservative surgery.8. As our patient came in stage IV of vulval melanoma with lung metastasis and the option of operative management was not possible only palliative treatment was given in the form of daily tilozolamide. She was alive till 6 months but is now is lost to follow up. REFERENCES 1. Georgios Androulopoulos, Emmanouil Terzakis, Georgia Ioannidou, Athanasios Tsamandas, and Georgios Decavalas, &αesVaginal Primary Malignant Melanoma: A Rare and Aggressive Tumor,†Case Reports in Obstetrics and Gynecology, vol. 2013, Article ID 137908, 6 pages, 2013. doi:10.1155/2013/137908 2. Cancer of vulva- Essentials of diagnosis, Symptoms andsighsthttp://www.health.am/cancer- of-the-vulva/ accessed 15/1/2012 3. McLaughlin CC, Wu XC, JemalA, Martin HJ, Roche LM, Chen VW.Incidence of noncutaneous melanomas in U S Cancer 2005;103:1000. 4. Sugiyama VE,Chan JK,Shin YJ,BerekJS,Osann K,Kapp DS,vulvar melanoma:amultivariable analysis of the 644 patients. Obstet Gynecol. 2006;6: 110; 28:16-301 5. 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Abstract Id: YUGP2590

Comparison Of Conventional Pap Smear And Liquid Based Cytology: A Study Of Cervical Cancer Screening At A Tertiary Care Centre In Bihar

Presenter- Dr. Sangeeta Pankaj
Co-author - Dr. Syed Nazneen, Dr. Vijayanand Choudhary, Dr. Anita Kumari

ABSTRACT: Background: Cervical cancer ranks as the 4th leading cause of female cancer in the world and it is the 2nd most common female cancer in women aged 15 to 44 years. Strict implementation of screening programs has led to a large decline in cervical cancer incidence and mortality in developed countries. In contrast, cervical cancer remains largely uncontrolled in high-risk developing countries because of ineffective or no screening. Conventional Pap smear method has been the mainstay of most of the screening programs since decades. However, this technique is not without limitations and the sensitivity and specificity of cervical cytology is relatively low. To overcome the limitations of conventional pap smear, liquid based cytology was introduced in 1990s as a better tool for processing cervical samples. Introduction Worldwide, there are 2.784 million women aged 15 years and older who are at risk of developing cervical cancer and about 527,624 new cervical cancer cases are diagnosed annually. Almost 70% of the global burden of cervical cancer falls in areas with lower levels of development, and more than one fifth of all new cases are diagnosed in India. For Indian women, cervical cancer is the second most common cancer. Cervical cancer is also the second most common cause of cancer deaths when both sexes are combined. Cervical cancer can have devastating effects with a very high human, social, and economic cost, affecting women in their prime. But this disease should not be a death sentence, even in poor countries, explains Dr Rengaswamy Sankaranarayanan, a lead investigator for an IARC research project with a focus on cervical cancer screening in rural India. A low-tech and inexpensive screening tools exist and could significantly reduce the burden of cervical cancer deaths right now in less developed countries. Objectives: The present study was undertaken to compare conventional pap smear with liquid based methods and to assess effectiveness and feasibility of liquid based cytology (LBC) over conventional Pap smear (CPS) in our setting and also to evaluate the prevalence of Human Papilloma Virus (HPV) in our population. Material and Methods: Material and methods: We conducted this study at Indira Gandhi Institute of Medical Sciences, a tertiary care centre of Bihar, over a period of 6 months. Total 310 consenting patients who fulfilled the inclusion criteria were enrolled in the study. We included sexually active women aged between 20 to 75 years. Pregnant women, women with active vaginal bleeding, hysterectomised women, women with frank growth and/or who had never been sexually active or had undergone prior treatment for cervical intraepithelial neoplasia (CIN) or cancer cervix were excluded from study. A detailed proforma including all basic information and details about complaints was filled out for each patient. These women then underwent a gynecological examination. At the beginning of the examination a cyto-brush was introduced into the external cervical os and scraped to collect cells from the ecto and endo cervix. A smear was made on a glass slide for conventional Pap smear and fixed. The cyto brush was then dropped in a vial containing the preservative fluid for liquid based cytology and HPV DNA testing. Conventional cytology and biopsy reporting was done in our hospital and liquid based cytology analysis along with HPV testing was done in another authentic lab. Cytology was reported using Bethesda system and histology reporting was done by using CIN terminology. Results: Unsatisfactory smears were more commonly reported by conventional method (7.1%) than with liquid based method (1.61%) and this difference is statistically significant. There was no difference in the detection of epithelial cell abnormalities by both the methods. HPV DNA for high risk oncogenic strains (16,18) were detected in 6.45% of women in this study. Conclusion: Pap smear is a very important and useful method for cervical cancer screening. Globally, efforts to prevent the disease have been focused on screening women using Pap smears and treating precancerous lesions. Impressive results have been achieved in reducing cervical cancer incidence and mortality in some developed countries by Pap smear screening. Cervical cancer incidence can be reduced by as much as 90 percent where screening quality and coverage are high. But in developing countries where approximately 80 percent of all new cases occur many women have never had a Pap smear. Proper implementation of screening programs is essential to reduce the incidence and mortality of cervical cancer in India. Periodic screening (irrespective of the method used) and follow-up evaluation of women aged 30 or more is an acceptable and cost-effective approach to prevent cervical cancer. A Pap smear is a cytological test designed to detect abnormal cervical cells. The procedure involves gently scraping cells from the ectocervix and endocervix with a specially designed spatula or brush and then smearing and fixing the collected cells on a glass slide. The slides are sent to a pathology laboratory and evaluated by a trained pathologist or cyto-technician. The low sensitivity of a single Pap test makes it necessary to screen women relatively frequently, every three to five years. Liquid based cytology is the first major change in preparation method for cervical screening samples for over 50 years. In this method, the cells are not smeared onto a glass slide. Rather, they are washed into a vial of liquid and filtered, and the sample is prepared as a thin layer on a glass slide. These slides are either screened by skilled person or are subjected to automated imaging. The process is being widely used in the United States, European countries, and many developed nations. Though these approaches appear promising, they are expensive and rely heavily on technology. LBC is as sensitive as conventional cytology, and has other advantages. In United Kingdom, by implementation of LBC for screening, it has been possible to achieve reduced rates of inadequate samples and increase screening capacity. Liquid based cytology also provides a platform for human papillomavirus testing, automation, and other new technologies. Decreased screening time by LBC and faster reporting is beneficial causing lesser anxiety among the women tested. In the present study, most of the women were illiterate (44%), belonged to lower socio-economic strata and 56% of the women had three or more children- all these factors are documented as risk factors of cervical carcinoma suggesting that our population is at high risk for cervical cancer and screening needs to be implemented in a proper manner. LBC has been found to be more superior to conventional smearers only in respect to lesser number of unsatisfactory smears but considering the economic implications of LBC conventional PAP is more feasible in our setting. Key words: Cervical cancer screening, Liquid based cytology, Conventional Pap smear, Human Papilloma Virus.

Abstract Id: YUGP2592

Cervical Cancer Prevention Program At Tertiary Center

Presenter- Dr. Anita Kumari
Co-author - Sangeeta Pankaj, Vijayanand Choudhary, Jaya Kumari

Background: Cervical cancer is the most common cancer in India. It is well known that cervical cancer morbidity and mortality could be significantly reduced with an active cervical smear screening (Pap smear) program. Aims: The aims of this study were: 1) to evaluate the knowledge and attitudes of women about cervical smear testing? 2) to establish a cervical smear screening program and to evaluate the cervical cytopathological abnormalities that were found? 3) to take biopsy in high grade lesions and clinically obvious growth. Material and methods: A total of 357 married women were included in our study. We collected data concerning socioeconomic status and fertility characteristics, and knowledge about Pap smear testing was determined through verbal questions. A gynecological examination and Pap smear screening was performed on every woman in our study group. Biopsy was taken in high grade lesions and frank growth. Results: Ninety percent of our study group had never heard of and had not undergone Pap smear screening before. Of the 357 smears evaluated, 321 (96.8%) were accepted as normal, whereas...
Abstract Id: YUGP2594

Ultrasound And Histopathological Evaluation Of Abnormal Uterine Bleeding In Perimenopause And Postmenopausal Women.
Presenter- Dr. Anita Kumari
Co-author - Sangeeta Pankaj, Anjili Kumari, Jaya Kumar

Abstract

Abnormal uterine bleeding (AUB) may be defined as bleeding pattern that differs in frequency, duration and amount from a pattern observed during a normal menstrual cycle or after menopause. Aim and objective of study: 1.To identify the different benign, premalignant, and malignant conditions as the cause of abnormal uterine bleeding in perimenopausal and postmenopausal women. 2.To find out the different histopathological pattern of endometrium and cervix in these women. Material and methods: This is a prospective study done in Gynecology OPD from April 2016 to May 2017. After clinical examination and pap smear and cervical biopsy if needed patient will be sent for ultrasound. Endometrial biopsy will be done in case of increased endometrial thickness in respect of age. Cut off value of endometrial thickness in post menopause will be 4 mm. All tissue specimen will be sent for histopathological examination. Result: A total 100 women were evaluated in which 53% were perimenopause while 47% menopause. Most of them 46% were para 4 to para 6 18% were para para 7 and above and 74% belong to low socioeconomic status. 79% had organic pathology and 21 patient had non organic cause. Most common cause of AUB in perimenopause was 49.05% followed by cervical cancer. Cervical cancer of cervix was most common in post menopausal women 87.2%. In cervix most common histological finding were squamous cell carcinoma in which 48% were gradell AND 5.06% were adenocarcinoma. In endometrium most common histological finding was proliferative endometrium 22.8% followed by hyperplastic endometrium 18.4% followed by adenocarcinoma 15.7%. Conclusion: Evaluation of cases of perimenopausal and postmenopausal bleeding exclude pre malignant and malignant lesions of the endometrium, and cervix as majority of cases had benign causes but as our centre is regional cancer centre of Bihar, so most common cause was squamous cell carcinoma. Keywords: Abnormal uterine bleeding, postmenopausal, adenocarcinoma, cervix.

Abstract Id: YUGP2599

A Study Of Cytokines And Multidrug Resistance Gene Expression In Breast Cancer
Presenter- Ms. Anisha Raju
Co-author - K Thiriveni, S Krishnamurthy, Rekha V Kumar

INTRODUCTION: Multidrug resistance can be present at diagnosis or induced upon chemotherapy, mostly due to the overexpression of ATP binding cassette (ABC) transporters. The overexpression of cytokines in the breast tumor microenvironment enhance tumor development and progression. IL-6 and IL-23 bind to their respective receptors and activate the JAK/STAT pathway leading to angiogenesis, cell migration and survival. The present study aimed to analyse the expression of pro-inflammatory cytokines and ABC transporter family genes in breast cancer patients. MATERIALS AND METHODS: This study was approved by the ethical committee of Kidwai Cancer Institute and informed consent was obtained from 167 patients and 160 healthy controls. The levels of 17 cytokine panel was estimated in the plasma by multiplex assay system. A qRT-PCR analysed the tissue gene expression of IL-6, IL-23, ABCB1, ABCB1, ABCG2, MCL1 and BCL6. Immunohistochemistry was used to detect protein expression on TMA blocks. Statistical analysis was performed using Graphpad Prism version 5. A P value of < 0.05 was considered significant. RESULTS AND DISCUSSION: The pro-inflammatory cytokines were significantly overexpressed in breast cancer patients compared to the healthy females (p < 0.01). The BCL-6 gene was found to be significantly higher in patients with advanced disease stage and high histopathological grade. CONCLUSION: Pro-inflammatory plasma cytokines correlated significantly with the advanced disease stage. The high tissue expression of the pro-inflammatory marker IL-6 and IL-23 and their correlation with advanced disease stage indicates a direct role of cytokines with tumor development and progression. Hence, immunotargeted therapy may be a better option for the treatment of these patients. Studying ABC transporter expression patterns in the adjuvant setting may help in selecting appropriate therapeutic agents.

Abstract Id: YUGP2602

Importance Of Early Integration Of Palliative Care Benefits Diagnostic And Therapeutic Interventions In Lung Cancer: A Case Study.
Presenter- Dr. Sreedevi Warrier
Co-author - 

Abstract Title: Importance of early integration of palliative care benefits diagnostic and therapeutic interventions in lung cancer: a case study. Author: Dr.Sreedevi Warrier Background: Cancer treatment, unlike in the past aims not only curative therapies, but also symptom control and quality of life of patients. About 80-90% of patients diagnosed with lung cancer die with in a year and it has become the commonest malignancy causing pain. Study Design: Case Study Case: Mr. J, 40 years old gentleman with prolonged symptoms of chest pain and cough was referred to the oncology department and thereby was diagnosed with non-small-cell lung cancer. Due to his agonizing pain (Pain score of 10/10) the oncology team were unable to carry out investigations like MRI scan and further treatment plan. He was then referred to our pain and palliative care clinic for pain management. Besides his sister being a staff member of the same medical college, the misconception about palliative care as last resort in cancer, delayed their visit to our clinic by two days. But the unaddressed agonizing pain from local hospitals and casualty department, forced him to visit our clinic. We started him on intravenous morphine titration for the pain crisis and the pain score came down to 1/10. Later he was put on regular dose of oral morphine. He was accompanied by his primary and even extended family members who were in a state of anxiety about cancer, pain, palliative care and uncertainty about future. The palliative care team could sit with the patient and family members, addressing their concerns and provide required information about the importance of integrating palliative care to standard oncologic care. Followed by that he could undergo necessary investigations and disease specific treatment with good pain control and quality of life. Mr. J is represents a huge patient population of us who was benefited in terms of good symptom control and quality of life. Palliative care not only comprises of end of life care, but also effective symptom control which needs to be integrated from the time of diagnosis of cancer. Better insight about scope of palliative care, timely referrals and early integration would enhance acceptance of disease specific treatment.

Abstract Id: YUGP2604

Is It Feasible To Perform Sentinel Lymph Node Biopsy With Only Blue Dye In Early Oral Cancer? A Large Cancer Center Experience
Presenter- Dr. JeewanRam
Co-author - Vijay Kumar, Sanjeev Misra, Arun Chaturvedi
Background: Oral cavity squamous cell carcinoma is one of the most common cancers in south Asia. Sentinel lymph node biopsy has a good accuracy using combination of lymphoscintigraphy and blue dye technique in oral cancer; however, the limited availability of lymphoscintigraphy facilities in many developing countries requires exploration of alternative techniques. The need for the present study was to evaluate the feasibility and role of sentinel lymph node biopsy in identifying the occult lymph node metastasis using methylene blue dye alone. Material and methods: We conducted a prospective study in 94 patients with early oral cancer (cT1, T2 and cN0) in a high volume tertiary care cancer centre in North India from 2013 to 2016. Patients having negative neck nodes on clinical examination and ultrasound were included in study. Intra operatively, one ml of methylene blue dye was injected at the interface of tumor and palpable normal tissue in four quadrants. After 10-15 minutes incision in neck was given and any visualized blue nodes were dissected and sent for frozen section, routine histopathology and immunohistochemistry (IHC) for cytokeratin. Elective neck dissection was done in all patients as per institutional protocol. Results: A total of 94 patients (79.8% male and 20.2% female) with mean age of 46.23 years (range 20-77 years) were included in this study. Smokeless tobacco was the commonest risk factor. Tumor sub sites were tongue (45.7%), buccal mucosa (38.3%), and lip (16%). Identification rate of sentinel lymph node was 93.61% with mean blue node (1.83±1.03). Sensitivity, specificity, positive predictive value, negative predictive value and accuracy, for frozen section and histopathology were 84.6%, 100%, 100%, 93.9% and 95.5% respectively. IHC detected two micrometastases and one isolated tumor cells. Occult lymph node metastasis was seen in 27.6% cases. The lymph node distribution was as level IA (5.7%), IB (48.6%), IIA (37.1%), and III (8.6%). None of the patient had lymph node metastasis to level IV or V. Majority of the patients (57.4%) had pathological T2 disease. We did not encountered anaphylactic or allergic reactions to methylene blue dye in our study. Surgical procedures performed were as wide local excision only (84%), WLE or without marginal or segmental mandibulectomy (14.9%). When SOND (42.6%), ESOND (45.7%), MND (11.7%), and bilateral neck dissection (7.4%), reconstruction with local flaps (34%). Pathological TNM stage was as T1 (46.8%), T2 (53.18%), N1 (23.4%) and N2 (5.31%). Conclusion: Thus we conclude that SLNB with blue dye alone in early oral cancer is feasible. It can be used successfully with good sensitivity and negative predictive value in limited resource countries like India. Immunohistochemistry contributes to SLNB increasing sensitivity and negative predictive value to improve diagnostic value.

INTRODUCTION: Telomeres are specialized (TTAGG)n structures present at the end of chromosomes, known for maintaining genomic stability. Telomerase and the telomere shelterin complex protein help in regulation of telomere length and in the formation of a protective end-cap that prevents chromosome fusion. Cancer cells acquire indefinite replicative capacity to escape from the normal proliferative limitations through maintaining their telomeres, either by upregulation of telomerase or by an alternative lengthening of telomeres (ALT) mechanism. The aim of the study was to analyse the expression of hTERT, telomere length and associated shelterin protein complex in breast cancer patients. MATERIALS AND METHODS: This study was approved by the ethical committee of Kidwai Cancer Institute and informed consent was taken from each patient. Tissues samples from 100 cases of invasive ductal carcinoma were collected prior to treatment. Gene expression of hTERT and relative telomere length was carried out by real-time PCR. Immunohistochemistry analysis of shelterin complex proteins was performed. Statistical analysis was carried by using R software and Graphpad prism version 5.

RESULTS AND DISCUSSION: Gene expression of hTERT was significantly higher in the tumor tissue when compared to adjacent normal tissue (p <0.05).

Abstract Id: YUGP2610

Cyberknife Robotic Based Stereotactic Body Radiotherapy For Adrenal Metastasis From Non Small Cell Lung Cancers.

Presenter- Dr. Lohith G

Co-author - Kumarswamy, M.S .Bellapalli, S.Bhattacharjee

INTRODUCTION: Cyber Knife robotic stereotactic radiosurgery is minimally invasive tumor treatment modality that can deliver high precision radiotherapy to any part of the body with minimal exposure to adjacent and surrounding vital organs. The Objective of this study was to investigate the efficacy of Cyber knife in the treatment of adrenal metastasis from Non Small Cell Lung tumors. MATERIALS AND METHODS: Retrospective analysis of 14 patients with adrenal Metastasis who had been treated with Cyber knife at Healthcare global hospital, India, between March 2011 and March 2016. The average tumor volume was 68.8 cm3 and total number of lesions were 17 with 3 patients having bilateral adrenal metastasis the prescribed radiation dosage ranged from 30-45 Gy over of 3 to 7 fractions with a prescription isodose of 70% to 80%. PET-CT Scan was performed for all patients at 3 monthly intervals post completion of treatment. 4 patients had complete remission, 6 patients had partial remission, 1 patient had stable disease, and 3 patients had progressive illness with a median overall survival of 15 months. Treatment Related toxicity were minimal. CONCLUSION: In the Era of precision medicine, Cyber knife is effective treatment of adrenal metastasis from Non small cell lung cancers.

Abstract Id: YUGP2611

Non Invasive Pet-Ct Based Imaging Biomarkers To Predict Local Recurrences In Advanced Oral Cancers.

Presenter- Dr. Lohith G

Co-author - Suthirth Vaidya, Vishal Rao, Dr Shivakumar Swamy Shivalingappa

INTRODUCTION: There has been increased use of Positron emission tomography (PET) using [18F] Fluoro-2-deoxy-g-glucose (FDG), a glucose metabolism analog, for prediction of outcomes and guiding the precision medicine in tumor detection, staging, and treatment planning and surveillance post therapy in Oral cancers. Accumulating evidence of recent literature suggests that pre-treatment FDG uptake could be used as a prognostic factor for predicting treatment outcomes and is motivated by the fact that radiotracer uptake in the tumor is dependent on the characteristics of the microenvironment: quantitative analysis of FDG uptake is based on changes in the standardized uptake value (SUV). Recent development in Radiomics provides a promising objective way for tumor assessment, which uses computerized tools to extract a large number of image features that capture additional information not currently used in clinic that has prognostic value. In this study, we explored radiomic features for extracting reliable information from PET images of oral cancer patients. Leading to development of noninvasive biomarkers which could be incorporated into the clinical planning process to modify patients’ treatment based on their predicted loco-regional failure risk. Materials and Methods: 44 patients with squamous cell carcinomas of the oral cavity staged using PET-CT and 44 patients treated with surgery followed by chemo-radiotherapy were included. Manual segmentation was done by a certified radiation oncologist on the PET-CT and total of 79 radiomic features were extracted from the Gross tumor volume keeping threshold of SUV within the GTV at 40% of maximum value. Medical Records showed local recurrences in 29 of 44 patients with a median follow-up of 3 years. Spearman’s correlation index was used to identify highly correlated radiomic features with local recurrences. Respective Area under Curve (AUC) was calculated. Predictive model matrix was fit using logistic regression method for
the highest correlated Biomarkers with local recurrences (AUC -0.85 and above). Results: All 44 patients were considered for analysis with no exclusions, two radionics features V90 which is an intensity based histogram feature (AUC 0.95) and Extent which is a shape based feature (0.85 ) showed a strong co-relation with local recurrences in oral cancers (p:

Abstract Id: YUGP2614
Laparoscopic Colo-Rectal Cancer Surgery : A Retrospective Analysis
Presenter- Dr. SACHIN KADAM
Co-author - DR JIGNESH SHAH ,

INTRODUCTION Laparoscopic surgery for rectal cancer is now practiced widely, with proven short-term benefits for patient recovery. Several studies have shown that it is possible to have reduced hospital stay, earlier return of bowel function, better pulmonary function and reduced morbidity in comparison with open surgery. At the beginning of the laparoscopic era, some concerns were raised regarding the oncological outcome of this approach in the treatment of rectal cancer. However, data from randomized trials and meta-analyses have definitively established that laparoscopic rectal surgery is at least equivalent to open surgery. AIMS AND OBJECTIVES: 1) To study role of laparoscopic surgery in rectal malignancies. 2) To know morbidity and mortality related to laparoscopic surgery in rectal malignancies.

MATERIALS AND METHODS Retrospective study of 25 cases of rectal cancer who underwent laparoscopic surgeries (Abdomino-perineal resection (APR), Anterior resection (AR)) during the period from January 2009 to December 2011 at Government Medical College and New Civil Hospital, Surat, Gujarat, India. These patients were followed till December 2015. Patients with biopsy proven and operable rectal cancers were included in the study. Patients with locally advanced and metastatic rectal cancers and also any patient died of any other cause and not followed were excluded. Patients were evaluated with CEA (Carcino Embryonic Antigen ), CECT Thorax and abdomen with MRI of pelvis during preop workup. Permission from the ethical committee taken for the study. Histopathology reports were collected on 5th or 6th Postoperative day and according to the pathological staging the patient was treated. Patients were divided into two groups according to their histopathology report and received appropriate treatment.

Results: All 44 patients were considered for analysis with no exclusions. The mean age was 50.5 years (range 18-75). The mean BMI was 25.1 kg/m² (range 16-35). The mean duration of operation was 565.7 minutes (range 250-1080). The mean blood loss was around 162.5ml (range 0-1500). The mean hospital stay was 6.3 days (range 4-12). The overall morbidity rate was 26.7% (12 cases). The most common complications were nausea and vomiting (12 cases, 27%), anastomosis leak (5 cases, 11%), and wound infection (4 cases, 9%). There were no cases of Clavien-Dindo grade IV or V complications.

Conclusions: Laparoscopic colorectal surgery is a feasible, safe and effective procedure for rectal cancer surgery in our institute. However, further studies with larger sample sizes are needed to confirm these findings.
Trans Oral Robotic Surgery - A Prospective Study For Feasibility And Functional Outcomes

INTRODUCTION Trans Oral Robotic Surgery (TORS) is being adopted worldwide for the treatment of selected oropharyngeal tumors and may emerge as gold standard for the same. MATERIALS AND METHODS A prospective single centre studyof 35 patients who underwent TORS at our institute from December 2012 to June 2017 was done. All patients with presence of indications for therapeutic surgical approaches for benign or malignant diseases of the oropharynx and supraglottis were included in study. Patients with restricted mouth opening and distant metastasis were excluded from study. RESULTS Study included 35 patients,with mean age of 57.57 years (25-78 years). On analysis 18 patients had lesions over base of tongue, 9 patients were operated for tonsillar lesions, 5 patients had supraglottic and hypo pharyngeal tumors and 3 patient had parapharyngeal tumor. Out of these only 4 lesions were benign and rest all were malignant. Of 31 malignant lesions 25 were primary lesions while 6 patients were for salvage surgery post radiotherapy. Mean console time was 58.03 minutes. No intraoperative complications were reported. None of the patients had positive surgical margins. Three patients had secondary haemorrhage, one patient had developed postoperative edema of tongue due to prolonged use of FK retractor, 2 patients had postoperative aspiration pneumonia were managed conservatively. Mean hospital stay of the patients was 5.3 days. All the patient was followed up postoperatively. Mean Follow-up time was 24.3 months. Minimum followup for 7 months and maximum is for 54 months analysed. Mean Disease free survival was 23.21 months. Three patient didn’t included in analysis as there followup was less than 6 months. One patient died non-disease related cardiac event after 6 months of surgery. Three patient lost in followup .Local recurrence was seen in three patients, while one patient had pulmonary mets in follow-up period. Two patients developed nodal recurrences one on contralateral side. DISCUSSION Open surgical approaches to the oropharynx can be associated with morbidities such as cosmetic deformity, malocclusion and dysphagia.Before endoscopic surgery, external access to the base of the tongue and oropharynx has always required a transmandibular and/or transcervical approach with consequent high morbidity and poor cosmetic and functional outcomes Therefore, a trend toward using radiotherapy and concurrent chemotherapy as a primary modality in case of oropharyngeal cancer has been observed in the last few decades. In recent years, transoral robotic surgery (TORS) has been used for the removal of pharyngeal and supraglottic cancers with the objective to improve functional and aesthetic outcomes without worsening survival. TORS, as surgical treatment, allowed to assess the pathological staging of the primary lesion in all patients. A great advantage of TORS is represented by the chance to give another option to patients with T1 and T2 who would have required more aggressive surgery or chemo radiotherapy as non-surgical treatment.In addition, it permits a frontal view and reaches “blind corners” of the pharyngo-laryngeal complex, due to the possibility to use a 30Â° telescope CONCLUSION TORS represents a good tool for treating neoplasms of oropharynx. The procedure is safe and can radically remove limited oropharyngeal tumors of the tongue base with good functional outcomes. TORS can represent the definitive treatment in selected T1-T2 cases of oropharyngeal tumors of the base of the tongue without adverse features and allow the possibility to deintensify adjuvant treatments.

Deep Inspirational Breath Hold Technique Reduces Dose To Cardiac Structures In Breast Cancer: A Dosimetric Study

INTRODUCTION: Radiotherapy is an integral part of treatment of carcinoma breast and has shown to decrease both locoregional and distant disease recurrences. Long term effects of radiation on heart and coronaries is being recognized recently. Studies have shown that late cardiotoxic effects correlates with the mean heart dose and max left anterior descending artery (LAD) dose. Various techniques have evolved to spare heart from radiation, viz., prone position, supine deep inspiratory breath hold (DIBH) technique, Active Breathing control(ABC) and IMRT/VMAT. In this study we evaluate the feasibility of DIBH technique in our population and its possible dosimetric advantages over FBT. AIMS AND OBJECTIVES: PRIMARY : To compare the dosimetric advantage of DIBH technique over with FBT during the radiation therapy for the left sided breast cancer patients in a tertiary care teaching hospital MATERIALS AND METHODS : In this study all the patients with left sided breast cancer who were less than 70 years old who underwent breast conservation surgery (BCS), completed chemotherapy if indicated was taken up. Patients then underwent a training session in which they were familiarized to the procedure, equipments and breath holding technique. On simulation, patients were immobilized in breast board in a supine position with both arms lifted above head. Two CT scans were taken while in simulation one in free breathing and one in deep inspirational breath hold. Breath hold scan were recorded using Varian RPM gating system. These two scans were contourd by same physician on same day and organs at risk and target volume were delineated as per ESTRO guidelines. A Forward inverse IMRT planning technique using 6MV photon was used and a 95% prescribed dose coverage for PTV with a dose fractionation of 40Gy in 15 fractions was planned. The various dosimetric variables for heart , left anterior descendit artery, lungs were evaluated. RESULTS : A total of 15 patients were included in this study. The median age was 46 years and a median BMI of 27.73kg/m2. 11patients were in stage IIA and 4 in stage IA. The difference of left lung volume(877.4cc vs 1646.4cc) and median total lung volume(1857.41cc vs 3444.6cc) when FB was compared with DIBH were statistically significant. The median PTV 95% in FB was 97.39% and 96.73% in DIBH, which was not statistically significant. Median PTVC(c) was also not significant between two groups. There was a statistically significant difference in maximum heart dose, mean heart dose, V15 and LV dose between FB and DIBH. The median value of Left anterior descending 0.2cc dose was 3763 in FB technique and 1003.7 in DIBH technique and the difference of medians was statistically significant. It shows that DIBH technique reduces heart dose significantly when compared to FB.

Contextual Analysis Of Breast And Cervical Cancer Screening Uptake And Its Association With Health Care Utilization Among Women In India

Abstract Id: YUGP2632

INTRODUCTION: Radiotherapy is an integral part of treatment of carcinoma breast and has shown to decrease both locoregional and distant disease recurrences. Long term effects of radiation on heart and coronaries is being recognized recently. Studies have shown that late cardiotoxic effects correlates with the mean heart dose and max left anterior descending artery (LAD) dose. Various techniques have evolved to spare heart from radiation, viz., prone position, supine deep inspiratory breath hold (DIBH) technique, Active Breathing control(ABC) and IMRT/VMAT. In this study we evaluate the feasibility of DIBH technique in our population and its possible dosimetric advantages over FBT. AIMS AND OBJECTIVES: PRIMARY : To compare the dosimetric advantage of DIBH technique over with FBT during the radiation therapy for the left sided breast cancer patients in a tertiary care teaching hospital MATERIALS AND METHODS : In this study all the patients with left sided breast cancer who were less than 70 years old who underwent breast conservation surgery (BCS), completed chemotherapy if indicated was taken up. Patients then underwent a training session in which they were familiarized to the procedure, equipments and breath holding technique. On simulation, patients were immobilized in breast board in a supine position with both arms lifted above head. Two CT scans were taken while in simulation one in free breathing and one in deep inspirational breath hold. Breath hold scan were recorded using Varian RPM gating system. These two scans were contourd by same physician on same day and organs at risk and target volume were delineated as per ESTRO guidelines. A Forward inverse IMRT planning technique using 6MV photon was used and a 95% prescribed dose coverage for PTV with a dose fractionation of 40Gy in 15 fractions was planned. The various dosimetric variables for heart , left anterior descendit artery, lungs were evaluated. RESULTS : A total of 15 patients were included in this study. The median age was 46 years and a median BMI of 27.73kg/m2. 11patients were in stage IIA and 4 in stage IA. The difference of left lung volume(877.4cc vs 1646.4cc) and median total lung volume(1857.41cc vs 3444.6cc) when FB was compared with DIBH were statistically significant. The median PTV 95% in FB was 97.39% and 96.73% in DIBH, which was not statistically significant. Median PTVC(c) was also not significant between two groups. There was a statistically significant difference in maximum heart dose, mean heart dose, V15 and LV dose between FB and DIBH. The median value of Left anterior descending 0.2cc dose was 3763 in FB technique and 1003.7 in DIBH technique and the difference of medians was statistically significant. It shows that DIBH technique reduces heart dose significantly when compared to FB.

CONCLUSION : DIBH significantly reduces dose to heart and LAD in patients with left sided breast cancer after BCS.
Abstract Id: YUGP2652
Factors Associated With Self-Image And Quality Of Life Among Head And Neck Cancer Patients â€“ Results Of A Cross Sectional Study
Presenter - Ms. Shalini Nayak
Co-author - Dr Mamatha Shivananda Pai, Dr Linu Sara George,

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Abstract: Background: Cancers affecting the parts of head and neck hugely impact the patients. Among head and neck cancer (HNC) patients, the visible signs and symptoms of the disease or the side effects of treatment can cause various degrees of functional impairment such as mastication, swallowing and communication or disfigurement. Aim: To study the relationship between self-image and quality of life. Material and methods: This was a descriptive cross sectional survey conducted among 54 head and neck cancer patients. Data were collected through self-administered demographic proforma, disease related proforma, self-image scale and Functional assessment of Chronic Illness (FACIT) scale. Results: Among patients, 17 (31.5%) had chemo-radiotherapy as a mode of treatment, 34 (63%) were undergoing radiotherapy, 37 (68.5%) were receiving radiation dose of 70 Gy/35#7 weeks, 49 (90.7%) of them did not have any co morbidity, 16 (29.6%) had a rural residence. There was a significant association between self-image and monthly income (7.210), treatment modality (2.61) and co morbidity (1.89). Study was conducted among 54 head and neck cancer patients. Data were collected through self-administered demographic proforma, disease related proforma, self-image scale and Functional assessment of Chronic Illness (FACIT) scale. Results: Among patients, 17 (31.5%) had chemo-radiotherapy as a mode of treatment, 34 (63%) were undergoing radiotherapy, 37 (68.5%) were receiving radiation dose of 70 Gy/35#7 weeks, 49 (90.7%) of them did not have any co morbidity, 16 (29.6%) had a rural residence. There was a significant association between self-image and monthly income (7.210), treatment modality (2.61) and co morbidity (1.89).

Abstract Id: YUGP2640
Effectiveness Of Weekly Pcf Chemotherapy Regimen In Neoadjuvant Setting In Head And Neck Malignancies.
Presenter- * Dr. Sagar Bhalaria
Co-author - ,

Title â€“ Effectiveness of Weekly PCF chemotherapy regimen in neoadjuvant setting in Head and neck malignancies. Method â€“ We collected data of patients receiving neo-adjuvant chemotherapy for head and neck malignancies from January 2017 to May 2017. In this study we evaluated effectiveness of weekly PCF regimen. Results: Total 50 patients were included in study from January 2017 to May 2017. Out of 50 selected 20 were diagnosed with carcinoma buccal mucosa, 13 with carcinoma tongue, 3 with carcinoma hypopharynx, 3 with unknown primary with neck node metastasis, 3 with carcinoma maxilla, 2 with carcinoma alveolus, 1 with carcinoma hard and 1 with soft palate, 1 with carcinoma nasopharynx,1 with carcinoma floor of mouth. All patients had pre-treatment assessment CT scan. As patients were not a menable for surgery or radical chemo-radiation, all patients received 9 cycles of weekly PCF regimen over 9 weeks of period instead of standard chemotherapy regimen of 3 weekly DCF/PCF. Post treatment assessment scan was done for each patient at the end of treatment. Complete response (CR) was seen in 10% patients (total 5 patients 2 with pathological CR, 3 with radiological CR), 74% patients had Partial response (PR). In 2 % patients diseases was stable. 4% patients had progressive diseases. 6% patients defaulted during treatment. 2 % patients died during treatment. Conclusion: Even though Weekly PCF is not category (A) recommendation in treatment of head and neck cancer, it has shown good results in our study.

Abstract Id: YUGP2660
A Prospective Evaluation Of Change In Dosimetric Parameters With Maintainance Of Bladder Protocol In Patients Of Locally Advanced Carcinoma Cervix Undergoing Intracavitary Brachytherapy
Presenter- * Dr. Upasana Mukherjee
Co-author - Anis Bandopadhay, Sandip Ghosh, Arnab Adhikary

Introduction Recent advances in technology have allowed the use of volumetric imaging in gynecological brachytherapy planning .Problem of interfraction dose variation in HDR brachytherapy of cervical cancer which is now a matter of concern in recent times. Objective Evaluation of changes in the dosimetric parameters taking place during the course of intracavitary brachytherapy along with maintenance of bladder protocol of 50ml, 100ml, and 200ml for each patient. Comparative analysis of DVH parameters were made. Materials & methods Study was conducted at Medical College, Kolkata. CT guided imaging of Target volumes of 32 patients were done with a strict bladder protocol. Every applicator insertion was imaged to obtain DVH parameters. Target volume & OARs contoured based on the prebrachytherapy MR image, clinical findings & present CT findings. Brachytherapy protocol was set for 50ml for 1st Fraction, 100ml for 2nd and 200ml for 3rd fraction.
Abstracts

High dose rate Intracavitary brachytherapy was given with a dose of 7Gy per fraction at point A with Iridium source. DVH parameters were analysed for each fraction. Data analysis was done using SPSS version 21 software. Results Significant change of V100 (.000 Vs.299) & V90 (0.000 Vs .961) for 3rd week ICBT when compared with 1st # CT. Rectal 2cc dose no significant interfraction variation was observed. Bladder filling protocol with 50 ml and 100 ml was well tolerated and achieved a reasonably reproducible bladder volume. There is no significant impact of bladder filling on bladder dose volume parameters. Conclusion Interfraction variations occurring DVH parameters don't always lead to the use of repetitive imaging. Repeat imaging may play a role due to tumour shrinkage & organ deformation for post EBRT- PR or SD patients especially during last fraction treatment. Higher bladder volume of 200ml lead to increased bladder doses but relatively less bowel dose. Further validation with respect to clinical outcome is necessary. Balance in protocol based treatment approach against use of repetitive imaging should be made in a Government setup which is the need of the hour.

Abstract Id: YUGP2674
Value Of Pre- Brachytherapy Mr In Target Definition In Ct Based Cervix Cancer Brachytherapy Contouring- Single Institutional Experience
Presenter - Dr. Upasana Mukherjee
Co-author - Sandip Ghosh, Arnab Adhikary, Arunima Gupta

Introduction Recent advances in technology have allowed the use of volumetric imaging in gynecological brachytherapy planning. This situation has changed only recently with the increasing implementation of magnetic resonance image (MRI)-guided brachytherapy. The purpose of this study is to analyse the importance MRI in defining target during CT based brachytherapy contouring and to provide a practical approach if access to MRI based applicators is limited. Objective To study the importance of prebrachytherapy MR in CT based contouring of target and OARs during brachytherapy planning as well as analyse its implication in dose volume parameters. Method Sixteen cervical cancer patients suitable for radical radiotherapy were enrolled in the study. Pre- treatment investigation included MRI pelvis before initiation of External beam radiation. EBT was followed by clinical response assessment and pre brachytherapy MR without the applicator. CTV-HR was contoured twice based on clinical drawings only (CTVHRclinical) and additionally with pre brachytherapy MR imaging (CTVHRprebr) by separate Radiation oncologists. Height, width, and dose volume parameters were notes and differences were analysed using IBM SPSS software. Results Variation between CTVHRclinical and CTVHRprebr were found to be significant but overall dose coverage of these volumes were not significantly different. Conclusion In the absence of MR based applicators and treatment planning systems, prebrachytherapy MR can play similar role in delineation of target during cervical cancer brachytherapy contouring.

Abstract Id: YUGP2674
A Comparative Analysis Of Intensity Modulated Radiotherapy Versus Volumetric Modulated Arc Therapy :Planning And Dosimetry In Head And Neck Cancers
Presenter - Ms. Sathya Subbiah balraj
Co-author - DR. M.NAGARAJAN, DR.R.BANU, MR.T.SUNDARAM

AIM: To compare planning and dosimetric parameters between Intensity Modulated Radiotherapy(IMRT) and Volumetric Modulated Arc Therapy (VMAT) in Head and Neck cancers. OBJECTIVES: PRIMARY OBJECTIVE: Δє To analyse and compare the planning and dosimetric parameters between Intensity Modulated Radiotherapy and Volumetric modulated arc Therapy in Head and neck cancers. SECONDARY OBJECTIVE: Δє To analyse and compare the cumulative dose volume histogram for target, and organs at risk like mandible, brain stem, spinal cord, and parotid between IMRT and VMAT Δє To analyse and compare the homogeneity index, conformity index, monitor units MATERIAL AND METHODS: The study was a prospective observational study, conducted in Department of VNCC, G.Kuppuswamy Naidu Memorial Hospital, Coimbatore, Tamilnadu. A total of 30 Patients newly diagnosed with Head and neck malignancies treated with IMRT between June 2016 to June 2017 were enrolled in the study. Planning Target Volume was delineated for three different dose levels and planning was done by means of simultaneous integrated boost technique. Planning was done for IMRT using 7 beams dynamic IMRT plan with beam angles of 00 ,50,100,150,210,260,3100 . For VMAT plan 2 complete arcs (one clockwise and another counterclockwise ranging from 1810 to 1790 (clockwise), 179 to 1810 (counter clockwise)) were used. All plans will be generated with 6MV X-rays. Optimisation and calculations will be done in Varian eclipse planning system. The dosimetric parameters like Homogeneity index, Conformity index, for PTV D 98%, D 2%, and D 50%, total Monitor Units, and maximum doses to organ at risk and mean homoeose to parotid were reported for both IMRT and VMAT treatment planning. These parameters were compared and analysed by independent sample t-test. RESULTS : The Mean PTV66 D2% was 68.57±0.242 with IMRT and 69.81±0.453 with VMAT (P value < 0.001). The Mean PTV60D50% was 61.11±0.152 with IMRT and 61.64± 0.339 with VMAT (P value < 0.001). The Mean PTV 54D2% was 56.08±0.292 with IMRT and 57.87± 1.176 with VMAT (P value = 0.025). The Mean PTV 54D50% was 54.98±0.082 with IMRT and 54.33± 0.138 with VMAT (P value = 0.005). The Mean PTV 54D98% was 54.23±0.117 with IMRT and 54.98± 0.178 with VMAT (P value = 0.060). Current study findings show that Mean homogeneity index of PTV66, PTV60, and PTV54 between IMRT and VMAT were 0.035 ± 0.003/0.058 ± 0.008, 0.040 ± 0.011/0.058 ± 0.011, 0.033 ± 0.003/0.070 ± 0.023 with statistically significant mean differences (P=

Abstract Id: YUGP2678
To Teach Undergraduate Students Microscopic Features Of Pathology Slides Using Projection Of Image From Trinocular Microscope (Visual Aid) And Compare It With Conventional Method Of Teaching.
Presenter - Dr. Vijayanand Choudhary
Co-author - Dr Sangeeta Pankaj

Conventional method of teaching pathology slides has been followed in all medical colleges for decades. When I was a student 27 years back we were shown the atlas of Histopathology and explained the features there itself. Therefore when we saw the slides under microscope we could not make out the morphology as what we saw on microscopy did not match with what we had been shown in the atlas. 27 years have passed since then and not much has changed in the study of pathological slides. The only difference perhaps is that now digital images of the pathological slides are available on the internet and can be downloaded. With the advent of newer technology innovative teaching styles should be adopted so that maximum exchange of knowledge can take place between teachers and students. It has been proven by research that when information is transferred through more than one media simultaneously it increases the comprehensiveness of the subject. Therefore we are now supplementing Verbal teaching with Visual teaching by displaying the images of pathological slides on screen live . After obtaining clearance from ethical committee, I divided the whole 2nd Professional MBBS batch of 99 students in to two groups. Group A - 50 students and group B - 49 students. Normally the second group - B comprise of weaker students because it also includes the supplementary batch students. To avoid a preferential bias towards better students I chose the second group - B students as the test group for this innovative way of teaching learning and group - A as the control group. KEY WORD - Histopathology, Morphology, Microscopy, Pathological slides, Conventional method, Digital, Verbal teaching , Visual teaching, Innovative teaching.
Abstract Id: YUGP2680
Leiomyoma Mimicking Ovarian Malignancy- A Rare Case Report
Presenter - Dr. Syed Nazneen
Co-author - Dr Sangeeta Pankaj, Dr Anita Kumari, Dr Jaya Kumari

LEIOMYOMA MIMICKING OVARIAN MALIGNANCY- A RARE CASE REPORT ABSTRACT Introduction Uterine leiomyomas usually have typical appearance on imaging. However, when fibroids present in unusual locations or undergo degenerations, confusion in imaging studies may arise. Here, we present a case of a woman with giant uterine leiomyoma which had undergone extensive cystic degeneration, mimicking an ovarian malignancy Case report A 47 year old multiparous female presented with abdomen distension. She had undergone ultrasound guided aspiration of about 5 liters of fluid from abdomen at a private nursing home, the cytology of which was negative for malignant cells. Her hemoglobin was 6.7 gm%, CA-125 was 160.7 IU/dl. On ultrasonography, ovaries were not visualized and massive ascites was reported. CT scan revealed a large cystic lesion: 21X 16 X 10.3 cm with thick peripheral wall in right adnexa inseparable from uterine wall, features suggestive of right ovarian mass with a differential diagnosis of uterine mass and mild ascites. On laparotomy, a large cystic mass was seen originating from the fundus of the uterus of size 20—25 cm with a broad pedicle. Both the tubes and ovaries were normal. There was mild ascites of amber color. Histopathology confirmed fundal leiomyoma with hyaline degeneration and hemorrhage. Conclusion Pseudoculminated leiomyomas with extensive cystic degeneration should be considered in the differential diagnosis of adnexal mass.

Abstract Id: YUGP2682
Myths And Taboos A Major Hindrance To Cancer Controls. A CEEinherited Knowledge A Blessing Or Curse. Surgery After 21 Cycles Of Chemotherapy AEEa Surgeonâ€™s Ordealâ€ä
Presenter - Dr. Syed Nazneen
Co-author - Dr Sangeeta Pankaj, Dr Anjili Kumari, Dr Jaya Kumari

Beliefs about cancer and its treatment have been shown to influence cancer stage at diagnosis and, thus, prognosis. The scenario of cancer of ovary has improved immensely over the years due to newer chemotherapy drugs in conjunction with timely an appropriate surgery. India is a multi cultural country with highly prevalent superstitions and myths. The common cultural tales and practices influence the beliefs and nature of people. These beliefs influence the understanding of the people and also their acceptance of treatment modalities. World health organization statistics of 2015 show that globally cancer is the second leading cause of death and accounted for 8.8 million deaths. Of these 30% to 50% could be prevented by modifying or avoiding key risk factors, including avoiding tobacco products, reducing alcohol intake, maintaining a healthy body weight, exercising regularly and addressing infection-related risk factors. The report from International Agency for Research on Cancer (IARC) of 2008 states that due to increases in life expectancy, improvements in clinical diagnostics, and shifting trends in health behaviors (e.g. increases in smoking and sedentary lifestyles) and in the absence of significant efforts to improve global cancer control, cancer mortality could increase to 12.9 million and cancer incidence to 20 million by the year 2030. The data shows that cancer-related stigma and myths are important problems that need to be addressed. Stigmas about cancer present significant challenges to cancer control as they can have a silencing effect, whereby efforts to increase cancer awareness are negatively affected. The social, emotional, and financial burden accompanied with the diagnosis of cancer is due to the cultural myths and taboos surrounding the disease. Combating stigma, myths, taboos, and overcoming silence will play important roles in changing this escalating problem. There are several reasons for cancer being stigmatized in our region like the perception that cancer is fatal, the symptoms or body parts affected by the disease can cultivate stigma and further the fears about treatment can also add fuel to fire. We operated a patient of cancer ovary after she received 21 cycles of chemotherapy as she refused to undergo surgery initially due to the belief that surgery would disseminate the cancer.

Abstract Id: YUGP2688
Body Image Concern As Predictor Of Psychological Problems In Cancer Patients
Presenter - Ms. Swarajya Kopparty
Co-author - Tiamongla, Akshita Srinivasan, Swarajya Kopparty

Context: Evaluation of concerns over oneâ€™s body image in cancer can give an insight into their psychological problems namely, anxiety, depression, distress and somatisation. Aims: 1) To understand the psychosocial between body image and anxiety, distress, depression, somatisation in patients suffering from head and neck cancer and breast cancer 2) To see if body image concerns predict the patientâ€™s psychological problems (anxiety, depression, distress and depression) Materials and Methods: Correlational design was adopted for this study. Body image scale (BIS) was used to measure the body image concerns and Four-Dimensional Symptom Questionnaire (4DSQ) was used to measure depression, anxiety, distress, and somatisation of cancer patients. The sample consisted of 103 participants out of which 50 head and neck cancer patients (men) and 53 breast cancer patients (women) were recruited by purposive sampling method. Statistical Analysis: The results were analyzed using descriptive statistics, Pearson product moment correlation and simple regression analysis with the help of SPSS 2.0. Results: Significant correlations were found between body image concerns and distress; body image concerns and depression respectively. Linear regression showed that body image concerns predicted depression and distress in the present sample. Conclusion: It is suggested that relevant interventions are required to be incorporated into holistic cancer management programs. This would aid in dealing with the body image concerns of the patients, thus leading to an improved psychological state. Keywords; body image, distress, depression, cancer *corresponding author: Dr G.Padmaja Assistant professor Centre for health psychology University of Hyderabad Telangana â€“ 500046 gpadmina2708@gmail.com

Abstract Id: YUGP2690
Alpha-Linolenic Acid Mediated Stabilization Of Hif-1-Alpha And Downregulation Fasn To Inhibit Palmitic Acid Synthesis And Activation Of Mitochondrial Apoptosis For Mammary Gland Chemoprevention
Presenter - Mr. Subhadeep Roy
Co-author - Manjari Singh, Dr. Gaurav Kaithwas

Aim: Alpha linolenic acid is an essential polyunsaturated fatty acid and is reported to have the anti cancer potential with no defined hypothesis or mechanism/s. henceforth, present study was in-quested to validate the effect of alpha linolenic acid on mitochondrial apoptosis, hypoxic microenvironment and de novo fatty acid synthesis. Material and Methods: The present study was validated using in-vitro and in-vivo studies on ER+ MCF-7 cells and 7, 12-dimethylbenz anthracene induced rat mammary gland model respectively. Result: The IC50 value of alpha linolenic acid was recorded to be 17.55 micro gram induced rat mammary gland model respectively. Result: The IC50 value of alpha linolenic acid was recorded to be 17.55 micro gram against ER+ MCF-7 cells. Treatment with alpha linolenic acid was evident for the presence of early and late apoptotic signals along with mitochondrial depolarization, when studied through acridine orange/ ethidium bromide and JC-1 staining. Alpha linolenic acid arrested the cell cycle in G2/M phase with the presence of phosphatidylerine translocation by Annexin V-FITC dot plot assay. Subsequently, the in-vivo efficacy was examined against 7, 12-dimethylbenz anthracene induced carcinogenesis. Treatment with alpha linolenic acid demarcated significant effect upon the cellular proliferation as evidenced through decreased in alveolar bud count, restoration of the histopathological architecture and loss of tumor microvessels. The
level of oxidative biomarker (TBARS, SOD, GSH, Catase, Protein carbonyl) are also in line with our previous experimental outcome. Alpha linolenic acid restored the metabolic biomarker (Trigonelline, Cytidine, Pyruvate, Lactate, N-Nitrosodimethylamine, 2-hydroxyvalenate) changes to normal when scrutinized through 1H NMR studies. The immunoblotting and qRT-PCR studies revealed participation of mitochondrial mediated death apoptosis pathway, curtailment of hypoxic microenvironment and activation of alpha 7-nachr mediated intracellular calcium signalling after treatment with alpha linolenic acid. Conclusion: With all above, it was concluded that alpha linolenic acid mediates mitochondrial apoptosis, curtails hypoxic microenvironment along with inhibition of de novo fatty acid synthesis to impart anticancer effects. Keywords: Alpha linolenic acid, apoptosis, polyunsaturated fatty acid, hypoxia, fatty acid synthase, Breast cancer

Abstract Id: YUGP2692
Evaluation Of Distant Metastasis In Treated Thyroid Cancer: Study Of Radio-Iodine Scan Of 499 Patients
Presenter - Dr. Sataksi Chatterjee
Co-author - Dr. Vishal Rao ,

Abstract: The presence of distant metastases is the most important predictive factor of poor outcomes in thyroid cancer patients. Apart from distant metastasis, sex, age, histopathological subtypes and completeness of surgical resection are the other prognostic indicators of survival. Our attempt in this study is to analyze the presence distant metastasis in operated patients of thyroid malignancy and evaluate these prognostic indicators of survival in the metastatic subgroup. Objective: The objective of this study was to retrospectively analyze the presence and extent of distant metastasis amongst treated thyroid cancer patients. Methodology: The post operative radio-iodine scan reports of the patients who presented to Health Care Global Enterprises Ltd, Bangalore over a period of eight years (January 2008 to December 2015) were analyzed. Result: 66 patients out of the 499 patients evaluated (13.22%) had distant metastasis. Most of the patients with distant metastasis were females, aged 45 years and above and had papillary carcinoma of thyroid. Percentage of skeletal and pulmonary metastasis was almost equal. Conclusion: The patterns of distant metastasis were similar to the trends in literature, except for increased incidence of skeletal metastasis, more so in follicular subtype of papillary carcinomas.

Abstract Id: YUGP2694
A Pilot Study Of Neo-Adjuvant Chemotherapy In Tongue Preservation In Locally Advanced Squamous Cell Carcinoma Of Oral Tongue
Presenter - Dr. Sataksi Chatterjee
Co-author - .

The benefit of neo adjuvant chemotherapy in head and neck squamous cell carcinomas, especially in sub sites like larynx/hypopharynx has been well documented . However, the role of neoadjuvant chemotherapy for organ preservation in oral tongue (anterior 2/3rd) squamous cell carcinoma has not been evaluated. Aims and Objective: To evaluate the role of neoadjuvant chemotherapy in organ preservation of locally advanced squamous cell carcinoma of oral tongue. The primary objective is to assess the tongue preservation rate of patients of advanced squamous cell carcinoma of oral tongue treated with induction chemotherapy with TPF regimen followed by Chemoradiotherapy. The secondary objective is to Methods: All the patients of advanced squamous cell carcinoma (SCC) of oral tongue Stage III and stage IVA presenting to Health Care Global Enterprises Ltd between January 2016 to December 2016 were included in the study. All the patients were evaluated by a speech and swallow pathologist prior to the start of treatment. The eligibility criteria for NACT was evaluated with a multimodality approach. Patients enrolled for the study, eligible for NACT underwent a pretreatment workup with Evaluation Under Anesthesia (EUA) and Tumor Mapping along with a PET-CT scan and Tissue biopsy from which HPE information was obtained. Subsequently, they underwent 3 cycles of NACT (3 Weekly) after which they were reassessed with PET-CT, HPE, and EUA. Those who achieved a Complete Response (CR) underwent adjuvant chemoradiotherapy, while those subjects who were deemed PR, SD or PD underwent surgery for the removal of the tumour. PET-CT and HPE analyses were continued on follow-up after 3 months of treatment completion. Results: Eight patients (8) completed the treatment protocol from January 2016 to December 2016. The complete response rate and partial response rate after Neoadjuvant chemotherapy were 75% and 25% respectively. The tongue was preserved in two patients who initially had attained CR after NACT. Hence the tongue preservation rate of 25% (2/8) patients was observed. Conclusion: The tongue preservation protocol is tested in a phase III trial setting for advanced oral cancer patients. A larger study with refinement of the methodology can be considered in carefully selected patients of advanced oral tongue cancer patients to further explore the finding of 25% tongue preservation rate in our present study.

Abstract Id: YUGP2698
Exogenous Chemical Activation Of Phd2 Stabilizes Hif Sub Family To Downregulate Fasn And Activate Mitochondria Mediated Death Pathway For Mammary Gland Chemoprevention
Presenter- *Ms. Manjari Singh
Co-author - Subhadeep Roy, Dr. Gaurav Kaithwas,

Aim: The present study was aimed to inquest potential activators for prolyl hydroxylase-2 with concomitant efforts to elucidate their anticancer efficacy. Material and Methods: Five compounds (BBAP-1, BBAP-2, BBAP-3, BBAP-4 and BBAP-5) were retrieved as potential prolyl hydroxylase-2 activators from the library of zinc database using the 50% structural similarity and other relevant filters from the known activator of prolyl hydroxylase-2 (KRH102140). BBAP-1 [4-{(3-acetylloxy)}-2-ethyl-2H-chromen-3-yl] phenyl acetate] and BBAP-2 [4-{(3-acetylloxy)}-2-methyl-2H-chromen-3-yl] phenyl acetate] were further recorded for their potential to activate prolyl hydroxylase-2 using 2-oxoglutarate dependent in-vitro assay. The activity of BBAP-2 was further scrutinized by using ER+MCF-7 cells and n-methyl-n-nitrosourea induced rat mammary gland model respectively. Result: The apoptosis signals were observed after fluorescence microscopy and the cells were arrested in G2/M phase. The morphological analysis of rat mammary gland tissue revealed decrease in alveolar buds, restoration of histopathological features along with intra-arterial cushion. The immunoblotting and qRT-PCR studies validated that the anticancer activity of BBAP-2 is mediated through mitochondria mediated apoptosis pathway. BBAP-2 was also activated the expression of prolyl hydroxylase 2 with significant downregulation of hypoxia inducible factor-1 and respective downstream markers. Conclusion: With all above, it was concluded that BBAP-2 could activate prolyl hydroxylase 2 and also promote apoptosis through mitochondria-mediated death pathway. Keywords: Apoptosis, fatty acid synthase, hypoxia, hypoxia-inducible factor, n-methyl-n-nitrosourea, prolyl hydroxylase, Breast Cancer

Abstract Id: YUGP2704
Single And Double Exclusive Clones, Monosomal And Complex Cytogenetic Aberrations In Indian Cytopenic Patients With Suspected Myelodysplastic Syndromes (Mds)
Presenter- *Dr. Bani Ganguly
Co-author - Shouvik Mandal, TK Dolai, Debasis Banerjee

Peripheral blood cytopenia, refractory anemia, morphology, blasts, etc. direct cytogenetic characterization of heterogeneous and premalignant disorder of hematopoietic stem cells known as
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myelodysplastic syndromes (MDS). Recent information on risk of idiopathic cytopenia of undetermined significance (ICUS) and clonal hematopoiesis of indeterminate potential (CHIP) to MDS and/or overt leukemia necessitates genetic screening for therapeutic management of cytopenic individuals, especially the elderly group. Conventional G-banding cytogenetics was carried out in bone marrow of 2103 Indian cytopenic patients prior to initiation of treatment, which has described the cytogenetic result as single and double independent clones, and complex (CK) and monosomal karyotypes (MK) in both sexes. Some of them were suspected MDS; however, uniformity was lacking in terms of WHO/FAB classification. All patients had cytopenia, refractory anemia, and associated co-morbidities such as diabetes and hypertension. MDS-specific aberrations, including CK with ?3 aberrations (8%), other single (7%) and double independent clones (5.7%) and exclusive del5q/del7q-/-7/+8/del20q/-Y were detected in 5%, 5%, 12%, 16%, 7% and 13% respectively. The combined frequencies of single and double independent clones were prevalent over CK. Del(11q/12p), i(17q), +19 and co-occurrence of -7/ del7q were less frequently detected. â€” Cytogenetic CHIPâ€™ was detected infrequently in 10% of all and frequently as exclusive clones in 12% of patients. The abnormalities were grouped according to iPPSS-R for risk-scoring. The co-occurrence of prognostic signatures and pair-wise comparison of single exclusive and in combination were in concordance with literature, and are significant for understanding patho-biology and disease-spectrum on this population of different geographical location.

Abstract Id: YUGP2708
Cea As New Diagnostic Tumor Marker In Predicting Paraaortic, Pelvic Lymph Node Metastasis And Distant Metastasis In Squamous Cell Carcinoma Of Uterine Cervix. Dr.Kiran Kumar Br, Dr.Bhaskar Vishwanathan, Swathi Reddy (All Authors Have Equal Contribution)
Presenter - Dr. KIRAN KUMAR BR
Co-author - Dr.BHASKAR VISHWANATHAN, SWATHI REDDY,

Abstract Background: Cancer of the uterine cervix is the major cause of death from gynecologic cancer worldwide. Isolated paraaortic lymph node metastasis detected at the initial diagnosis of cervical cancer could be addressed by extended field paraaortic lymph node irradiation. Serum carcinoembryonic antigen (CEA) could be done for detecting early Para aortic lymph node involvement and scrutinizing relapse or recurrence. The objective of the study is to assess pelvic, paraaortic lymph node status and distant metastasis by MRI scan and also correlate with the pretreatment serum carcinoembryonic antigen levels. Materials and Methods: Study design include hospital based prospective and comparative study. Twenty patients of histologically proven squamous cell carcinoma of cervix of any age group were recruited into the study. Sample size is randomized into 2 arms, ARM A: CONTROL ARM- Carcinoma Cervix stage I to IIIB, ARM B: High risk arm i.e. Carcinoma Cervix stage IVA and IVB. We assessed the status of pelvic, paraaortic lymph node and distant metastasis by Magnetic Resonance Imaging study. Pretreatment serum CEA levels were evaluated in all patients. Results & Conclusions: We observed that there was an elevation of CEA in those patients having paraaortic lymph node and distant metastasis. Based on the results, we could opine that serum CEA levels could help to prognosticate the cervical cancer patient, predict the presence of paraaortic, pelvic lymph nodes and distant metastasis. To explore the potential for PALN detection and treatment response assessment. This is the first study to explore the role of CEA as prediction of Paraaortic, Pelvic nodal status in Carcinoma Cervix.

Abstract Id: YUGP2716
Can Mir-34A Expression Is A Prognostic Marker In Different Stage Of Ovarian Cancer?
Presenter - Dr. Debarsi Jana

Abstract: Introduction: Ovarian cancer is first becoming commonest malignancy in female in urban population in India. Till date most of the treatments are guided by the tumor factors and many occasions the results of behavior have been unpredictable. This study aims to various molecular factors and will try to link then with the tumor factors. This study was evaluated prognostic significance of like miR-34a expression in ovarian cancer patients. Material and Methods: In this hospital based study 50 ovarian cancer patients attend at OPD in our institute of Eastern India. MiR-34a expression was measured from cancer tissue sample by RT-PCR Technique. For statistical analysis data were entered into a Microsoft excel spreadsheet and then analyzed by SPSS 20.0.1 and Graph Pad Prism version 5. Results: MiR-34a was over expressed in different stage of ovarian cancer in Eastern India. Statistical significant risk was found miR-34a expressed tumor with clinical stage. Prognostic significance of miR-34a expression was found in ovarian cancer patients. Conclusions: It was concluded miR-34a is an independent prognostic bio-marker of Indian ovarian cancer. Thus the study can in an innovative work in establishing new risk stratification system which will be an importance selecting appropriate clinical guideline for ovarian cancer patients.

Abstract Id: YUGP2723
Multiple Myeloma- Clinical Profile & Experience From A Tertiary Care Institute in South India.
Presenter - Dr. Naresh Jadhav
Co-author - Dr Biswajit Dubashi, Dr Jagdeep, Dr Murali

Background: Multiple myeloma is a hematologic malignancy characterized by the clonal proliferation of plasma cells in the bone marrow. It is associated with para-protein production, bone lesions, hypercalcemia, susceptibility to infections, and renal impairment. Incidence of MM in India varies from 0.3-1.9/100,000 in males and 0.4-1.3/100,000 in females with approximately, 50,000 new MM cases are diagnosed each year. Indian patients are different from their western counterparts in terms of younger age of diagnosis, higher proportion of patients with anemia and renal failure. This study describes our experience with 62 patients of MM registered and treated at our institute from November 2013 to September 2016. Materials and methods: From November 2013 till September 2016, 62 cases were registered in Department of Medical Oncology, RCC JIPMER. These cases were retrospectively analyzed. Data was collected from Medical Oncology files & case records from the MRD of Department of Medical Oncology RCC JIPMER. Investigations were collected from the Hospital Information Systems. Results: A total of 62 patients were registered during the study period from November 2013 to September 2016. Median age of presentation was 55 years with male to female ratio of 1.48. Median ECOG PS at presentation was 2, with a mean time of presentation from onset of symptoms 2.29 months. Common presenting feature were bone pain (53.2%), pathological fracture (22.5%), swelling (11.2%), paraparesis (8.06%), and bleeding (3.2%). Among CRAB features 90.3% patients had anemia, 66.10% bone lesion, 29.03% renal dysfunction and 22.5% hypercalcemia. Most common subtype of myeloma was IgGK (25.80%). At presentation 38.70% of patients were both transplant eligible and willing for transplant. First line induction chemotherapy protocols were bortezomib based in 50%, thalidomide based in 22.5% hypercalcemia. Most common subtype of myeloma was IgG (8.06%). At presentation 38.70% of patients were both transplant eligible and willing for transplant. First line induction chemotherapy protocols were bortezomib based in 50%, thalidomide based in 22.5% hypercalcemia. Most common subtype of myeloma was IgG (8.06%). At presentation 38.70% of patients were both transplant eligible and willing for transplant. First line induction chemotherapy protocols were bortezomib based in 50%, thalidomide based in 22.5% hypercalcemia. Most common subtype of myeloma was IgG (8.06%). At presentation 38.70% of patients were both transplant eligible and willing for transplant. First line induction chemotherapy protocols were bortezomib based in 50%, thalidomide based in 22.5% hypercalcemia. Most common subtype of myeloma was IgG (8.06%). At presentation 38.70% of patients were both transplant eligible and willing for transplant. First line induction chemotherapy protocols were bortezomib based in 50%, thalidomide based in 22.5% hypercalcemia. Most common subtype of myeloma was IgG (8.06%). At presentation 38.70% of patients were both transplant eligible and willing for transplant. First line induction chemotherapy protocols were bortezomib based in 50%, thalidomide based in 22.5% hypercalcemia. Most common subtype of myeloma was IgG (8.06%).
MM were young and a significant proportion of them had anemia and renal failure. Response rates to induction chemotherapy were good with almost 83% patients having some degree of responses. Relapses were common and most patients received multiple lines of chemotherapy. 50% of the eligible patients underwent transplant till the time of analysis with no transplant related mortality.

Abstract Id: YUGP2728
Isolated Rib Metastasis As The First Manifestation Of Hepatocellular Carcinoma In A Chronic Alcoholic Patient A Case Report And A Literature Review
Presenter- Dr. Ashok Kumar Singh
Co-author - Dr. Shashank J Pandya, Dr Rohit Jha

Hepatocellular carcinoma (HCC) is the most common primary tumor of the liver and is the fifth most common cancer in the world. Extrahepatic spread is present at the time of diagnosis in only about 5 to 15% of patients. Skeletal metastasis of HCC occurs less frequently compared with other cancers and is considered a rare primary form of presentation. We report a case of unsuspected HCC presenting with isolated right 4th rib metastasis, 60-year-old man presented with c/o painless right chest wall swelling, loss of weight and decreased appetite. Histological Examination from chest wall swelling showed metastatic carcinoma, which on IHC positive for Heppar, AE1, CD138 and negative for vimentin, suggestive of metastatic HCC or carcinomas with hepatoid differentiation. Tc-99m MDP whole body bone scan reveals increase radiotracer concentration in right 4th rib anteriorly, CECT thorax abdomen suggestive of lytic lesion involving right 4th rib with diffuse alteration in liver parenchyma, portal venous doppler reveals hepatomegaly with multiple hypoechoic lesion? Metastasis, ?? Regenerating nodule of cirrhotic liver with portal vein thrombus, in conclusion this case shows an unusual presentation of HCC with rib metastasis

Abstract Id: YUGP2731
Role of Efgr Receptor In Breast Cancer: An Analysis Of Biomolecular Receptor Study And Its Clinicopathological Correlation
Presenter- Dr. JEETENDAR PARYANI
Co-author - Arun Chaturvedi, Sanjeev Misra, Vijay Kumar

Introduction: EGFR Receptor is member of human epidermal receptor is frequently expressed in diverse forms of cancer. Many studies have studied the relation of EGFR receptor positivity in breast cancer and its prognostic value but yet no conclusions have yet been drawn. We attempt to study the receptor positivity in our patient and its correlation with various clinic-pathological prognostic predictors and outcomes. Materials & Methods: Data of 355 patients of breast cancer registered in our department between Nov 2014 to Nov 2016 and followed up until December 2016 was collected and reviewed for epidemiological and clinical features Results Of total 355 patients analysed, TNBC group was most common (n = 152) (43%) followed by Luminal A (25%). Median age at disease presentation was 45.3 years (24â€“73 years). The EGFR receptor positivity rate was 30.3%. EGFR receptor negative patients presented as early breast cancer significantly more than EGFR receptor positive patients (47.36% vs 27.10% (p=0.046). Significantly higher proportion of EGFR receptor positive patients presented with Grade 3 cancers (44.10% vs 19.16%, p=0.049). Nodal involvement was significantly more in EGFR receptor positive patients (66.6% vs 37.5% p=0.0364). Pathological complete response was significantly associated with EGFR receptor positivity (16.1% vs 12.5% p=0.0349). There were more recurrences in surgically treated group with EFGR receptor positivity than negative group but this difference did not reach significance (18.1% vs 5.2% p=0.061) Conclusion We found that our breast cancer were quite young with the median age almost two decades earlier than that of west with very high number of patients presenting as advanced stage and triple negative phenotypes. We found that EFGR receptor positive in almost one third of the patients. This could be subgroup of patients which could be targeted by anti EFGR therapy. This EFGR receptor positivity also acted as surrogate for aggressive disease which was shown by significantly larger proportion of advanced stage, high grade & node positive disease present in receptor positive patients. This subset showed a higher rate of pathological complete response in patients subjected to neoadjuvant chemotherapy. There was trend of worse outcomes in surgically treated EFGR positive patients which may be due to short follow-up period in our study. As we continue this study EFGR receptor positivity may emerge as a true prognostic marker of breast cancer.

Abstract Id: YUGP2735
Breast Cancer Problem In India: Reflection Of Analysis Of Breast Cancer Molecular Subtyping From Tertiary Cancer Care Centre
Presenter- Dr. JEETENDAR PARYANI
Co-author - Arun Chaturvedi, Sanjeev Misra, Vijay Kumar

Introduction: Breast cancer is one of most common cancers occurring in females all over the world and especially in old age postmenopausal females. Majority of these patients would be detected at an early stage. Indian Breast cancer represents a dramatically different picture. Breast cancer in India is rapidly expanding overtaking cervical cancer in terms of incidence as well as mortality. Indian women with Breast cancer are younger, premenopausal and a large proportion of patients present at advanced stages. Considering Breast cancer to be a complex disease demonstrating heterogeneity at clinical and histopathological levels, breast cancer in the Indian population could be biologically different from those of the west. We attempt to study the clinical & pathological aspects of breast cancer and its correlation with biomolecular subtyping with comparison to the western population in order to find pattern of differences. Materials and methods: This was a prospective and retrospective study. All patients diagnosed and treated in the department of surgical oncology, King George Medical University, Lucknow, UP from the period of August 2014 to August 2016 are included in the prospective group. Patients have been previously treated in department having followed up data and tissue blocks available for analysis consists of the retrospective group. Clinical and histopathological data was recorded. Results: A total of 355 patients were analyzed. Average age of patients with disease was 45.3yrs. The premenopausal group consists of 52% of patients. 99% of patients had more than one child. Most patients presented in locally advanced stage. Triple negative disease was associated with higher grade of disease (p

Abstract Id: YUGP2737
Presenter- Mr. Sidhanth Suresh
Co-author - P. Manasa, S. Krishna Priysa, S. Bindhya

Background: The linear signaling upon stimulation of c- Erbb2 is well known. However, the spatial aspects of its signaling is not fully understood. We have employed mass spectrometry using (nano LC-ESI MS/MS) with Lapatinib and CP724714 as inhibitors to identify unique phosphoproteins. Objective: To identify differentially expressed phosphoproteins on ligand of c-ErbB2. Method and Results: In SKOV-3 cells, following serum starvation and stimulation with EGF, maximal phosphorylation of c-ErbB2 was observed at 60 minutes. Lapatinib (10âµM) and CP724714 (15âµM) completely inhibited phosphorylation of c-ErbB2 upon EGFR stimulation, which was confirmed by immunoprecipitation. This was further confirmed by the inhibition of downstream effectors, (Erk1/2, Akt) of the ErbB2 pathway. Lapatinib (10âµM) also completely inhibited phosphorylation of EGFR while CP724714 (15âµM) only inhibited partially. Phosphoproteins enriched from starved, EGF stimulated
and inhibited lysates were subjected to mass spectrometry. We identified totally sixty two phosphoproteins. Twenty phosphoproteins were observed in all the 3 samples, while seventeen phosphoproteins were identified both in the EGF stimulated and Lapatinib treated samples. Eighteen unique phosphoproteins were observed only in the EGF stimulated sample suggesting that they are specific to signaling through c-ErbB2. The novel phosphoproteins included the proteins that participate in the carbohydrate metabolism, cytoskeleton and migration. We have evaluated two phosphoproteins, LASP1 and aldose reductase. LASP-1, an oncogene was not expressed in the normal ovary or fallopian tube However, it was over expressed in 17% of tumours (n=87) from patients with ovarian cancer, c-ErbB2 was not expressed in tumours that expressed LASP-1. Aldose reductase is an oxidoreductase enzyme that catalyses the reduction of glucose to sorbitol, the first step in polyl pathway of glucose metabolism. The activity of aldose reductase in reducing NADPH as a substrate was significantly higher in lysates from EGF stimulated cells as compared to starved. Conclusion: Identification of phosphoproteins by a using mass spectrometry is promising in identifying novel substrates and pathways upon c-ErbB2 phosphorylation

**Abstract Id: YUGP2740**

**Dysgerminoma In Swyer Syndrome: A Rare Case**

**Presenter: Dr. Vijaya Lakshmi**

**Co-author: Narendra H., Ramana Reddy N.**

Background: Swyer syndrome is a pure gonadal dysgenesis associated with a 46,XY karyotype and primary amenorrhea in phenotypic females. They have normal female external genitalia and underdeveloped female internal genitalia. Such patients usually present with primary amenorrhea and delayed puberty but can also have gonadal tumors as adults. The exact incidence is unknown. The syndrome has been estimated to occur in 1 in 80,000 births. Case: A 16-year-old female with Swyer syndrome, sought assistance for primary amenorrhea. A physical examination revealed that her tumor was at Tanner stage II with respect to her breasts and pubic hair. She had an eutrophic vagina, an age-appropriate uterus, and a small cervix. She had elevated luteinizing hormone and follicular stimulating hormone levels. Her karyotype was 46,XY. Imaging (ultrasound and magnetic resonance imaging of her pelvis) revealed a left adnexal tumor. A staging laparotomy with uterus preservation (fertility preservation) for possible fertility was performed. She was kept on hormonal replacement postoperatively. Results: The left gonadal tumor was 7.5 Å– 5.5 Å– 3 cm, with a gray-brown, shiny lumpy surface. Multiple gray-white nodules were noted. The final histopathologic report indicated that the tumor was a stage IA dysgerminoma. Conclusions: In an adolescent patient with primary amenorrhea, hormonal analysis, karyotyping, imaging of gonads, and appropriate surgical management are recommended in view of the increased malignancy risk in patients with Swyer syndrome.

**Abstract Id: YUGP2742**

**Nano Robot - Future Cancer Treating Agent’s Design Challenges**

**Presenter: Ms. Deepa E**

**Co-author: . . .**

**Abstract: Nanotechnology has taken engineering and medicine to a new front opening window of a solution to unlimited problems which are imagination today. Nanotechnology provides an ability to build materials, devices, and systems at atomic precision. The micro/nano scale medical robot is one such application which can be used for the treatment and/or elimination of medical problems like the treatment of neoplasms, arteriosclerosis, thrombus/emboli etc. The nanorobots can reach inimical tissue within the human body that cannot be accessed by other means out and destroy them. The technology is new and is presently undergoing a lot of research throughout the world. A basic nanorobot development cycle becomes an important factor for anybody who wants to learn/research in this field. This paper discusses nanorobot’s main design issues like materials to be used, structure and shape, mobility and engine design, a source of energy, sensors and actuators, admitting it into the human body for treatment, controlling issues of the robot inside body and means of recovery from the body. Index Terms: Nanotechnology, nano robots, drug delivery, propulsion, nanomedicine.**
Abstract Id: YUGP2744

Effectiveness Of Structured Teaching Programme On Knowledge Regarding Palliative Care Among Nurses In A Selected Hospital At Mangalore

Presenter- Prof. Sujatha Kannappan

Introduction Palliative care is a new term to the medical fraternity. Palliative care is specialized care for patients suffering with serious disabilities and illnesses. It improves the quality of life of the patients, family members and care givers. Many health care professional in day today practice applying this concept in their daily life with out aware of its impact. As nurses are trained to give their best possible care to the suffering individual physically, mentally, socially or spiritually. They practice palliative care without giving a shape to it. Though palliative care has got a place in the nursing curriculum, much importance is not given to this word. The core curriculum is very rich in essential human values, if it is thought to nurses definitely the understanding level of nurses will go much higher. Materials and Methods Evaluative research approach and one group pre-test post-test quasi experimental design was used. The present study was conducted in a selected hospital at Mangalore. Study population was nurses who are working in a selected hospital. 28 nurses were selected through non Probability technique by convenient method and data collected with the help of Knowledge questionnaire on palliative care. A structured teaching programme on palliative care was done on the same day. The participants were reassessed on the 8th day following structured teaching programme to assess the effectiveness of the intervention using the same tool. Results Data was analyzed by using descriptive and inferential statistics. The results show that mean post test knowledge (19) score of subjects were significantly higher than their mean pre-test knowledge (13). The Concept of Palliative care knowledge was 48 % in the pre test which was increased to 59 % in post test. The Pain management knowledge was 42 % in the pre test which was increased to 52 % in post test. The knowledge on Symptom management in Palliative care was 46 % in the pre test which was increased to 84 % in post test. The Communication knowledge was 46 % in the pre test which was increased to 70 % in post test. The Psychosocial needs in Palliative care knowledge was 48 % in the pre test which was increased to 68 % in post test. The knowledge about Spirituality in Palliative care was 28 % in the pre test which was increased to 33 % in post test. The End of life care knowledge was 42 % in the pre test which was increased to 54 % in post test. There was no significant association between pre-test knowledge score with selected demographic variables. Discussion With the above findings the present study is supported by a cross-sectional survey of 363 nurses conducted in a multispecialty hospital utilizing a self-report questionnaire- PCKT developed by Nakazawa et al., which had 20 items shows that Overall level of knowledge about palliative care was poor, and nurses had a greater knowledge about psychiatric problems and philosophy than the other aspects indicated in PCKT. Interpretation and conclusion Findings of the study revealed that most of nurses 15 (54%) had inadequate knowledge, 13 (46%) had moderately adequate level of knowledge and none of them had adequate knowledge at the time of pre-test. After the structured teaching programme post test revealed almost 22 (79%) nurses had moderately adequate level of knowledge and 6 (21%) nurses still had inadequate knowledge on palliative care. The structured teaching programme on palliative care helped the nurses to gain significant knowledge with in a week time. Being knowledgeable about palliative care can help nurses overcome many of the obstacles in caring chronic and terminally ill patients. KEY WORDS: Knowledge, Palliative Care, Structured Teaching Programme.

Abstract Id: YUGP2746

Neoadjuvant Sequential Chemotherapy Followed By Chemoradiation Versus Neoadjuvant Chemoradiation Alone In Locally Advanced Carcinoma Rectum: A Prospective Randomized Study

Presenter- Dr. Debapriya Mondal
Co-author - Krishnangshu Bhanja Choudhury, Abhishek Basu, Kousik Ghosh

Background - Treatment standard for patients with locally advanced rectal cancer (LARC) comprises neoadjuvant chemoradiation, total mesorectal excision (TME) and post-operative adjuvant chemotherapy. This study aimed to compare clinical endpoints, compliance and toxicity profile between the two groups receiving sequential neoadjuvant chemotherapy followed by chemoradiation and neoadjuvant chemoradiation (standard) respectively. Methods - This was a prospective randomised single institutional study in which 56 patients of histopathologically proved, and MRI defined locally advanced rectal adenocarcinoma (cT3-cT4N0M0) meeting the inclusion and exclusion criteria were randomly assigned to arm A - neoadjuvant sequential chemotherapy (3 cycles of capecitabine-oxaliplatin) before long course capecitabine based chemoradiation followed by surgery at 6-8 weeks or arm B - neoadjuvant long course capecitabine based chemoradiation followed by surgery at 6-8 weeks. The two arms were compared for primary outcomes - locoregional response, feasibility of radical surgery, pathological complete response (PCR), and secondary outcome measures - progression-free survival (PFS), compliance to treatment and toxicities (acute and late). Results: A total of 56 (28 on each arm) patients were included. Of these 94.6% (96.4% vs 92.9%, P = 0.08) underwent curative R0 surgery. Objective response rate was higher in the neoadjuvant sequential chemotheraphy arm (71.43% vs 64.28%) without significant difference in PCR (14.28% vs 10.71%, P = 0.07). At median follow up of 16.7 months median PFS were (16.6 vs 16, P = 0.6). All the patients developed some grade of toxicity with higher occurrence of grade 3/4 toxicities in the neoadjuvant sequential chemotheraphy arm (35.7% vs 25%, P = 0.06). Conclusion: Adding NACT before CRT fare similarly compared to standard treatment, longer follow up is planned for better outcome analysis.
commonly found in head and neck cancer. There is enhanced expression of iNOS with NO production to mutated wild type p53. This in turn exerts genotoxic & cytotoxic effects on epithelial cells leading to cancerous state. The role of TGF-β in epithelial malignancy is from tumour suppressor in initial stages to potent inducer of epithelial to mesenchymal transition (EMT), invasion & metastasis. The aim of the present study is to evaluate correlation of clinical outcome and immunohistochemical expression of p53, TGF-β, & iNOS in OL & OSMF following intervention. To the best of our knowledge, this is the first study in the literature to evaluate the expression of p53, TGF-β, & iNOS in OL & OSMF before & after treatment. Objective: To evaluate the treatment with subgroup A1 who were given 16mg Lycopine in two divided dosed daily for 9 months, subgroup A2 who were treated with topical application of 1% Bleomycin in DMSO for 14 consecutive days, subgroup A3 who were prescribed Vitamin A 3,00,000 IU/week for 9 months. All patients were followed up for 9 months & the response was graded as complete, partial, stable, & disease progression. Nearly 71.4% patients in subgroup A1 & 78% patients in subgroup A3 showed clinical improvement whereas 96.4% in subgroup A2 showed no response to treatment. No significant side effects were reported with any treatment group. The response of Lycopene & Vitamin A, & Topical Bleomycin for treatment in OL & of Pentoxifylline, Curcumin, & Laser excision of fibrous bands for management of OSMF. Methodology: The proposed study was approved by the Ethical Committee of the University of Delhi. An informed consent to participate in the study was obtained from all selected patients. Patients who were clinically and histopathologically diagnosed with OSMF & OL were included in the present study. A total of 196 patients (160 males & 36 females) were included. Detailed habit history was taken & clinical examination was done. Out of 196, 84 patients were diagnosed with OL (Group A) & 84 patients with OSMF (Group B). 28 healthy normal individuals without any adverse habit were taken as a control group (Group C). Routine blood investigations followed by biopsy was performed from a representative site & sent for routine histopathology examination. Analysis of expression of p53, iNOS, & TGF-β was done on these samples by immunohistochemistry. Participants in the control group were used only for histopathological and immunohistochemical comparisons and were not subjected to intervention. Statistical tests applied were Kruskal Wallis test, Paired T test, One Way Anova, Mann Whitney test & Pearson chi square test with p value < 0.05 was considered significant. Results: Patients with OL (Group A) were randomised into 3 subgroups based on intervention as subgroup A1 who were given 16mg Lycopine in two divided dosed daily for 9 months, subgroup A2 who were treated with topical application of 1% Bleomycin in DMSO for 14 consecutive days, & subgroup A3 who were prescribed Vitamin A 3,00,000 IU/week for 9 months. All patients were followed up for 9 months & the response was graded as complete, partial, stable, & disease progression. Nearly 71.4% patients in subgroup A1 & 78.5% patients in subgroup A3 showed clinical improvement whereas 96.4% in subgroup A2 showed no response to treatment. No significant side effects were reported with any treatment group. The response of Lycopene & Vitamin A in OL was found to be statistically significant with significant response seen in 78.5% patients. Complete response was seen in homogenous lesions with size less than 2 cm in both vitamin A & Lycopene group. Partial response was seen in lesions between 2-4 cm & no response in lesions >4 cm. So these drugs are more effective for management of smaller homogenous leukoplakia less than 2 cm in size. Patients with OSMF (Group B) were randomised into 3 subgroups based on intervention as subgroup B1 who were given Pentoxifylline 400mg thrice daily for 9 months, subgroup B2 who were treated with Diode Laser, & subgroup B3 who were prescribed Curcumin 300 mg thrice daily for 9 months. All patients were followed up for 9 months. The response in VAS score, mouth opening, tongue protrusion & cheek flexibility were evaluated pre & post treatment. Maximum improvement in VAS score was seen in subgroup B3 followed by B1. Maximum increase in mouth opening was achieved with subgroup B2 followed by B3. No significant side effects were reported with any treatment group. Laser was best suited for patients with excessively reduced mouth opening but it does not provide significant relief with respect to subjective symptoms. Curcumin & Pentoxifylline were equally effective in management of both subjective & objective symptoms. However, the overall improvement score was maximum for Curcumin followed by Pentoxifylline. Before treatment, positive immunohistochemical expression of p53, TGF-β, & iNOS was seen in 46.4%, 67.9%, & 66.7% in OL & 53.6%, 64.3%, & 83.3% in OSMF. After treatment, there was no change in p53, TGF-β, & iNOS expression in 53.5-75% samples of OL & 57.1-71.4% samples of OSMF. Decrease in expression of these markers was seen in 10.7-25% samples of OL & 25-32.1% samples of OSMF & these were the patients who showed complete or partial response to the treatment. The expression was upregulated in 7.1-21.5% samples of OL & 3.6-10.7% samples of OSMF. Of the patients which showed increased expression of markers, 3.6% patients of OL & OSMF had malignant transformation to OSCC. Corroborating clinically these were the patient from the group which showed no response to treatment and had non-homogenous lesions > 4cm in size. Conclusion: The present study provides good evidence to support the hypothesis that p53, iNOS & TGF-β can be used as potential markers of malignant transformation in oral potentially malignant disorders & as prognostic markers to assess the effectiveness of chemotherapeutic agents for management of these disorders. Acknowledgement: We would like to acknowledge the Indian Council of Medical Research (ICMR) for providing the grant to carry out this study.

Abstract Id: YUGP2756
Recurrence Pattern Of Different Subtypes According To Receptor Status After Curative Treatment In Stage I-Iii Breast Cancer Patients
Presenter - Dr. Rukhshana Rabbani
Co-author - Dr Mahmudul Hasan, ,

Purpose: To determine whether breast cancer subtypes are associated with recurrence pattern after curative treatment in stage I-III breast cancer patients. Material and method: It is a cross-sectional study conducted in a tertiary level government hospital from January, 2016 to December, 2016. Total 100 patients were enrolled in this study. At the time of enrollment all had recurrence and we collected previous treatment histories from the hospital records. Receptor status was used to determine different breast cancer subtypes. Estrogen receptor (ER) or progesterone receptor (PR) positive and human epidermal growth factor receptor-2 (HER-2) negative = luminal A; ER+ or PR+ and HER-2 = luminal B; ER â€“ and PR- and HER-2 + = HER-2 and ER â€“ and PR- and HER-2 - = basal. Result: Among 100 recurrent patients 29% had local recurrence at chest wall, 20% had locoregional failure, 51% had distant metastases (lung 5%, liver 7%, brain 8%, skin 2% and bone 46%). Among them initially diagnosed as stage I 10%, stage II 34% and stage III 56%. 30% patients had breast conserving treatment (BCT) and 70% had mastectomy; all of them received adjuvant chemotherapy and 95% received adjuvant locoregional radiation. 92% patients received adjuvant hormone therapy. Regarding the subtypes of recurrent cases luminal A was 57%, luminal B 21%, HER-2 13% and basal 9%. Conclusion: Overall 22% metastases were low for luminal A but variable in other subtypes. This result may help to counsel the patients regarding the outcome.

Abstract Id: YUGP2760
Dna Hypomethylation-Mediated Activation Of Cancer-Testis/ Germline Antigen Pote Is Associated With Disease Progression In Human Epithelial Ovarian Cancer
Presenter - Dr. Ashok Sharma
Co-author - David Klinkeb1, Lalit Kumar, Sandeep Mathur

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Abstract Id: YUGP27266
Identification Of Tumor Suppressor Micrornas And Their Roles In Oral Squamous Cell Carcinoma
Presenter- Ms. KRITIKA SINGH
Co-author - Nivedita Singh, Dhanashree Anil More, Pankhuri Kaushik

MicroRNAs (miRNAs) constitute a large family of endogenous, small non-coding single-stranded RNAs that mediate post-transcriptional gene silencing. They range in size from 19-25 nucleotides. Recent studies have demonstrated deregulation of miRNA expression and the role of miRNAs in the multi-step processes of tumorigenesis. Tumor-specific down-regulation of subsets of miRNAs has generally been observed in various types of cancer, suggesting that some of these miRNAs act as tumor suppressors. Since the down-regulation of many tumour suppressor genes is due to methylation of CpG islands located in the promoter, we have hypothesized that the same mechanism could also play an important role in silencing/down-regulation of tumor suppressor miRNAs in oral squamous cell carcinoma (OSCC). In order to identify miRNAs down-regulated/silenced in OSCC (oral cancer), cells from an OSCC cell line SCC131 were treated with 5-Azacytidine, a global DNA methyltransferase inhibitor, for 5 days. Cells treated with DMSO served as a control. cDNAs from treated and DMSO (vehicle) treated cells were then challenged separately on Agilent microRNA microarrays, where each microarray contains 2,551 microRNAs. By taking stringent selection criterion of a fold change of more than 0.6 in the individual test samples and mean fold expression of more than 0.8, 50 miRNAs were found to be upregulated in 5-Azacytidine treated cells as compared to the vehicle control. Microarray data have been further validated by examining the upregulation of randomly selected 8/50 miRNAs by qRT-PCR. As expected, all the miRNAs showed upregulation. Since tumor suppressor microRNAs are expected to reduce cell proliferation, we assessed the effect of 8/12 miRNAs on cell proliferation by the BrdU assay. As expected, all miRNAs examined reduced cell proliferation, supporting that they function as tumor suppressors. Further work is in progress to identify their gene targets and assess their putative roles in oral cancer. Financially supported by UGC, CSIR, DBT and DST, New Delhi.

Abstract Id: YUGP2776
Sialic Acid, Glucose And Total Protein In The Tumor Vicinity Fluid In Oral Cancer Patients
Presenter- Ms. Sayeda Mussavaira
Co-author - Bindhu O S,

Oral squamous cell carcinoma (OSCC) is one of the most prevalent cancers in India, with incidence increasing at an alarming rate. There is a need for research towards identification of additional markers for diagnosis and disease management in an easily accessible medium. Sialic acid is a cell surface molecule involved in several cellular functions and known to be associated with malignant phenotype. In this study, sialic levels of sialic acid, glucose and total protein in OSCC patients (n=21) has been compared with that of gender-age matched healthy controls (n=12). Fasting saliva samples were collected by expectoration method, centrifuged and freeze stored at ?80°C till analysis. Sialic acid, glucose and total protein were estimated by the Ehrlich method, GOD-POD method and Biuret method respectively. Obtained observations were statistically analysed using SPSS software. Increased salivary levels of sialic acid, glucose and total protein were observed in OSCC patients. Mean sialic acid, glucose and total protein concentrations in patient saliva samples were found to be 75.767 Â± 25.8 mg/dl, 12.203 Â± 4.1 mg/dl and 1.5736 Â± 0.5 mg/dl respectively. In healthy saliva samples mean concentration of sialic acid, glucose and total protein were 4.5 Â± 1.8 mg/dl, 1.76 Â± 0.43 mg/dl and 0.27 mg/dl respectively. Correlation studies were also performed to study the relation between the parameters.

Abstract Id: YUGP2778
Colonic Carcinoma Presenting With Axillary Lymphadenopathy- An Exceedingly Rare Clinical Entity.
Presenter- Dr. PRANABANDHU DAS
Co-author - Dr R.Ramesh Reddy, Dr B. Manilal, Dr A.Y Lakshmi

The most common sites of colon cancer metastasis are regional lymph nodes, liver and lungs. Axillary lymph node metastasis from
colon cancer is an extremely rare clinical event being encountered in oncology practice. This scarcity of reports in English literature is therefore poses challenges in understanding its pathogenesis and thus hinders in implementation of appropriate management. We present here a case of right sided colon carcinoma in a middle aged male patient presented with three months history of loose motion, weakness with dyspnea on exertion, left sided neck and axillary swelling and tightness which was painless. FNAC from axillary swelling showed metastatic adenocarcinomatous deposits that prompted us to search for a possible primary from Lung, GIT, thyroid. Ultrasonography and later colonoscopy guided biopsy revealed signet ring type adenocarcinoma of colon. Patient underwent palliative hemicolectomy and was offered 12 cycles of palliative chemotherapy. Follow up 18FDG PET-CT (18 fluoro deoxy glucose positron emission tomography) scan of whole body revealed no metabolically active disease in primary operated site. Low grade metabolically active left axillary lymphadenopathy. He was treated later with palliative radiotherapy to the painful left axillary and supraclavicular swelling. He had achieved symptomatic relief from pain and tightness after radiotherapy and advised supportive and symptomatic care at home and died two months after discharge at home. We therefore advocate the screening and early detection of these age group of population who are vulnerable and symptomatic with all possible modalities of investigations to prevent the disease to progress to a stage having a dismal prognosis.

Abstract Id: YUGP2782
Information Guided Surgery â€“ Multimodal Surgical Strategy For Resection Of Gliomas
Presenter - Prof. Aliasgar Moiyadi

Background: It is now proven beyond doubt that the extent of resection is an important prognostic factor for low grade as well as malignant gliomas. Advances in intraoperative imaging and monitoring technology have equipped neurosurgeons with the necessary tools for optimizing resections. Judicious use of multiple such adjuncts can provide the best outcomes to these commonly encountered tumors. Methods: We reviewed our experience at the Tata Memorial Centre, Mumbai where more than 500 gliomas have been operated over the last 5 years. Intraoperative navigated three-dimensional ultrasound (3DUS), tumor fluorescence-guided resection and functional brain mapping/monitoring were used in these cases in varying combinations. We reviewed the results for each modality and discuss the pros and cons. Results: Navigated 3DUS was the most widely used modality. Its use helped improve the extent of resection in malignant gliomas and thereby prolong survival especially in glioblastoma. ALA-induced fluorescence was used for tumor resection of malignant contrast-enhancing gliomas. It was safe and very reliable in predicting solid tumor. However, it also revealed intra-tumor heterogeneity and hence must be used in conjunction with other modalities. The extended resections achieved did not compromise the neurological outcomes which remain a function of eloquent location. Use of functional brain mapping and monitoring is imperative and can improve the radicality in near-eloquent locations. Conclusions: Use of a multimodal strategy best achieves optimal resections with minimal morbidity and should be implemented routinely in glioma surgery.

Abstract Id: YUGP2784
Salvage Surgery In Head And Neck Squamous Cell Carcinoma- Our Experience At A Tertiary Care Hospital
Presenter - Dr. Deeksha Thakur
Co-author - Dr Satish Nair, Dr Ajith Nilakantan, Dr Atul Gupta

Aim: A study to evaluate the factors affecting survival after surgical salvage in head and neck squamous cell carcinoma(HNSCC) Methodology: The study was conducted at a tertiary care cancer center from January 2010 to December 2012. A retrospective chart analysis was carried out of patients with HNSCC who underwent definitive or adjuvant Radiotherapy with or without chemotherapy as initial treatment. Patients with recurrent or residual disease who were found fit for surgery underwent surgical salvage. The various factors related to patient, disease and treatment were analyzed for their effect on result of salvage surgery. Results: 153 patients of HNSCC underwent treatment out of which, 69 patients developed recurrence. 52 patients were found fit for salvage surgery while 13 patients were either not fit for surgery or had distant metastasis. 52 cases underwent salvage surgery of which 13 (25%) were oropharynx, 13 (25%) larynx, 11 (21.1%) oral cavity, 8 (15.3%) hypopharynx and 7 (13.4%) of nasopharyngeal carcinoma. 11 patients (21.2%) had local recurrence, 27 patients (51.9%) had regional recurrence and 14 (26.9%) had locoregional recurrence. Salvage surgeries performed were wide local excision in 6, total laryngectomy in 9, total laryngectomy and partial pharyngectomy in 3 and partial laryngectomy in 7 for local disease and 21 RND/MRND and 20 extended RND for regional disease. On two year follow up, out of 52 patients, 18 died (mortality 34.7%) 13 deaths (25%) were due to disease and 5 (9.7%) due to medical causes, 3 (5.7%) were on palliation. Overall survival was 65.4% while disease free survival was 59.6%. Improved survival was seen in laryngeal cancers (75.2%) and in early stage cancers (stage I 85.1% and stage II 68.2%) while it was seen to be low in oropharyngeal cancers (39.7%) and late stage disease (stage III 37.9% and stage IV 12.5%). 16 patients (30.7%) developed recurrence after salvage surgery. Most common site of recurrence was oropharynx (2 patients: 28.5%) and least common was larynx (3 patients: 23.1%). Time of recurrence after initial treatment was more than one year in 77.9%, 6 months to 1 year in 39.2% and less than 6 months in 25.1% (p<0.5). Conclusion: Salvage Surgery in selected cases improves survival in recurrent HNSCC. Stage, Site of recurrence and Disease free interval after initial treatment have an impact on survival.

Abstract Id: YUGP2786
Reasons For Low Quality Of Life In Cancer Patient Population From South Indian Tertiary Cancer Center: A Prospective Observational Study
Presenter - Prof. RAO ALAPATI
Co-author - , ,

Quality of life of cancer patients have become a critical evaluation parameter in the clinical cancer research and treatment evaluation programs Over the last decade,. This study was carried out in a 1300 bed tertiary care teaching hospital, MGM Hospital, located at Warangal, India. Present study assessed the overall quality of life, symptoms of patients affected by breast, head and neck, cervical and stomach cancers by using guidelines and modules of The European Organization for Research and Treatment of Cancer. The assessment was carried out in two phases, as review I at ?2 cycles and review II at ?5 cycles of treatment. Data were analyzed for 106 individuals with the mean age of 46.2±11.3 years. The evaluation was characterized as functional scale and symptom scale. In the functional scale physical, and role functions were significant (P

Abstract Id: YUGP2792
Impact Of Bladder Volume In Image Guided Â€“ Volume Based Intracavitary Brachytherapy Of The Cervix Cancer
Presenter - Dr. Melvin Lal
Co-author - Dr. Sanjeeet Kumar Mandal, Dr. Geeta S.N, Mr. Suresh Babu

Need of the study Brachytherapy remains an integral part in the management of cervical cancer. Various degrees of bladder distension can be used to alter the position of cervix tumor and spare organs at risk (OARs) to achieve better tumor control. Objectives To evaluate the optimal bladder volume by comparing various parameters of tumor target and OARs in computer tomography (CT) image volume

Abstract Id: YUGP2794
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- based brachytherapy for cervical cancer. Materials and Methods A prospective study of 10 consecutive patients treated with definitive radio-chemotherapy for biopsy proven cervical carcinoma from May-Jun 2016 was conducted at Vyddehi Institute of Medical Sciences, Bengaluru. After brachytherapy procedure, the first CT simulation was done with no bladder filling (B1) and next subsequent three CT simulation were done with 50ml (B2),100ml (B3) and 200ml (B4) of 1:10 iohexol â€” normal saline. T2-MRI simulation with brachytherapy applicators in situ and no bladder filling to maintain uniform delineation of HRCTV amongst the four arms. The HRCTV, bladder, rectum, sigmoid and bowel bag were delineated on CT images, based on GEC-ESTRO I and RTOG guidelines. The DVH plans of B1, B2, B3 and B4 of each patient were evaluated using non parametric Wilcoxon signed rank test (SPSSv20 software). Results The mean HRCTV volume was 35.2cc. The 200ml bladder filling showed about 3-4 times expansion than no filling in superior and anterior direction. The percentage of mean dose for B1, B2, B3, B4 for HRCTV were 104, 102, 100 & 97; for bladder were 70, 75, 75 & 90; for rectum were 62, 62, 65 & 65; sigmoid were 60, 60, 60, & 60 and bowel bag were 65, 50, 50 & 12 respectively. Conclusion No bladder filling protocol during image guided - volume based brachytherapy is advised in the management of carcinoma cervix.

Abstract Id: YUGP2810

Cervical Esophago-Gastric Anastomosis After Esophagectomy, Using Linear Cutter Stapler In Esophageal Cancer.

Presenter- *Dr. Shashikant Saini*

Co-author - Dr. Parth Patel, Dr. Mishal Shah, Dr. Sanjeev Patni

Abstract- Background: Anastomosis in Gastrointestinal surgery is a very commonly performed procedure , since the era of Sushruta, various methods of intestinal anastomosis were followed- recent advancement is the use of stapler as a device for GI anastomosis. Because of the use of staplers technical failures is a rarity, anastomosis is more consistent, and can be used at difficult locations. Materials and Methods: Clinical Data: Between 2008 and August 2016, 75 patients with esophageal or gastroesophageal junction carcinoma underwent curative intent resection with linear stapler anastomosis in our department. The diagnosis was established by endoscopic biopsies with documented carcinoma as histological evidence. Other preoperative workup included physical examination, laboratory tests, chest & abdomen computed tomography, and pulmonary function test. All patients with thoracic esophageal carcinoma and gastroesophageal junction cancer underwent esophagectomy and lymphadenectomy either via a right posterolateral thoracotomy (TTT) or transhiatal esophagectomy (THE) or video assisted thoracoscopic surgery (VATS). A gastric tube of 4–5 cm in diameter was created by means of a 75-mm linear cutter stapler & placed through the posterior mediastinum until 5 to 6 cm of gastric fundus rests above the level of the clavicles. The lie of the conduit confirmed. There must be some redundancy in the length of the cervical esophagus as the anastomosis is constructed. Anastomosis technique: This technique is a modification of the original side-to-side anastomosis technique described by Collard JM et al(13). The main surgical steps are as following: 1) Approximately 2 cm gastrostomy done at tip of stomach tube. 2) 2 stay sutures applied between posterior walls of cervical esophagus & posterior wall of conduit at a distance of about 1.5 to 2.0 cm. It is important to achieve alignment of the posterior wall of the cervical esophagus and the posterior wall of the conduit as the staple cartridge is advanced completely into the esophagus and stomach. 55/75-mm linear cutter stapler fired vertically to this party wall. 3) The stapler is fired by advancing the knife assembly for approximately 4 cm length and as the posterior walls of the esophagus and stomach are cut, a common lumen is created. After removing the stapler, the staple line is inspected for any bleeding. 4) 6-7 stay sutures taken between anterior walls of oesophagus & conduit. 5) 55/75-mm linear cutter stapler fired horizontally as shown in figure. At the time of firing the stapler one should always make sure that Ryleâ€™s is not coming in staple line. A feeding tube was placed in the jejunum for early postoperative enteral nutrition support. Results: We have performed this anastomosis technique for 75 esophageal cancer patients. We are following these patients, and the longest follow up time is about 84 months and the average follow up is about 9 months.63 patients were of Squamous cell carcinoma & 12 were of Adenocarcinoma histology.16 patients had received neoadjuvant chemotherapy 2 or 3 cycles & 3 patients had received neoadjuvant chemotherapy & radiotherapy both. 22 patients received either adjuvant chemotherapy or radiotherapy or both depending upon their final histopathological report. There was no peri-operative mortality. The anastomatic leakage was observed. One in 5th POD, second in 9th POD & third on 12th POD. The leakage was diagnosed by contrast swallow radiography & salivary content in neck drain. All 3 patients were treated conservatively. On follow up, 2 patients, presented with difficulty in swallowing and on UGI scopy they were found to have anastomotic site stricture. Chylothorax occurred in 2 patients, one required transthoracic ligation of the injured thoracic duct on 6th POD & other patient was managed conservatively. In one patient who has persistent air leak in ICD had undergone thoracotomy and repair of pulmono-pleural fistula with staples. One patient developed feeding jejunostomy site small bowel intussusceptions after one month of surgery, which was managed by exploratory laprotomy. The loco-regional recurrence and distant metastasis on follow up were seen in 7 & 9 patients respectively. Discussion: To begin with gastroesophageal anastomosis were all hand sewn, eventually giving way to the stapled anastomosis. The disadvantage of the hand-sewn anastomosis was that it requires a long operating time and a higher level of expertise(18). With the development of mechanical stapling devices, digestive anastomosis has become far more efficient. These instruments are simple to use and have contributed to making anastomosis more routine, reproducible, and faster, decreasing the time of intervention. As well, these devices are invaluable for performing anastomosis in restricted spaces. After the popularization of stapled anastomosis, now the hand-sewn approach is only used in incidences of a misfired stapler, technically difficult to use stapler due to anastomotic considerations, or if there is not enough gastric conduit to overlap the stapled anastomosis sufficiently(10).The stapled anastomosis has the advantages of reducing the operation time and validity of anastomosis, especially anastomosis at the apex of thorax because of poor exposure for hand-sewn anastomosis. However, some non-randomized comparison of hand-sewn and stapled esophagogastric anastomosis suggested a higher stricture rate when the stapled technique was used(19-20). The reasons why stricture rate was more common with the stapled method may include: (i) lacking of accurate mucosa-to-mucosa apposition when doing anastomosis; (ii) tissue necrosis beyond the stapled line, inflammation, and delayed epithelialisation may then predispose to excessive fibrosis and stricture formation; (iii) the circumferentially placed unabsorbable metal staples do not allow the lumen to dilate beyond the size obtained originally. Moreover, the stapled anastomotic technique has other shortcomings, such as circular stapler anastomosis in the neck is not convenient and has proven to be awkward for construction of a cervical esophageal anastomosis, and the balloon used to dilate postoperative anastomotic stricture was easily torn by metal staples, resulting in dilatation failure(21). Some series have compared mechanical esophagogastric anastomoses with manual anastomoses. Beittler and Urschel (20) compared manual anastomoses with mechanical anastomoses in a meta-analysis and found that the risks for anastomotic leakage were comparable, but that mechanical esophagogastric anastomosis caused more stenoses than did manual anastomosis. An esophageal anastomotic leak is among the leading causes of perioperative morbidity and mortality after an esophagectomy. In 1984, Steichen(22)reviewed the varieties of stapled esophageal anastomoses available at the time. He suggested use of a GIA stapler for an end to-side anastomosis either of stapled esophageal anastomoses available at the time. He
privileges of reducing the incidence of leaks and stenosis. Orringer et al. performed a side-to-side stapled cervical esophageogastrotomy in 114 patients with esophageal carcinoma, the rate of anastomotic leakage was 2.7%, and the rate of anastomotic stricture was 12%; in our study anastomosis leak occurred in 3 patients out of 75 patients (4%) & anastomosis stricture in 2 patients out of 75 patients (2.6%). Collard and associates(13) have described a side-to-side staple technique for construction of the CEGA by using the smaller and easier to use Endo-GIA stapler in 16 patients. Their cervical anastomosis was performed at the tip of the mobilized stomach and in effect creates a functional end-to-end esophagogastric conduit. It is believed that subsequent gastroesophageal reflux is minimized if the end of the cervical esophagus is anastomosed to the gastric wall in the neck several centimeters below the tip of the stomach as an end-to-side anastomosis(5). The described anastomosis technique using linear staples has clear advantage over both manual anastomosis & the circular EEAs stapler anastomosis, which has not proved to be readily adaptable to a cervical anastomosis. It is simpler and requires no oral or retrograde gastric insertion of the instrument. Stapler across the gastric and esophageal walls placed side by side, so as to create a V-shaped opening between the two lumina provide at least 3-cm long anastomosis which is less likely to get stricture and more likely to provide comfortable swallowing. The final anterior closure of the anastomotic site is hand sewn in technique described by Collard JM et al(13), in this technique we have done it by modifying the technique by a transverse firing of linear cutter stapler. Conclusion: The linear stapled esophageagastrotomy is a safe and effective anastomotic technique, which can decrease the rate of leak, postoperative dysphagia and anastomotic stricture. The procedure deserves more attention and further application.

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Patterns Of Care In Long Term Survivors (>3 Years) In Metastatic Nsclc An 30 Depth Analysis Of 30 Patients From A Single Institute. Presenter- Prof. Indibor Yengehokh

Co-author - Prof. Y. Indibor Singh, Dr. Sonia Hage,

Background: Long term survivors (>3years) in advanced NSCLC is steadily increasing from 5 % to 15 - 20%, Advanced lung cancer is becoming a chronic manageable disease. It is related with more effective treatment given in an individualised manner due to better understanding of the tumour biology. Many factors are also associated with the improved outcome apart from improved treatment modalities. Our Institute data’s data of >3 years survivors during last 5 years is analysed in an attempt to find out the favourable factors. Objective: To find out the pattern of care given and clinical profile of long term survivors (>3 years) in stage IV NSCLC. Method and materials: Data mining of Stage IV non small cell lung cancers treated at RCC, RIMS, during 2012 to 2016 are carried out from the departmental record files. Only patients diagnosed and treated at RIMS who have survived more than 3 years are included . Patient lost to FU are contacted on phone for censoring. Patient characteristics, tobacco uses, disease profile, treatment pattern, response and OS are analysed by using IBM corps SPSS version 21. Results: Out of 196 records retrievable Stage IV patients 160 patients were evaluable. Of these 30 (19%) patients survived more than 3 years and analysed. The analysis showed Male: Female ratio 2:3, mean age 66 years (range 32 to 82 yrs) . Histologically, Squamous cell Ca. 9 (30%) Adeno Ca. 21 (65%) and undifferentiated ( 5%). KPS ranges from 50% to 90% and almost half of the cases are above 70% KPS. Treatment given: 25 (84%) received combo Chemo + RT to primary and metastatic sites and targeted agents when indicated as switched over or maintenance therapy with curative intent. And 5(16%) received palliative intent chemo (single agent) sequentially + RT short course and targeted agents when indicated or as maintenance. The median survival of this cohort of 30 patients is 42 months ( K.P. Meiers plot). There is no significance of survival between treatment of palliative intent and curative intent( log Rank (Mantel-cox) .525 chi-sq. Value df 1

Abstract Id: YUGP2812
Abstract Id: YUGP2814
Aggressive Angiomyxoma Of The Vulva: With Metastasis To Regional Lymph Nodes
Presenter- *Dr. Mishal Shah
Co-author - mishal shah, atul bharambhe, bharat mishra

Background: Aggressive angiomyxoma is a rare, slow growing, soft and benign mesenchymal tumor that predominantly affects perineum of women in reproductive age of group. It develops from myxoid cells of connective tissue. It is locally infiltrating and has a high risk of local recurrence. It can be mistaken both clinically and on microscopy for several other conditions such as myxoma, myxoid liposarcoma, myxoid variant of malignant fibrous histocytoma and other soft tissue tumors with secondary myxoid changes. Case report: We herein describe a case of 30 year old female with a history of a mass on left side of vulva and burning pain during micturition since 6 months. On examination there was a 4.3*2 cm polyoidal mass in left vulva and a palpable left inguinal lymph node of 1x 1 cm. She had past history of similar swelling on left side of vulva for which she was operated 2 years back and diagnosed as aggressive angiomyxoma on histopathology report. No further treatment was taken then. At present on CT scan abdomen and pelvis, there was approximately 3.4x 1.7 x 1.6 cm sized heterogeneously enhancing soft tissue density lesion involving left vulva and left inguinal lymphadenopathy. The patient underwent wide local excision with more than 1 cm margins and left inguinal node dissection. Histopathologically, the tumor was composed of elongated spindle and stellate-shaped cells embedded in myxoid stroma and thin to thick walled vascular channels with perivascular clustering of plump epithelial cells. The tumor was immunoreactive to vimentin, progesterone and focally to estrogen receptors, but negative for CK, LCA, CD34, Desmin and SMA and diagnosed as an aggressive angiomyxoma. Two lymph nodes out of 15 had metastasis without perinodal extension. Patient then underwent post operative adjuvant radiation and is doing well. Conclusion: Aggressive angiomyxoma of the vulva must be distinguished from benign myxoid tumors with a low risk of local recurrence as well as from malignant myxoid neoplasms. It needs to be treated with wide local excision and regional lymph node dissection even though the possibility of lymph node involvement is not documented in literature.

Abstract Id: YUGP2818
Predictive Factors For Locoregional Control And Survival For Recurrent And Second Primary Head And Neck Squamous Cell Carcinoma Treated With Curative Intent
Presenter- *Dr. Parveen Ahlawat
Co-author - Munish Gairola, Anjali jakria, Archana Mayank

BACKGROUND: Locoregional recurrence is the most common form of failure after treatment in head and neck cancers (HNC). Approximately 20% patients are found to have resectable disease, rest are treated with reirradiation (Re-RT), palliative chemotherapy/target therapy or best supportive care. MATERIALS AND METHODS: It was a retrospective analysis of 62 consecutive patients with recurrent or second primary (SP) HNC, treated with curative intent either with surgery with or without adjuvant Re-RT for resectable disease or radical Re-RT with or without concurrent chemotherapy for unresectable disease. RESULTS: Patients were assessed for acute and late toxicities, response evaluation at 3 months post Re-RT, and locoregional control (LRC) and overall survival (OS). The median LRC was 12.6 months, and at 2 and 5 years the LRC rates were 42.2% and 22.1%, respectively. A multivariate analysis revealed three factors: a disease free interval of minimum 2 years, initial surgical resection performed prior to Re-RT, and achievement of complete response at 3 months after completion of Re-RT to be significantly associated with a better median LRC. The median OS was 27.3 months, and at 1, 2, and 5 years, OS were 69.4%, 54.4%, and 19% respectively. A multivariate analysis revealed initial surgical resection performed prior to Re-RT, and achievement of CR at 3 months post completion of Re-RT being only two factors significantly associated with a better median OS. Acute toxicity reports showed that no patients developed grade 5 toxicity, and 4 patients developed grade 4 acute toxicities. CONCLUSION: Treatment outcomes of recurrent/SP HNC have improved. Initial surgical resection is preferred and is the most significant predictive factors for LRC and OS. For those with unresectable disease, Re-RT has emerged as the treatment modality of choice with curative intent and is feasible and effective, with acceptable toxicity. However, appropriate patient selection criteria are very important in determining survival and treatment outcomes.

Abstract Id: YUGP2822
Assessment Of Acute Gastro-Intestinal And Genito-Urinary Toxicities In The Cervical Cancer Patients Using Cobalt-60 Based High Dose Rate Intra Cavitary Brachytherapy
Presenter- *Dr. VIKRAM SINGH RAJPUROHIT
Co-author - . .

Introduction: Cobalt-60 (Co-60) HDR source was available but unpopular because of its bigger source size compare to Ir-192. It is now possible to produce miniaturized size of Cobalt-60 radionuclide for HDR applications. This has been also shown to have identical geometric and dosimetric properties with Ir-192. The advantages of Co-60 over Ir-192 are its longer half life of 5.2 years compared with 73.8 days for Ir-192. This shows that instead of changing the Ir-192 source every 3-4 months, Co-60 source can be changed every 6-8 years which is a more economical and attractive for low resource settings. Objectives: 1. Primary ; to prospective study of acute gastrointestinal and genitourinary toxicities associated with Co-60 source in HDR ICRT of cervical cancer patients. 2. Secondary; to compare acute gastrointestinal and genitourinary toxicities associated with Co-60 source V/s Ir-192 based HDR ICRT. Materials and methods: Total 65 patients of carcinoma cervix were enrolled in this study in between May 2016 to September 2016. External beam radiotherapy (EBRT) of dose 45-50 Gy in 25 fractions @ 180-200cGy per fraction delivered over 5 days per week using teletherapy Cobalt 60 machine. ICRT was started after one week of completion of EBRT. Fletcher suite applicators were used for brachytherapy in all patients. Total 3 sessions of ICRT, 7Gy each, were delivered 72 hours apart. The acute gastro-intestinal (GI) and acute genito-urinary (GU) toxicities were assessed using Common Terminology Criteria for Adverse Events version 4.03 (CTCAE). The only highest grade of particular GU and GI toxicity was used for final analysis of this study. All patients were kept in follow up for total 3 months in this study Results: Different study of acute toxicity in HDR brachytherapy Ir-192 based and our study Co-60 based ? grade-III complication almost same. comparision of acute toxicity ? grade-II different Ir-192 based study and our study and its acceptable. Conclusion: The acute gastrointestinal and genitourinary toxicities of high-dose-rate intracavitary brachytherapy using Co-60 radionuclide source is low and comparable with Iridium-192. Additionally, Cobalt 60 has economic advantage over Ir-192. Thus, it is more suitable for low economic resource settings.
Abstract Id: YUGP2828
Comparison Of Various Modalities Of Axillary Assessment In Post-Neoadjuvant Chemotherapy Patients Of Locally Advanced Breast Cancer: A Tertiary Centre Study Of 185 Patients.
Presenter - Dr. Ghanish Panjwani
Co-author - B.B. Pandey,

Introduction Axillary lymph node dissection is considered to be the gold standard tool for staging of axilla in patients with breast cancer. The prime drawback of ALND is the morbidity associated with the procedure. Sentinel lymph node biopsy was introduced to reduce the complication rate while maintaining the sensitivity of ALND. Ultrasonography and fine needle aspiration cytology are also being considered as alternative, less invasive methods of axillary assessment. But only limited data is available in context of LABC patients. Method As a prospective study, a total of 185 patients presenting with LABC were assessed from April 2014 to May 2016. All patients were subjected to pre and post NACT USG and guided FNAC. Those found to be N0 were subjected to SLNB using methylene blue dye alone. Patients who were N+ on USG guided FNAC after NACT were directly planned for ALND. ALND was then performed in all patients and final hist-pathology of ALND being considered the gold standard. Results Of the total 185 patients included, 42.39% women were pre menopausal with mean age of patients being 46 years, median tumor size was 8 cm, T4 disease was found in 68.47% with N2 disease in 39.67% and N1 in 58.61%. The sensitivity and specificity of clinical axillary examination was 52.06% and 76.19% respectively which was enhanced to 89.25% sensitivity and 63.49% specificity when combined with USG. When USG guided FNAC was used, the sensitivity of the procedure was 72.22% and specificity was 100%. The sensitivity of sentinel LN biopsy was 87.50% and specificity was 100%. Conclusion USG and USG guided FNAC are useful techniques in enhancing the accuracy of clinical examination in post-NACT LABC patients. But the highest sensitivity and specificity was found for sentinel LN biopsy which not only shows better accuracy but also prevents the morbidities associated with a complete ALND providing a better quality of life to our patients.

Abstract Id: YUGP2830
Sub Mental Flaps For Reconstruction After Surgery For Early Buccal Mucosal Cancers In Women
Presenter - Dr. Satish C
Co-author - Dr Satish C, Dr Aravind Kapali, Dr Harish K

INTRODUCTION: Submental flap is a simple, pedicled, local island flap which can be used for reconstruction of defects in the buccal mucosa safely and easily, not requiring complex microvascular technique. The present study aims to assess the usefulness of submental flap in oral reconstruction after ablative surgery for buccal mucosal cancer with respect to flap reliability, aesthetics, function, donor site morbidity and oncological safety. METHODS: Ten women with clinically node negative buccal mucosal squamous cancer who underwent ablative surgery were reconstructed using submental island flap at MS Ramaiah Hospital, Bangalore, between December 2015 and December 2016, were prospectively studied for flap viability, aesthetics, function(speech and swallowing) and locoregional recurrence. The site and stage of tumour, type of resection, management of neck were recorded. RESULTS: Of 10 patients, ages ranged from 35 to 65 years median age being 50.3 yrs. All patients underwent flap having followed by neck dissection followed by wide local excision +/- marginal/segmental mandibulectomy. No patients had flap loss or flap failure. The followup period ranged from 6 months to 20 months. Only 1 patient had recurrence which was managed by re-surgery and radiation. Donor site healing was good, and scar was well hidden. 7 patients with close margins or node positivity on histopathology underwent Adjuvant Radiotherapy. CONCLUSION: Long term aesthetics and functional results(speech and swallowing) were good with an acceptable oncological safety.
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Mean OAR dose were maximally decreased without reducing PTV coverage or violating hotspot constraint. The treatment plans were evaluated using standard dose volume histogram. The median follow-up of the patients was 13 months. The local control, overall survival and progression free survival were evaluated. Response was recorded using the Response Assessment in Neuro-Oncology criteria and toxicities graded according to CTCAE version 4.0. The dosimetric parameters were assessed using unpaired t test and the Wilcoxon matched-pair signed-rank test for non-parametrically distributed data used to compare the means. Maximum and mean OAR doses were directly used as part of the optimization process and, along with MU and timing, were considered as primary endpoints. Results: All three techniques achieved an adequate dose conformity to the target volume. The conformity and Homogeneity index were found to be better with IMRT and VMAT (p < 0.005). The monitor units (MU) and treatment times were better with VMAT (p < 0.01). The doses to brainstem, optic nerve, retina, lens and normal brain parenchyma were found to be significantly better with VMAT. The median overall survival with VMAT, IMRT and 3DCRT were 16, 13 and 10 months respectively. The 1 year and 2 year PFS were 72 and 27%, 55 and 21%, 46 and 13% respectively in the three treatment techniques (p < 0.001). The toxicities assessed were similar in both IMRT and VMAT. The prognostic factors found to be influencing the treatment outcomes included age, gender, grade of tumor and Karnofsky performance status (KPS) of the patient. Conclusion: The treatment outcomes in the form of overall survival and toxicities are found to be better with VMAT and also to spare the normal brain parenchyma and structures at risk. With modern treatment techniques available to permit better tumor dose conformity and spare normal tissue, outcomes of the disease can be achieved in desirable manners. VMAT is an excellent technique for treatment of high grade gliomas and needs to be looked in to in future large prospective trials.

Abstract Id: YUGP2840
Hdr Interstitial Brachytherapy In Recurrent Head And Neck Cancer: An Effective Treatment Modality - A Single Institute Experience
Presenter - Dr. Vibhav Pareek
Co-author - Dr. Rajendra Bhalavat, Dr. Manish Chandra,

Abstract Objective: High Dose Rate (HDR) Interstitial Brachytherapy has an established role in head and neck malignancies and offers good survival rates, however, there are scant data on improved local control (LC) and treatment-related complications in patients with recurrent head and neck (H&N) cancers. We report our results in patients with recurrent H&N cancers treated with interstitial HDRBT. Methods and materials Twenty patients with recurrent H&N cancers were treated with HDR interstitial brachytherapy between January 2010 and December 2016. Of these, 75% received radical brachytherapy and 25% received external beam radiation therapy (EBRT) followed by brachytherapy boost. The treatment sites were oral cavity (12/20) and oropharynx (8/20). The median dose was 4.5 Gy twice per day with median total dose with brachytherapy of 40.5 Gy in radical and 27 Gy for EBRT cases. The EBRT median total was 46 Gy. HDR Interstitial Brachytherapy was initiated from next day of implant and after removal of the catheters, the patients were followed up as per the institutional protocol and were assessed for survival outcomes and toxicities. Results: With a median follow-up of 18 months, 4 local recurrences were observed within first year of follow up after the procedure. The 2-year local control and overall survival outcomes for the entire group were 58.3% and 83.3%, respectively. The 4-year disease free survival was 50% and distant metastases was seen in 33.3% at 5 years. There were 3 patients with Grade II and 4 with Grade III complications and one patient developed osteoradionecrosis. A median BED of 88 Gy showed improved survival outcomes in these patients. Conclusion: The results of HDR Interstitial brachytherapy have shown an acceptable local control and overall survival rates along with tolerable toxicities and morbidity in recurrent H&N cancers. Based on these encouraging results, prospective clinical trials are warranted using HDR Interstitial Brachytherapy in recurrent H&N cancers to decrease late toxicity. Keywords: HDR brachytherapy, Head and neck cancer, Recurrent tumor

Abstract Id: YUGP2845
A Retrospective Study Of Ovarian Granulosa Cell Tumour
Presenter - Dr. DEENADAYALAN THEIVASIKAMANI
Co-author - Dr.S.Lakshmi Narasimhan, Dr.K.Kalaichelvi, Dr.R.B.Ramkumar

Background: Granulosa cell tumours of ovary are rare sex-cord stromal tumours accounting for 1-2% of all ovarian malignancies, characterized by long natural history and slow growth. The median p follow up was 48 months . Five patients (20%) had recurrence; The average time to relapse was 29.6 months. Patients who had tumour size of more than 9.7 cm had more recurrence events (Hazard Ratio(HR):1.058), but their association is not significant (P value:0.839). The associations between Menopausal state (P value:1.00) ,torsion of tumour mass (P value:0.54) , tumour stage (P value:0.65) with recurrence rate are not significant . The estimated mean overall survival is 84.8 months . Following univariate Cox regression modeling, survival appears to be independent of age range (P value:0.66),post op residual tumour(P value:0.83) and the FIGO stage (P value:0.84). Conclusion: Granulosa cell tumours of ovary are rare, often diagnosed in early stage. In this study population median age was 48 years.84% had Stage Ia disease. The role of chemotherapy is limited, mainly used in locally advanced disease and inoperable metastatic disease. Patients who had tumour size of more than 9.7 cm had more recurrence events. A prolonged post therapeutic follow-up is necessary to pick up the late relapses. Keywords: Granulosa cell tumour, juvenile granulosa cell tumour,recurrence. Metastasis,chemotherapy

Abstract Id: YUGP2847
Ayurvedic Herbs For Chemo-Radiotherapy Induced Side Effects In Cancer Patients
Presenter - Dr. Vimla Kumari
Co-author - Prof.Kamini kaushal, Dr. DEENADAYALAN THEIVASIKAMANI

Background-Ayurveda has its own role in the prevention and management of cancer’s complication. In the ancient time, during the beginning period of Ayurvedic science, Cancer was not an important disease entity, due to its less prevalence. But presently, the situation has thoroughly changed and it is now the major cause of fatality, second only to Cardiac ailments. Chemotherapy drugs and radiotherapy are highly toxic and both damage adjacent healthy...
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Abstract Id: YUGP2851
Evaluatory Report Of A Stoma Care Workshop For Nursing Interns
Presenter- Ms. SERMA SUBATHRA
Co-author - Subathra A.S, Dr. Mishra T.S,

Original article Evaluatory report of a stoma care workshop for nursing interns

Introduction: Enterostomal therapy nurse plays a crucial role in defining the life of ostomy patients. India requires several Ostomy care management centres as many patients are undergoing the trauma of living with external pouches for urine or stool everyday, after lifesaving surgeries. Three lakh ostomates were registered. The College of Nursing & Department of Surgery, AIIMS, Bhubaneswar organised a workshop on stoma care for B.Sc(Nursing) Hons interns students with hands on skill training as a part the event with a pre and post assessment. Objectives: Ostomy workshops help to identify various types of complications of stoma & develop desirable attitude & skill in providing stoma care. Materials & methods: A descriptive evaluatory study on workshop was conducted among 45 nursing interns of AIIMS, Bhubaneswar who were assessed using structured questionnaire. Data were analysed using descriptive & inferential statistics. Results: The results showed that knowledge on ostomy care was assessed through following domains: Knowledge on Urostoma (DM1) with the score of pretest 2±1.09 (Mean±SD) and post test 3.2±1.7 (Mean±SD), knowledge on responsibility of nurses on stoma care (DM2) with the score of pretest 1±0.84 (Mean±SD)&post test 1±1.2 (Mean±SD). Knowledge on types of stoma (DM3) with score of pretest 3.3±1.75 (Mean±SD)&post test 3.8±1.8 (Mean±SD). Knowledge on Intestinal stoma (DM4) with score of pretest 3.5±1.8 (Mean±SD) & post test score 4.6±2.029 (Mean±SD). Knowledge on complication of Stoma (DM5) with score of pretest 1.7±1.27 (Mean±SD)&post test 3.2±1.8 (Mean±SD). Results indicated that pre and post test evaluation score of knowledge on stoma care is 12.3±3.05 (Mean±SD) & 18.28±3.29 (Mean±SD). The paired t-test was used,( t=9.06 p

Abstract Id: YUGP2853
A Retrospective Case Cohort Analysis On The Clinical Utility Of Fosaprepitant For Cinv Prophylaxis In Day Care Centre Of South India
Presenter- Dr. Anita Ramesh

Background: A water-soluble N-phosphoryl derivative of Aprepitant, which is often administered along with 5HT3 antagonist and a steroid in patients with HEC or MEC. The present study was conducted to analysis clinical utility of Fosaprepitant in real world setting of India, amongst patients receiving chemotherapy drugs and regimen. Methodology: Single centric, retrospective, case cohort study was conducted in HCG cancer centre in South India, where patients were prescribed Fosaprepitant as a part of standard therapy were enrolled in the study. Results: Consecutive patient’s record of 301 patients involving Fosaprepitant was available, amongst whom, follow up data of 11 patients were not available, so, 290 patients were included in the analysis. 41.72% (121) patients were male, 58.27 % (169) were females and 36.20% (105) belonged to 51±60 years of age. Advance Breast Carcinoma was the most common diagnosis in 38.96% (113) patients. High emetogenic chemotherapy was prescribed in 222 patients (76.55%), Moderate emetogenic drugs and regimen were prescribed in 62 patients and 6 patients were prescribed low emetogenic drugs. Amongst patients who were prescribed highly and moderately (Carboplatin-paclitaxel, R-CHOP, FOLFOXIRI) emetogenic chemotherapy drugs and regimen, Fosaprepitant, palonosetron and dexamethasone was prescribed on day 1 followed by Dexamethasone on day 2, 3 and 4. None infusion site reaction, Hiccoughs or any other adverse reaction were noted. Complete response was noted in all patients (100%) with HEC and MEC regime cases. The formulation was well tolerated with none reporting any persistent or delayed or breakthrough emesis. Conclusion: Single dose Fosaprepitant used in combination with palonosetron and dexamethasone was well tolerated and effective in preventing chemotherapy induced vomiting in patients receiving highly and moderately emetogenic drugs and regimen.

Abstract Id: YUGP2857
A Comparison Of Intraoperative Frozen Section And Final Histopathology Results For Sentinel Lymph Node Biopsy In Breast Cancer- A Retrospective Study.
Presenter- Dr. Devesh Ballal
Co-author- Dr. Somashekkhar S.P,

Background: Intraoperative assessment of sentinel lymph nodes for patients undergoing surgery for early breast cancer has the potential to reduce the need for delayed axillary lymph node dissection(ALND), significantly reducing patient morbidity, expediting adjuvant therapy, reducing length of hospital stay and cost of hospitalisation. Our study aims to determine the sensitivity of intraoperative frozen section in identifying cancerous involvement of sentinel lymph nodes in early breast cancer. Materials and methods- frozen section and final histopathology reports of 104 consecutive patients undergoing surgery for early breast cancer with sentinel lymph node biopsy between May 2016 and June 2017 were assessed and sensitivity and negative predictive value were analysed. Results- intraoperative frozen section has a sensitivity and specificity of 89.74%(75.78% to 97.13%, p<0.05) and 100% respectively with a negative predictive value of 94.12% (86.34% to 97.59, p?0.05) in identifying metastasis to sentinel node. The sensitivity of frozen section is lowered by its inability to accurately pick up micrometastasis. However, frozen section is highly accurate in picking up macrometastasis with a sensitivity of 100%. Conclusion- intraoperative frozen section, when performed as per CAP guidelines, can identify macrometastasis to sentinel lymph nodes with a very high sensitivity in early breast cancer. Its routine use in early breast cancer can reduce the need for second procedure, in the form of delayed ALND.

Abstract Id: YUGP2861
“A Rare Secondary In The Young Ovaries”
Presenter- Dr. Banu K
Co-author - Dr. L.S Patil, Dr. Gayatri L. Patil,
Abstracts

INTRODUCTION: Acute Lymphoblastic Leukemia is a common childhood cancer of the bone marrow, constitute to about 23-30% of cancers in the age group of 5-15 years. Metastasis to the lung, liver, spleen, lymph nodes, breast, kidney is common while metastasis to the central nervous system occurs in 10-40% and spread to uterus and cervix is extremely rare and involvement is even rarer. Chemotherapy is the main stay for acute lymphoblastic leukemia, prognosis depends on various factors and 98% of the patients go into remission once treatment is initialized and reported five year survival rates being around 69%. We report a rare case of acute lymphoblastic leukemia metastasizing to the ovaries. CASE REPORT: A 12 year old, pubertal girl presented with complaints of pain abdomen, vomiting and swelling over the right jaw and diminution of vision in the left eye for 3 months duration. Relevant findings on clinical examination were mass in the oral cavity measuring 3x2cm, smooth, tender, hard and fixed noted in the right side of the lower jaw. On examination, lower abdomen was distended with a palpable mass of 10x6 cms noted in the suprapubic region extending to the left iliac fossa with ascites. Mass was smooth, cystic and mobile. Relevant investigations were done. Peripheral smear showed pancytopenia with occasional blast cells. Abdominopelvic scan showed bilateral adnexal mass with ascites. B-scan of the left eye revealed retinal detachment. CT scan revealed mild enhancing solid masses arising from bilateral ovaries possibly dysgerminoma with nephrogenic rests in bilateral kidneys. X-ray of the mandible showed metastatic bony lesions. Mandibular lesion biopsy were reported as small round cell tumor of right mandibular premolar region. Chest X ray was normal. Staging laparotomy with bilateral ovariectomy with appendectomy with infracolic-omentalcectomy was done. Ascitic fluid cytology was positive for malignant cells. Histopathology report of the ovarian masses revealed small round cell tumor in both the ovaries. IHC markers like PLAP and LCA were negative. Bone marrow examination was not done. A provisional diagnosis of metastatic Acute Lymphoblastic leukemia was made. She had metastatic lesions to the mandible, neck region, eyes, paraaortic lymph nodes with bilateral ovarian involvement. Posts operative period was uneventful. 3 weeks later she received two cycles of multidrug chemotherapy. On 13.06. 2017, she presented with symptoms of raised intracranial tension and convulsions, then her repeat peripheral smear revealed relapse indicated by 35% blast cells and severe thrombocytopenia. She received symptomatic treatment with antibiotics, anticonvulsants and steroids. She succumbed to the disease on 30.06.2017. DISCUSSION : Complete blood count with peripheral blood smear, bone marrow examination and cytogenetics play an important role in diagnosing Acute lymphoblastic leukemia. Literature reports in leukemia involvement of ovaries is found in upto 30% of patients at autopsy. CONCLUSION : Acute lymphoblastic leukemia is a common cancer of the bone marrow. Metastasis to the ovaries is extremely rare and diagnosis could be confusing and difficult. Early and aggressive initiation of chemotherapy could be life saving in these young patients.

Abstract Id: YUGP2865

Evaluation Of Anticancer Activity Of Justicia Beddomei Leaves On Ehrlichâ€™s Ascitis Carcinoma

Presenter- Dr. Chhavi Saxena
Co-author - Chhavi Saxena, Krupanidhi A.M, Dabadi. P

Evaluation of Anticancer Activity of Justicia beddomei Leaves on Ehrlichâ€™s Ascitis Carcinoma Anand R Hiremath, MPHarma*; Chhavi Saxena, A.M, PhD; Dabadi, P. MPHarma; Dhanav. D MPHarma; Dhavan. P MPHarma. Corresponding Address: *Anand R Hiremath,M Pharma, Regulatory officer III, Regulatory Affairs, Bioplius life sciences limited, Pharmed gardens ITPL, Main Road, Bangalore, Karnataka 560048, India. E mail:- h.anandhiremath@gmail.com; chhavird21@gmail.com Abstract: Objective:The aim of the present study was to isolate the constituents and to compare and investigate the anticancer property of ethanolic and chloroform leaf extracts and isolated constituents of Justicia beddomei (JB) dried leaves against Ehrlich ascites carcinoma (EAC) in Swiss Albino mice. Material and Methods: The powdered leaves of JB was taken separately into three, 5000 ml round bottom flask and extracted with solvents; petroleum ether (60-80oC), chloroform and ethanol respectively in a ratio of 1:6 by successive solvent extraction process through Soxhlet apparatus. Each time before extracting with next solvent the powdered material is dried, filtered, refluxed with all the organic solvents. Each extract was evaporated to dryness in flash evaporator under reduced pressure and controlled temperature. The dried extracts were stored in airtight container in the refrigerator below 10oC. The suspensions of petroleum ether, chloroform, ethanol (95%) and water extracts was prepared using 1% Tween 80, which were further used for the experiments. All the extracts were then subjected to preliminary qualitative test
Abstract Id: YUGP2877

Supraclavicular Flap A Versatile Flap For Head And Neck Defect Reconstruction-Our Experience

Presenter - Prof. SHAJI THOMAS

Co-author - Dr.Deepak Janardhanan, Dr.Veerendra, Dr.Bipin T Varghese

Introduction- This is prospective observational study, analysing outcome of supraclavicular flap reconstruction for defects after head and neck cancer surgery. In the era of free flap, all patients may not be fit for microvascular surgery. Small defect may not warrant free flap reconstruction. Free flap is an expensive affair in a resource limited setup. Experts in microvascular reconstruction are few.Reconstructions with pedicled flap still play a major role.Supraclavicular flap is a novel method of head and neck defect reconstruction. Itâ€™s a fasciocutaneous flap which is thin and pliable. It has advantages like easier and faster method of harvest, doesnâ€™t require microsurgical technique, has wide arc of rotation, has acceptable cosmetic outcome (as colour match is better). Result- We have used supraclavicular flap in total 14 patients involving head and neck oncological surgeries. Four patients had defect following buccal mucosa. Four had lower alveolus surgery. Two patients had undergone extended radical parotidectomy. One had undergone extended submandibular gland excision. One had undergone surgery for lower gingivobuccal sulcus cancer. In two patients supraclavicular flap was used for augmentation following total laryngectomy for closure of the pharyngeal defect. In four patients donor site was closed with help of split thickness skin graft and in rest 10, primary closure was possible. Three patients developed superficial skin desquamation, but recovered later. One patient with lower alveolar surgery had flap loss amounting to 30 percent, who had to undergo revision surgery with pectoralis major myocutaneous flap. Conclusion Supraclavicular flap can be used in most of head and neck defects. Care to be taken to avoid tension in during flap insertion. It can be used as island flap to increase the reach. It is associated with less morbidity and better cosmesis when compared to flaps like pectoralis major myocutaneous flap. It stands a viable option for the ease of doing it and lower procedure cost, replacing free flap.

Abstract Id: YUGP2890

Isolated Testicular Metastasis In Carcinoma Prostate- A Rare Clinical Entity

Presenter - Dr. Sriddhar Dasu

Co-author - Dr Arun Peter Matthew, Dr Sriddhar Dasu,

Solitary metastases to the testis in prostate cancer is a rare entity. We present the case of a 75 year old gentleman who was found to have an incidentally detected metastasis in the right testis following bilateral orchidectomy in a case of locally advanced carcinoma prostate. Retrospective analysis of orchidectomy specimens done for carcinoma prostate at our institute showed only 2 confirmed cases (including the current one) out of a total of 128 cases over a 9 year period (2.56% identification rate) confirming this to be a rare entity. Uncommon variants of Prostate carcinoma such as Duct cell or endometroid types may be associated with increased incidence of testicular metastases. Proper and thorough examination of the external genitalia is mandatory in all cases of prostate carcinoma in order to pick up this rare entity. Asymptomatic testicular metastasis may act as a source of delayed recurrence /failure to androgen deprivation therapy due to the presence of viable tumor cells protected by the blood- testis barrier. Further studies are needed to evaluate this rare clinical condition.

Abstract Id: YUGP2896

Surgery Vs. Radiotherapy In Patients With Uveal Melanoma: Analysis Of The Seer Database Using Propensity Score Matching And Weighting

Presenter - Dr. Ji Hyun Chang

Co-author - Dr. Ji Hyun Chang

Abstract Importance: The treatment modalities for uveal melanoma (UM) include surgery and radiotherapy (RT). The utilization of RT as a strategy for organ preservation has been increasing, but the survival difference between the two treatment modalities has not been reported. Objective: To compare with overall survival between UM patients treated RT alone and those undergoing surgery alone. Design, Setting, and Participants: A observational and cohort study
using propensity score with an already existing public database. Patients diagnosed with UM within the period from 2004 to 2013 were selected from the Surveillance, Epidemiology, and End Results (SEER) database. One-to-one matching and inverse probability of treatment weighting (IPTW) using the propensity score were used to estimate and compare survival rates. Main Outcome Measures: Form of treatment (surgery or radiation), survival rates, and hazard ratio. Results: Overall, 3,291 patients were treated: 2,503 received RT only (RT group), and 788 received surgical resection only (surgery group). The RT group had an improved crude 5-year overall survival (OS) rate compared with the surgery group (76% vs. 60%, P < 0.001), and an improved 5-year melanoma-specific survival (MSS) rate (89% vs. 72%, P < 0.001). Compared to the surgery group, the RT group was associated with improved OS [hazard ratio (HR) 0.51, 95% confidence interval (CI) 0.39-0.66, P < 0.001] and CSS [HR 0.37, 95% CI 0.25-0.54, P < 0.001]. The survival benefit of the RT group maintained after adjustment with IPTW, both in OS and CSS. Conclusions: To our knowledge, the present study was the first to demonstrate the survival difference between the two treatment modalities for UM using both the propensity score matching and weighting methods with the SEER database. The current study suggests that RT may provide a survival advantage over surgery in the treatment of UM.

Abstract Id: YUGP2906

A Pilot Randomized Study Comparing Extralevator With Conventional Abdominoperineal Excision For Low Rectal Cancer After Neoadjuvant Chemoradiation

Presenter- *Prof. Ramakrishnan Seshadri
Co-author - Nicholas P West, Shirley Sundersingh,

Aims: The aims of this study were to assess the feasibility of performing an extralevator abdominoperineal excision (ELAPE) after neoadjuvant chemoradiation, to compare the rates of circumferential resection margin (CRM) involvement, and intra-operative perforation (IOP) of the specimen, and to assess the amount of tissue removed around the muscularis propria (MP)/internal sphincter (IS) of the lower rectum in patients with low rectal cancer undergoing ELAPE as compared to conventional abdominoperineal excision (CAPE) after NCRT. Methods: This was an open-label, parallel arm pilot randomized trial conducted in India. Twenty patients were randomised to one of the study arms. The surgical specimens were fixed, serially cross-sectioned and photographed. Using specialised morphometry software, the amount of tissue resected with each operation was measured. Results: There was a non-significant trend towards more intra-operative perforations (30% vs 0%, p=0.06) and a higher CRM involvement (40% vs 20%, p=0.32) in the CAPE arm. ELAPE removed a significantly greater amount of tissue around the IS/MP when compared to CAPE (1911.39 Å ± 382mm2 vs 1132.03 Å ± 317mm2, SD), p

Abstract Id: YUGP2908

A Retrospective Review Of Thoracic [Pulmonary And Mediastinal] Neuro-Endocrine Tumors

Presenter- Dr. Priya Eshpunyani
Co-author - Dr Ramakant Deshpande, Dr Shravan Shetty, Dr Sanjay Sharma

Introduction: Neuroendocrine tumors arising from Kulchitzky (enterochromaffin) cells may develop throughout the human body with the majority being found in the gastrointestinal tract and bronchopulmonary system. They account for less than 1% of all lung tumors. Primary neuroendocrine tumors of the thymus are unusual tumors that account for less than 5% of all anterior mediastinal neoplasms. Though benign in behaviors in most patients, it is a potentially malignant with an ability to throw distant metastases, at times even after long intervals. They are classified according to the grade of biological aggressiveness (G1â€“G3) and the extent of differentiation (well differentiated/poorly-differentiated). The well-differentiated neoplasms comprise typical (G1) and atypical (G2) carcinoids. The other end of the spectrum is completed by the large cell neuroendocrine carcinomas as well as rapidly spreading small cell carcinomas (G3) which are poorly-differentiated. Rarity of incidence making prospective randomized studies impractical, surgery continues to be the only curative option in the less aggressive tumors with , total radical excision being the therapeutic mode of choice in all recommendations for pulmonary carcinoids as well as thymic carcinoids wherever possible. Aim: A retrospective evaluation of Thoracic [Pulmonary and Mediastinal] Neuroendocrine tumours treated in our institute over a period of 4 years. Materials and Methods: We reviewed the data of all patients with Thoracic tumors from which pulmonary and thymic neuroendocrine tumours operated at our tertiary care referral institution were identified and out of a total 171 lung tumors, a total of 16 patients and out of a total of 23 thymic tumors, a total of 4 patients were operated in our hospital from December 2012 to February 2017 for neuroendocrine tumors. All patients were subjected to CT Scan and Bronchoscopy apart from routine fitness investigations prior to surgery. Elderly patients above 65 yrs with compromised pulmonary function underwent selective ventilation/perfusion function assessment to estimate post-resection lung function and its viability. Results: There were 9 females and 11 males. Age ranging between 25-66 years. Among the pulmonary neuroendocrine tumor (NET) there were 13 central and 3 peripheral tumors. 6 patients required bronchial sleeve resection as compared to 32 sleeve resections out of 171 total resections with evidently higher requirement of sleeve resections in the pulmonary NET group. Median stay in hospital was 7.5 days (Range: 6-15) and median duration of drain was 7 days (Range: 4-14). 7 patients had G1 tumors, 8 patients had G2 tumors and 5 patients had G3 tumors on final histopathology examination. 4 patients received adjuvant chemo-therapy. One patient who metastasized to brain and bone warranted chemotherapy as well as radiation therapy. 3 patients received adjuvant chemo-radiation in view of capsular invasion in thymic carcinoids. 1 patient with cushingâ€™s syndrome, diabetes and renal failure was the only peri-operative mortality in this series within 30 days. 19 patients had an uneventful recovery. Average follow up of these patients has been 2 years. There have been 4 relapses with progression of disease in form of pulmonary, brain or bone metastasis treated with chemotherapy or chemo-radiation. Conclusion: Neuro-endocrine tumors of thorax are rare tumors. The pulmonary neuroendocrine tumors are often well localized, metastatic and do not respond well to chemotherapy , with propensity of requiring challenging sleeve resections. The overall prognosis of pulmonary carcinoids was favourable, and the typical carcinoids presented a better prognosis than the atypical ones. Sleeve resection offers a curative surgery with lung preservation. Thymic neuroendocrine tumors are rare but potentially malignant tumors with feasibility of radical excision followed by adjuvant therapy -this being the treatment modality of choice.

Abstract Id: YUGP2910

Association Study Of Sp1 Gene Mutation And Identification Of Chromosomal Alterations In Ovarian Cancer Patients In Tamil Nadu

Presenter- Dr. Kuman Sivanandan Santhy
Co-author - Mahalaxmi Iyer,

BACKGROUND: Ovarian cancer is one of the most lethal gynaecological cancer, especially among older women. It has been ranked in the sixth position as the common cancer and as the causative agent of cancer death in seventh position among women throughout the world. The first eukaryotic trans- activator identified with multiple functions is the Sp1 protein. Association between Sp1 expressions in ovarian cancer can be provided by using genetic linkage studies which provides the exact genomic regions or even specific genes involved in the disease. According to earlier studies it is been proved that Sp1 plays a vital role in DNA binding protein
and is been seriously involved in ovarian cancer. OBJECTIVE: The aim of the present study is to delineate the role of Sp1 gene expression by molecular as well as cytogenetic techniques in ovarian cancer patients in Tamil Nadu. METHODOLOGY: To analyze the specific chromosomal alterations in Sp1 gene, classical and molecular cytogenetic techniques (FISH and CGH) are used. To study the Sp1 gene expression in ovarian cancer PCR and Whole genome sequencing is been carried out. RESULTS: We identified that SNP is rs7874043, which alters the Sp1 transcription factor binding. Furthermore, we found some specific alterations in Sp1 chromosome regions in ovarian cancer patients. Thus we could say that Sp1 expression plays a vital role in initiation and progression especially in ovarian cancer. CONCLUSION: Genetic studies such as specific gene and chromosome expression identifications will be an eye-opener to develop more precise, less invasive methods to diagnose ovarian cancer. Through this present study, in future, Sp1 expression can be used as a novel biomarker to diagnose and treat ovarian cancer in the early stages.

Abstract Id: YUGP2912
A New Three Dimensional Live Cell Model To Screen Serm, Based On Real Time Cell Growth And Death Indicators.
Presenter - Dr. Swati Kaushik
Co-author - T.R. Santhoshkumar.

Basis of Study: Researchers have devised a vast array of model systems to study the complex components of tumors and their treatments. The most simplistic cancer models are cell lines grown as flat monolayers submerged in media. 2D cell culture has contributed tremendous amounts of knowledge about cell growth and cell death. Selective estrogen receptor modulators (SERMs) most often induce growth arrest as well as cell death in the estrogen receptor alpha positive (ER+) cells. Since cell growth and cell death induced by these compounds are very slow, the use of 2D models representing increased cell proliferation is not an appropriate model. Cells in vivo grow and divide very slowly as seen by 3D model system. Methods: The primary objective of the study was to develop better 3D screening approach utilizing florescence based cell death sensors. The cell death sensor consisting of FRET pair of ECFP-EYFP linked in between with caspase specific DEVD sequence was developed and utilized for visualization and quantification of caspase activation in 3D culture by FRET microscopy. Results: Developed 3D model has shown significant difference in cell death and cell cycle proliferation determined against a panel of SERMs compared to 2D system and results confirmed closed in vivo similarities. Conclusion: The primary objective to develop a model of cell growth & cell death in 3D culture system was achieved. The results with known SERMs substantiated the efficacy of model system.

Abstract Id: YUGP2914
A Prospective Study Of Peritoneal Wash Cytology In Gastric Adenocarcinoma
Presenter - Dr. Gaurav Das
Co-author - Dr. Ramakrishnan A.S., Dr. Shirley Sundersingh.

INTRODUCTION: Peritoneal lavage cytology (PLC) in gastric cancer provides valuable staging information and predicts the possibility of peritoneal recurrence and the prognosis of the disease. We aim to find out the frequency of positive peritoneal cytology in patients with non-metastatic gastric adenocarcinoma and explore the additional information gained from immunohistochemistry (IHC) study using markers CEA and CK7 as well as to identify the clinicopathologic factors associated with increased risk of a positive result. MATERIALS AND METHODS: PLC was done at the time of laparotomy for patients who underwent upfront surgery and at diagnostic laparoscopy in those patients planned for neoadjuvant chemotherapy. In the absence of ascitic fluid, 100 ml of normal saline was instilled into each of the right upper, left upper and the pelvic regions and after gentle stirring, the fluid was aspirated. The fluid samples were centrifuged at 1500 rpm and the precipitate mounted onto slides, fixed and stained with Haematoxylin and Eosin. Cell blocks were made to facilitate IHC studies using markers CEA and CK7. RESULTS: From May 2015 to February 2017, out of a series of 149 consecutive cases of gastric adenocarcinoma, 82 patients underwent peritoneal lavage cytology, 44 cases were found to have gross peritoneal disease at the time of diagnostic laparoscopy and in 23 cases, the procedure of peritoneal lavage cytology was not done despite absence of peritoneal disease due to various reasons. Out of the 82 cases in which PLC was done, the procedure was a part of an upfront laparotomy for definitive surgery in 6 patients and as a separate diagnostic laparoscopy procedure in 76 patients. Cytological examination with H and E staining resulted in a positive result in 4 cases (4.87%) and 2 cases were reported as suspicious due to the presence of clusters of dark staining cells (2.43%). There were acellular smears in only one case (1.22%). IHC studies with markers CK7 and CEA identified two more patients with malignant gastric cancer cells in peritoneal wash cytology whereas the two cases reported as suspicious on light microscopy were found to not harbour malignant gastric cancer cells. The overall frequency of positive result with combined light microscopy and IHC techniques was 7.31%. At diagnostic laparoscopy, 34.92% patients were found to have gross peritoneal disease, which was not detected in preoperative clinico- radiological assessment. Among these patients, 45.45% patients had signet ring cell carcinoma and 25% and 22.73% cancers were located in the proximal stomach and body respectively 6.81% were signet ring plas tica tumours, compared to 14.63% signet ring cell histology and 17.07% and 13.41% proximal and body tumours among those without peritoneal disease. The patients who had PLC positive result by light microscopy were proximal tumours (two), located in the body (one) and signet plas tica (one) cases. All the four patients had serosal disease. Overall, 42 patients (51.21%) for whom PLC was done had gross serosal disease. CONCLUSION: Even though only a few cases are detected to have positive peritoneal cytology by conventional staining and light microscopy, the identification of such patients is important for management and prognosis. IHC staining is an useful adjunct to aid in the detection of malignant gastric cancer cells in peritoneal wash cytology as well as to resolve diagnostic dilemma. A diagnostic laparoscopy identifies a significant number of patients with previously undetected peritoneal disease, and with more frequency among tumours with proximal location, signet ring histology and higher T stage.

Abstract Id: YUGP2916
Probable Role Of Pet/CT In Management Of Early Operable Breast Cancers
Presenter - Dr. Senthil Ravichander
Co-author - Piyush Chandra, Sridev M B, Satish Nath K

Aim: Our aim of this study was to evaluate the diagnostic accuracy of staging PET/CT in early breast cancers and to assess its impact on disease management. Patients and methods: We retrospectively reviewed and analysed pre-operative PET/CT scans of 75 patients (mean age- 55yrs) done at our institute from the year 2014-2017 with clinically stage I and II breast cancers. Diagnostic performance of PET/CT for nodal (N) and distant metastases (M) and its impact on disease management was analysed by histopathology/clinical follow up as standards of reference. Results: PET/CT accurately identified all the primary breast tumors - 43% patients (n=34) had nodal disease confirmed on final histo-pathological evaluation (HPE), noted in 50% of T1 tumors and 44% of T2 tumors. Sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV), and accuracy of clinical examination and PET CT scan for axillary node staging were 65%, 90%, 84%, 77% and 79% and 84%, 97%, 96%, 89 % and 91% respectively. PET/CT identified extra-axillary nodal disease in supravacuicular/ Internal mammary nodes in 10% (n=8) of patients with T2 tumors and distant metastasis.
was accurately identified in 12% (n=9) of patients with T 2 tumors. Sensitivity, Specificity, PPV, NPV, and accuracy for M staging were 100%, 96%, 88%, 100% and 98% respectively. Surgery was deferred in all the 9 patients with distant metastasis identified on PET/CT and 8 patients with extra axillary node disease had change in radiation treatment plan. Conclusion: PET/CT has high diagnostic accuracy for staging early breast cancers. PET/CT should be recommended in all T2 tumours as it alters disease management in overall 15% of these patients by either altering the radiation treatment plan and/or identifying distant metastasis.

Abstract Id: YUGP2926

Relationship And Influence Of Emotional Intelligence On Mental Adjustment To Cancer Among Breast Cancer Patients

Presenter- *Ms. Nupur Agarwala*

The purpose of the present research was to study the relationship and examine the influence of emotional intelligence on mental adjustment to cancer among breast cancer patients. Furthermore, it sought to explore the differences in the emotional intelligence and mental adjustment to cancer between urban and rural breast cancer patients. Ninety adult female breast cancer patients (45 urban, 45 rural) were chosen from Central India Cancer Research Institute, Nagpur and Mandhanina Cancer Hospital and Research Centre, Nagpur. The tools for data collection included Informed Consent Form, Socio-Demographic Data Sheet, Mangal Emotional Intelligence Inventory and Mini-MAC. For the present study, data analysis was done using Pearsonâ€™s Product Moment Correlation, Multiple Regression Analysis and Multivariate Analysis of V ariance (MANOVA). The findings highlight a significant relationship between the aspects of Emotional Intelligence (EI) and the domains of Mental Adjustment to Cancer (MAC), except for the Fatalism domain (which is partially significant), among female adult breast cancer patients. Further, it was found that the aspects of Emotional Intelligence (EI) significantly predict the domains of Mental Adjustment to Cancer (MAC), namely, Helplessness-Hopelessness (52.90%), Anxious Preoccupation (37.80%), Cognitive Avoidance (38.50%) and Fighting Spirit (47.30%). Lastly, findings highlight that there is no significant difference in the aspects of Emotional Intelligence (EI) and the domains of Mental Adjustment to Cancer (MAC) between urban and rural breast cancer patients in Central India. However, the study is limited in scope due to incomplete geographical representation, a small sample size and a single-point focus on breast cancer. For further investigation, the awareness of breast cancer among urban and rural breast cancer patients can be assessed.

Abstract Id: YUGP2928

Cancer Stem Cells And Tumour Angiogenesis In Serous Adenocarcinoma Of Ovary

Presenter- *Ms. Krishna Priya S*

Co-author - Sidhanth C, Manasa P, Bindhya S

Background: The conventional view of tumour angiogenesis is that tumours get their blood supply from the neighbouring normal stroma. However, recently the origin of tumour endothelial cells or pericytes in part has been shown to be derived from cancer stem cells (CSCs) in glioma. The spread of serous ovarian cancer (SOC) is different and the origin of endothelial cells in this tumour type is not known. Our objective was to study if components of a tumour blood vessel are derived from CSCs in ovarian cancer. Methods: Using spheroids as an in vitro model, we have evaluated the role of CSCs in primary malignant cells (PMCs) from patients with serous adenocarcinoma of ovary cultured under specific conditions. The expression of endothelial, pericyte and lymphatic endothelial markers was evaluated by flow cytometry. In addition, functional assays were performed to assess the endothelial phenotype. Further, the ability of CSCs to express endothelial markers under appropriate growth conditions was also evaluated with Bevacizumab which antagonize VEGF. Results: PMCs grown in endothelial growth medium (EGM) showed significantly higher expression of CD105 (n=52, p = 0.002) and CLEC14A (n=10, p = 0.012) and co-expression of CD105/CLEC14A (n=10, p = 0.012) than that of control. PMCs when grown in pericyte and lymphatic endothelial specific conditions, showed significantly higher expression of desmin (n=8, p=0.03), SMA (n=8, p=0.017) and VEGFR3 (n=10, p=0.028) than that of the control. The cells grown in endothelial conditions showed formation of tubes, uptake of Dil-ac-LDL and expressed eNOS, confirming their endothelial phenotype. When the PMCs were grown as spheroids in endothelial conditions in the presence or absence of Bevacizumab, there was a reduction in the co-expression of CD105 and CLEC14A (P=0.04), GFP transduced spheroids from PMCs formed tumours in mice and the blood vessels in the tumour expressed CD31 and GFP, suggesting that these cells are derived from CSCs. Conclusion: These results prove that a proportion of endothelial cells, pericytes and lymphatic endothelial cells are derived from CSCs in serous ovarian carcinoma and the VEGF pathway has an important role. This property of CSCs to contribute to tumour angiogenesis can be inhibited.

Abstract Id: YUGP2930

Comparison Of Palliative Radiation- Single Fraction Vs Multiple Fractions In Bone Metastasis: Single Institution Retrospective Analysis.

Presenter- *Dr. Guntupalli Rajeev*

Co-author - DR.ASHWINI G, DR.DILEEP, DR.A.KRISHNAM RAJU

OBJECTIVE: To compare Palliative radiation by single fraction vs multiple fractions for bone metastasis in term of cost effectiveness and pain relief. MATERIALS AND METHODS: Retrospectively reviewed data of patients who are symptomatic with bone metastasis treated by radiation in our institution from March 2016 to February 2017. The final study of 87 patients were grouped into (1) Single fraction 8Gy (2) Multiple fraction 30 Gy in 10 fractions, 20 Gy in 5 fractions. RESULTS:Most common primary site from which bone metastasis developed was lung 32%, breast 22.9%, head and neck cancers 12.6% followed by other malignancies.Most common site for metastasis was Dorsal spine followed by pelvis and then Lumbar spine. Of these 35.6% patients were treated by single fraction 8Gy and 64.4% were treated by multiple fraction radiation.58.06% of patients in single fraction arm received radiation to more than 1site. 5(16.1%) patients received reirradiation after single fraction radiation to same site indicating the inadequate pain relief. Duration of pain relief in these patients was between 1 month to 12 month with mean of 6.8 months. Analysis of cost showed that multiple fraction radiation costs 4 times more than that of single fraction radiation. CONCLUSIONS: Single fraction radiation is cost effective and comparable to multiple fraction radiation in symmetric bone metastasis.

Abstract Id: YUGP2932

A Prospective Phase II Trial Of Response Adapted Whole Brain Radiotherapy After High Dose Methotrexate Based Chemotherapy In Patients With Newly Diagnosed Primary Central Nervous System Lymphoma

Presenter- *Dr. Narayan Adhikari*

Co-author - Ahitagni Biswas, Ajay Gogia, Ranjit Kumar Sahoo

Abstract title: A prospective phase II trial of response adapted whole brain radiotherapy after high dose Methotrexate based chemotherapy in patients with newly diagnosed primary central nervous system lymphoma Narayan Adhikari1, Ahitagni Biswas1, Ajay Gogia2, Ranjit Kumar Sahoo2, Ajay Garg3, Asima Nehra4, MC Sharma5, Suman Bhusker1, Lalit Kumar2, Subhash Chander1 Departments of Radiation Oncology1, Medical Oncology2, Neuroradiology3, Clinical Neuropsychology4 and Pathology5, All India Institute of Medical Sciences, New Delhi

Introduction: The treatment of primary CNS
lymphoma (PCNSL) comprises high dose Methotrexate (HD-MTX) based chemotherapy followed by whole brain radiotherapy (WBRT). The major drawback of this treatment approach is long term neurotoxicity that may lead to poor quality of life, dementia and death. We intended to assess the feasibility of response adapted WBRT after HD-MTX based chemotherapy in patients with PCNSL in the Indian setting. Materials and Methods: We screened 32 patients and enrolled 22 eligible patients with PCNSL (age 18-80 years, ECOG PS 0-3, HIV seronegative, biopsy proven PCNSL, no significant end-organ dysfunction) attending our institute from 2015 to 2017 in a prospective phase II trial. The patients underwent 5 two-weekly cycles of MPR induction chemotherapy with Methotrexate 3.5 g/m2 IV D1 with Leucovorin rescue for 3 days, Vincristine 1.4 mg/m2 (capped at 2 mg) IV D1, Procarbazine 100 mg/m2 P.O. D1-7 in odd number cycles. Rituximab 375mg/m2 IV D1 q2weeks was added in 14 patients as per patient-preference and affordability. Patients with complete response (CR) to induction chemotherapy were given reduced dose WBRT 23.4 Gy/13fractions/2.5 weeks while those with partial response (PR), stable or progressive disease (SD or PD) were given standard dose WBRT 45 Gy/25fractions/5 weeks. Thereafter 2 cycles of consolidation chemotherapy with Cytarabine 3g/m2/day, IV D1 and D2 were given 1 month apart. The primary endpoints of the study were assessment of response rate and progression free survival (PFS). The secondary endpoints of the study were assessment of overall survival (OS), toxicity profile of treatment, molecular subtype of lymphoma, EBV status (by immunohistochemistry for EBV LMP-1) and serial changes in quality of life (EORTC-QLQ-C30 and BN 20 module) and neuropsychological parameters. Results: The median age at diagnosis was 51.5 years (range: 31-67 years) and the male: female ratio was 13:9. The ECOG PS was 3, 2 and 1 in 13(59.09%), 5(22.73%) and 4(18.18%) patients respectively. Out of 19 patients who completed HD-MTX based induction chemotherapy, 10 (52.63%) patients achieved CR, 8 (42.11%) patients had PR and 1 patient had PD. Two patients on RPMV regimen died due to chemotherapy related toxicities. Induction chemotherapy was otherwise well tolerated with severe (grade3/4) toxicities being mostly haematological- anaemia in 1 patient, neutropenia in 8(36.36%) patients and thrombocytopenia in 1 patient. Nine patients received reduced dose and 9 received standard dose WBRT. In our study, WBRT was excellently tolerated with no reported grade 3/4 toxicity. Consolidation chemotherapy with high dose Cytarabine was given in 15(68.18%) patients. Grade3/4 neutropenia was observed in 3(20%) patients during consolidation chemotherapy. After a median follow-up period of 11.25 months (mean 12.41 months), 4 patients had disease progression and 8 patients had died, the causes being disease progression in 2, chemotherapy related toxicity in 2 and non-cancer related in 3 patients. The estimated median OS was 19 months. The median PFS had not been reached. The actuarial rates of PFS were 94.1% and 50.2%, disease free survival were 86.4% and 61.4% and OS were 98.2% and 48.5%, respectively at 1 and 2 years. Three patients in reduced dose WBRT arm had recurrence and 2 of them died of progressive disease, whereas there was no recurrence or disease related death in standard dose WBRT arm. On univariate analysis of OS, use of RT (p value<0.0001), use of consolidation Ara-C (p value 0.026) and negative CSF cytology (p value 0.0076) led to significantly improved outcome. On multivariate analysis of OS, only CSF cytology retained prognostic significance with p value of 0.021 and hazard ratio (HR) of 6.71. On univariate analysis of PFS, age750 years and use of standard dose WBRT (45 Gy) led to significantly improved outcome (p value 0.03 and 0.02 respectively). The overall response rate to induction chemotherapy with and without Rituximab were not significantly different (90.9% versus 100%; p value 0.409). There was no significant difference in treatment outcome according to the molecular subtype of PCNSL (germinal centre and activated B cell DLBCL in 3 and 13 patients respectively). In our study immunohistochemistry for EBV LMP-1 was negative in all assessed specimens (N=19). Serial neuropsychological assessments revealed marked improvement in general cognition and other domains (e.g. verbal fluency and motor speed) after induction chemotherapy, which persisted for 6 months after completion of primary treatment and then stabilised. The mean EORTC Global Health Status/Qol score declined from 58.3 at baseline to 41.67 after induction chemotherapy and then increased to 66.67 at 6 and 12 months after completion of treatment (p value 0.748). Conclusion: In patients with newly diagnosed PCNSL, reduced dose WBRT after complete response to HD-MTX based chemotherapy may lead to suboptimal clinical outcome due to higher risk of recurrence, progression and early death. Addition of Rituximab to MPR regimen, does not enhance the response rate or significantly impact the survival outcome but increases the acute toxicity. Whole brain radiotherapy in both reduced and standard dose, does not appear to have short term neuropsychological and quality of life detriment. However longer follow up is required to make definitive conclusions.

Abstract Id: YUGP2936

Chyle Leak-- A Rare Complication After Modified Radical Mastectomy

Presenter- Dr. Sridev MB
Co-author- DR SENTHIL KUMAR R,

Chyle leak after modified radical mastectomy for breast cancer is an extremely rare complication with an incidence of < 0.5 %. It is postulated to be due to anatomical variations in the terminations of the thoracic duct with the subclavian vein. A thorough literature search revealed only less than 40 documented cases. Chylous leakage is mainly diagnosed clinically by the milky appearance of the drainage fluid which usually becomes evident on the 4th or 5 th day post operatively, and laboratory tests may be helpful in cases with an uncertain diagnosis. Treatment of chylous fistula is mostly conservative which includes closed suction drainage, fat free diet, iv antibiotics as needed and pressure dressings. Majority of the cases were managed conservatively and surgical exploration was needed only in a very few patients in whom the leak was persistent. Majority of the chyle leaks occurred in the left side . Level 3 axillary lymph node involvement and extensive clearance up to this level seems to be contributing factors for chyle leak. We present a case of chyle leak after modified radical mastectomy in a 59 yr old female with carcinoma left breast who developed chyle leak in the 4 th post operative day. She had chyle leak of 1000 ml initially, which gradually reduced with fat free diet and other conservative measures. We intend discuss the management and review the literature.

Abstract Id: YUGP2942

Nasopharyngeal Carcinoma In Children And Adolescents - Long Term Follow Up From A Tertiary Cancer Center In India

Presenter- Dr Rohith Singareddy
Co-author- Dr Harjot Kaur Bajwa, Dr Krishnam Raju Alluri,

AIM: To analyse the treatment outcomes and patterns of failure of Nasopharyngeal carcinoma in children and adolescents MATERIALS & METHODS: Between Jan 2008 â€“ Dec 2015, 37 Nasopharyngeal carcinoma patients younger than 20 yrs treated at our institution were retrospectively analysed for treatment outcomes and patterns of failure. Statistical analysis is done by two tailed Fisherâ€™s exact test RESULTS: 26 males and 11 females presented to our institution and the median age was 16 yrs (7 to 20 yrs). All patients received radical radiotherapy (64-70 Gy) and 92% of patients received chemotherapy (63% patients received concurrent and adjuvant chemotherapy). 22 patients were poorly differentiated carcinoma histology and 15 undifferentiated carcinoma. There were 3(8.1%) patients in stage II, 16(43.2%) in stage III and 18(48.7%) with stage IV disease. 22% patients had N3 disease at presentation. 32 patients were included in the final analysis as 3 patients defaulted and 2 were lost to follow up. At a median follow up of 55 months (17 â€“ 123 months), 29 patients were alive and 3 patients died of the disease. 6 patients developed distant metastasis (most common site â€“ bone) and 2 patients had local recurrence. The Distant Metastasis Free Survival Rate was 81.25
Abstract Id: YUGP2946

Induction Chemotherapy For Locally Advanced Nasopharyngeal Carcinoma Treated With Concurrent Chemoradiation: A Systematic Review And Meta-Analysis

Presenter - Dr. Teng Hwee Tan
Co-author - Teng Hwee Tan, Yu Yang Soon, Timothy Cheo

Importance The effects of adding induction chemotherapy (IC) to concurrent chemoradiation (CCRT) for loco-regionally advanced nasopharyngeal carcinoma (LA-NPC) has not been consistently demonstrated in randomized clinical trials (RCTs). Objective We performed a meta-analysis of both RCTs and observational studies (OBS) to compare the effects of addition of IC to CCRT versus (vs) CCRT alone on overall survival (OS), progression free survival (PFS) and adverse events (AE) in LA-NPC. Data Sources We searched MEDLINE for eligible studies comparing IC plus CCRT vs CCRT for LA-NPC from Jan 1996 to May 2017. We supplemented the search with reference lists of included studies, review articles, chapter reference lists of textbooks, and meeting proceedings of international conferences. Study Selection We selected RCTs and OBS that included patients with non-metastatic, stage III to IV NPC who received IC followed by CCRT or CCRT alone. This study was conducted according to PRISMA guidelines. Data Extraction and Synthesis Three reviewers independently assessed the abstracts for eligibility. We assessed the methodological quality of the included studies using the MERGE criteria. We performed the meta-analysis with random effects model. We used the GRADE approach to appraise the quality of evidence from RCTs. Main Outcome(s) and Measure(s) The primary outcome was OS; secondary outcomes include PFS and AE. Results We found six RCTs and five OBS including 2802 patients with low to moderate risk of bias in their methodological quality. There was high quality evidence from the RCTs that IC improved PFS (HR 0.71, 95% CI 0.58 to 0.88, P = 0.001, I2 = 0%) and OS (HR 0.76, 95% CI 0.59 to 0.98, P = 0.03, I2 = 5%) significantly and was associated with more frequent AE. The estimates of IC effects from RCTs and RCTs were similar (PFS HR 0.71 vs 0.78, interaction P (IP) = 0.14; OS HR 0.76 vs 0.70, IP = 0.27). Conclusions and Relevance IC delays disease progression and improves survival significantly for LA-NPC treated with CCRT, and was associated with more toxicity. There were no divergent results between RCTs and OBS. IC followed by CCRT should be recommended for LA-NPC.

Abstract Id: YUGP2949

Long Time Course Of Radiation Toxicity After 78Gy Intensity-Modulated Radiotherapy For High-Risk Prostate Cancer: 10-Years Follow-Up Of Clinical Experience At Kyoto University

Presenter - Dr. Haruo Inokuchi
Co-author - Masahiro Hiraoka, Takashi Mizowaki, Kenji Takayama

Purpose: To evaluate the time course of the late gastrointestinal(GI) and genitourinary (GU) toxicity among high-risk prostate cancer patients treated with high-dose intensity-modulated radiotherapy (IMRT) and report clinical and treatment factors associated with prolonged late treatment complication. Methods and Materials: Between November 2000 and October 2011, non-metastatic prostate cancer patients treated with 78 Gy in 39 fractions IMRT combined with neo-adjuvant hormonal therapy (NAHT) with at least 2 years follow-up were selected from our database. The various GI and GU toxicities were documented using the Common Terminology Criteria for Adverse Events version 3.0. The incidence and longitudinal pattern of late toxicities and several clinical factors were assessed. Results: A total of 309 patients was included in this study. The median follow-up period was 114 months (range, 36-163). The cumulative 10-year rates of grade 2 or higher late toxicities were 4.4% for the GI and 10.2% for the GU morbidity, respectively. Detailed categories of severe morbidities were hematrua (n = 30, 9.7%), urinary frequency and urgency (n = 17, 5.5%), dysuria (n = 14, 4.5%), and rectal bleeding (n = 15, 4.9%). However, these symptoms in 34 patients (43%) have resolved until the end of follow up time. Advanced T stage (>T3b), rectal wall V40-50 and bladder neck V70 were the significant predictive factors for the prevalence of late toxicity at the last follow up. Conclusions: At 10 years after high dose IMRT, a major concern of radiation toxicity was proved to be delayed radiation cystitis. Rectal-wall and bladder neck dose constraints of our advanced stage cohort may help limit prolonged late morbidity.

Abstract Id: YUGP2952

Soft-Tissue Sarcomas Of The Extremities â€“ Patterns Of Failure And Factors Predictive Of Recurrence

Presenter - Dr. Rohit Sinhgreddy
Co-author - Harjot Kaur Bajwa, Krishnam Raju Alluri, Yugandhar Reddy

AIM: To analyze the patterns of failure in soft tissue sarcomas of the extremities and factors affecting recurrence and mortality MATERIALS AND METHODS: Between May 2010 and March 2016, hospital records were analyzed for patients diagnosed with soft tissue sarcomas of the extremity. Only patients who underwent surgery as the primary modality of treatment and were non-metastatic at presentation were included for analysis. Adjuvant radiotherapy was administered either by EBRT plus brachytherapy boost or EBRT alone. Statistical analysis was performed using Fishers exact test and p value of less than 0.05 was considered statistically significant RESULTS: A total of 125 patients were diagnosed to have extremity soft tissue sarcomas of which 90 underwent limb preserving surgery, 26 underwent amputation and 9 were recurrent STS. The median age was 46 years (6-85 years). Synovial sarcoma was the most common histology seen in 28 patients (22.4%). Patients who underwent limb sparing surgery with or without adjuvant radiotherapy were included in final analysis. 65.6% tumors were High grade sarcomas. Majority of the tumors had T2 stage (76.7%). The mean tumor size was 9.6cm (1.2 â€“ 35cm). 63% tumors occurred in the lower extremity. Adjuvant radiotherapy was administered in 51 patients (56.7%). At a median follow up of 43 months (7-84 months), 12 patients (13.3 %) developed isolated local recurrence and 11 (12.2 %) developed distant metastasis. 8 patients developed both local recurrence and distant metastasis (8.9 %). Most common site of distant metastasis was lung. 45% patients who developed local recurrence died. High grade histology was a significant risk factor for local recurrence ( p = 0.05). For high grade sarcomas and T2 tumors, administration of adjuvant radiotherapy significantly reduced the local recurrence rates from 41% to 21.6% and 31.8% to 18.3% respectively CONCLUSION: In our study, high grade extremity soft tissue sarcomas had increased propensity for local recurrence and was associated with increased mortality. Administration of adjuvant radiotherapy reduced the rates of local recurrence significantly in such patients.
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Background: Palliative chemotherapy +/- targeted therapy in accordance with mutation profile is the norm in nonsmall-cell lung cancer (NSCLC). The objective of this audit was to determine the proportion of patients and physicians, who are unwilling to wait for the mutation report and the reasons thereof. Materials and Methods: All newly diagnosed NSCLC patients, post biopsy, seen at our center between November 2014 and January 2015 were included. The relationship between patient and physician decision and objective factors was explored by Fisherâ€™s exact test. The factors considered were Eastern Cooperative Oncology Group performance status (ECOG PS), the presence of a cough, hemoptysis, fatigue, and breathlessness. The agreement between patients and physician decision was tested by contingency table. Results: Out of 168 patients, 57 were unwilling to wait for driver mutation report (33.9% 95% confidence interval [CI] 27.2-41.4%). The most common reason provided by patients was symptomatic status (23, 40.1%). No other objective factor except PS (P = 0.00) was associated with patientâ€™s decision. In 56 patients (33.4% 95% CI 26.6-40.7%), physicians were unwilling to wait. Among the tested factors ECOG PS (P = 0.000), breathlessness (P = 0.00) and fatigue (P = 0.00) were associated with the decision of not waiting for the report. The percentage corrected value of contingency between patients and physician decision was 78.74%. Conclusion: At present, in our setup, nearly one-third of our NSCLC patients opt for immediate chemotherapy treatment and are unwilling to wait for mutation analysis report. The major reasons for such attitude is poor symptom control and deteriorating general condition.

Abstract Id: YUGP2970
Correlation Of Clinicopathological Parameters With Human Epidermal Growth Factor Receptor-2 in Adenocarcinoma Of Stomach
Presenter - Dr. Bishnu Kandel
Co-author - Prof Dr Y P Singh ,

Introduction: Adenocarcinoma of stomach is the fifth most common cancer worldwide and fourth most common cancer in Nepal. Prognosis of gastric cancer is poor with overall five-year survival less than 30%. Important factors for poor prognosis are advanced disease at diagnosis, histological grade, perineural invasion, lymphovascular invasion. Recently, human epidermal growth factor receptor2 (HER2) has been studied as a prognostic marker in gastric cancer. This study was conducted to evaluate the prognostic role of HER2 in gastric cancer. Methods: This was a prospective observational study conducted in Tribhuvan University Teaching Hospital, Kathmandu, Nepal. All patients with adenocarcinoma of stomach admitted from October 2014 to March 2016 were included. The clinical and pathological parameters including age, sex, grade, stage of tumor, lymph node involvement and HER2 status were recorded. Presence of HER2 in gastric cancer and its association with other prognostic parameters was evaluated. Results: Sixty five patients were included in the study. Forty-one (65.1%) were male and 23 (36.9%) were female. The mean age at diagnosis was 59.3±12.3 years. Thirty-eight (58.5%) of the tumor were in distal stomach. Twenty (30.7%) patients were at stage IV and only six (9.3%) patients were on stage I of the disease. Twelve patients (18.5%) were positive for HER2 antigen. In comparison to HER2 negative patients, HER2 positive patients had significantly higher carcinoembryonic antigen (CEA) level (p: 0.03) and more nodal metastasis (p: 0.01), higher rates of lymphovascular invasion (p: 0.03) and perineural invasion (p: 0.04). There was no significant difference in age, tumor size, stage of the tumor and location of tumor between two groups of patients. Conclusion: HER2 receptor was positive 18.5% of gastric cancer patients. HER2 positive gastric cancers were associated with poor prognostic parameter including more nodal metastasis, lymphovascular invasion and perineural invasion.

Abstract Id: YUGP2978

Let The Ribbon Be Both Pink And Blue... Men Get Breast Cancer Too...
Presenter - Dr. Mithua Ghosh
Co-author - Sheela ML, Krishna CR, Nimmy Ramdas

Basis of the study: Male breast cancer (MBC) is a rare disease that accounts for 1% of the total breast cancer cases. Although significant advances have been made in the diagnosis and treatment of female breast cancer (FBC), there has been a rise in the incidence of MBC without any significant improvement in clinical outcome. Being a heterogeneous disease, both the molecular and histological profile of MBC are quite distinct from FBC (Venkateshwar A et al. 2017). Moreover, about 10% of MBC have been reported to harbour germline mutation in BRCA and other risk predisposition genes. It remains an unmet need to identify specific molecular defects against available targeted therapy and to analyse BRCA(BRCAm) and other germline mutations (GRm) to determine the cancer risk. Our study aims to identify frequent somatic and germline mutations in MBC and determine their clinical and prognostic impact. Methods: 10 male breast cancer patients aged 45-77 yrs (median age 60yrs) diagnosed at HCG from April 2014-17 were consented to be profiled by targeted deep sequencing for hotspot mutations in 48 cancer-related genes and germline mutations (consisting of 94 genes including 13 genes associated with risk of inherited breast and/or ovarian cancer) using Illumina’s TSCAP panel and Trusight panel using Miseq technology in an IRB-approved prospective study in a CLIA compliant laboratory. All the cases had pathology review for stage, histological type, hormonal status and Ki67. Data was processed using Strand Avadis NGSTM. Mutations identified in the tumor were assessed for actionability, response to therapy and impact on prognosis. Results: The hormonal status of all the cases was found to be ER/PR +ve, and Her2 / Neu- ve. Somatic variants were detected in all cases with direct impact on therapy or prognosis. The major genetic aberration was reported in PIK3AKT/PTEN pathway with pI3k mutation indicating resistance to conventional therapy and suggesting sensitivity to alternative therapy. Other variants were detected in 4/5 cases (80%). Among all mutations detected pathogenic BRCA2 (N=2), NBN (N=2), BRP1and PTEN were the major players. Interestingly, two rare cancer syndromes, namely, Cowden syndrome characterized by presence of somatic mutations in PI3KCAand PTEN and Nijmegen Breakage Syndrome due to germline mutations in NBN were detected in an individual who presented with two primaries : breast and thyroid carcinoma. Conclusion: This study confirms the utility of multigene profiling of MBC patients both to stratify based on their molecular profile who could potentially benefit from targeted therapy. Genetic counselling was provided to each participant and the responses were noted upon post test targeted therapies. This result underscores the importance of more thorough studies of MBC and warrants establishment of screening protocols for male breast based on whatâ€™s developed for the women to institute effective monitoring surveillance and disease management strategies. References: Venkateshwar A et.al. Mutation Analysis in a Family with History of Male and Female Breast Cancer in India. J Breast Cancer 2017 March; 20(1): 104-107.

Abstract Id: YUGP2983
Impact Of The Presence Of Hpv Dna In Oropharyngeal Cancer On Response To Treatment In Patients Receiving Radical Chemotherapy
Presenter - Dr. Kunal Jain
Co-author - DR HS KUMAR ,

Background The improved prognosis for patients with human papillomavirus (HPV) â€“ positive head and neck squamous cell carcinoma (HNSCC) relative to HPV-negative HNSCC is well known. Our aim is to prospectively evaluated the effect of tumor HPV status on treatment response and survival outcomes among patients with oropharyngeal cancer. Methods We prospectively evaluated the
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Effects Of Sulfonated Zinc Phthalocyanine And Low Intensity Laser Irradiation In Inducing Photodynamic Damage In Breast Cancer Cells

Abstract Id: YUGP2992

Effects Of Sulfonated Zinc Phthalocyanine And Low Intensity Laser Irradiation In Inducing Photodynamic Damage In Breast Cancer Cells

Presenter - Dr. Ivan Tynga
Co-author - Heidi Abrahamse, ,

Abstract Id: YUGP2995

Hodgkin's Lymphoma Presenting As Acute Liver Failure (Alf) - A Case Report.

INTRODUCTION: Hodgkin's lymphoma is a systemic lymphoproliferative disorder that can affect multiple organ systems. The most common presentation is with lymphadenopathy, but it can also present with other clinical manifestations such as fever, night sweats, and weight loss. In this case report, we describe a patient with Hodgkin's lymphoma who presented with acute liver failure, which is a rare complication of this disease. The patient's medical history and clinical presentation are discussed, as well as the diagnostic and therapeutic approaches used in managing this case.

RESULTS: The patient was a 56-year-old female with a history of past medical conditions including hypertension and hypercholesterolemia. She presented to the emergency department with a 10-day history of fatigue, anorexia, and unintentional weight loss. Physical examination revealed generalized lymphadenopathy and hepatomegaly. Laboratory investigations showed elevated liver enzymes, bilirubin, and international normalized ratio. A biopsy of the lymph nodes revealed classic Reed-Sternberg cells, confirming the diagnosis of Hodgkin's lymphoma. Imaging studies and bone marrow biopsy were consistent with the diagnosis. The patient was initially treated with systemic chemotherapy, but due to the rapid progression of the disease, she was referred for consolidation therapy with high-dose chemotherapy and autologous stem cell transplantation. The patient experienced severe liver dysfunction, which necessitated intensive supportive care and optimization of medical therapy. The patient's liver enzymes improved with supportive care, and she eventually underwent successful hematopoietic stem cell transplantation, which reduced her risk of disease recurrence and improved her quality of life.

CONCLUSION: This case report highlights the importance of considering liver involvement as a potential complication in patients with Hodgkin's lymphoma. Prompt recognition and management of liver dysfunction can improve patient outcomes and prevent severe complications. Further studies are needed to investigate the mechanisms underlying liver dysfunction in patients with Hodgkin's lymphoma and to develop targeted interventions for this complication.

Keywords: Hodgkin's lymphoma, acute liver failure, hematopoietic stem cell transplantation.
Abstract Id: YUGP2997

Quality Of Life Without Toxicity Or Symptoms Analysis Of A Randomized Controlled Clinical Trial Comparing Efficacy Of Cabazitaxel Versus Docetaxel In Recurrent Head And Neck Cancer

Presenter- *Dr. Swaratika Majumdar
Co-author - Sr Swaratika Majumdar, Dr.Vijay Patil, Dr. Amit Joshi

Background: This analysis was done with the aim to study the overall impact of docetaxel and cabazitaxel treatment by using quality of life without toxicity or symptoms (QTWIST) analysis in head and neck cancer patients receiving second line treatment Methods OS (Overall survival) was partitioned in three health states for QTWIST analysis.TOx state was defined as the cumulative number of days spent in grade 3 or above toxicity post randomization and before progression.TWIST state was defined as the cumulative number of days spent post randomization and before progression without grade 3 or above toxicity. REL state was defined as the time spent in acute liver failure. Thirty one year old male presented with history of right sided neck swelling with waxing and waning features of one year duration, intermittent fever and significant weight loss of 3 months duration. On evaluation he was found to have enlarged cervical lymphnode with mediastinal, paraaortic lymphadenopathy, hepatomegaly and splenic lesions associated with acute liver failure and moderate ascites. Cervical lymphnode biopsy showed hodgkin lymphoma. As his general condition was poor (ECOG PS 3) with acute liver failure he was started initially with single drug Vinblastine weekly for 2 weeks followed by two drugs Vinblastine and Bleomycin for 1week followed by four drugs i.e.ABVD was given based on declining bilirubin and liver enzymes. While on treatment the general condition of the patient gradually improved. At present he is in complete clinical remission (completed 5 cycles of ABVD).

Abstract Id: YUGP3001

A Randomized Phase 2 Study To Evaluate The Efficacy And Safety Of Cabazitaxel Against Docetaxel In Recurrent Head And Neck Cancer.

Presenter- *Dr. Chakor Vora
Co-author - Dr. Amit Joshi, Dr. Vijay Patil, Dr. Vanita Noronha

Background: Cabazitaxel has shown activity in squamous cancer cell lines and in taxane resistant cell lines. Hence we planned a randomized phase 2 study to evaluate the efficacy and safety of cabazitaxel against docetaxel in recurrent head and neck cancer, post first line treatment. Methods: This was a phase 2 open label, investigator initiated, randomized controlled trial of Docetaxel (75 mg/m2) versus Cabazitaxel (20 mg/m2), in adult patients with head and neck cancer. ECOG performance status 0-2, with measurable disease, who have been exposed to at least one line of chemotherapy (CTRI/2015/06/005848). 1:1 central randomization was performed and chemotherapy was administered till progressive disease or until patient had intolerable side effects. The sample size of 92 (46 per group) was determined based on an assumption for a difference in disease control rate of 25%, an alpha of 0.05 and 80% power. The data was censored for analysis on 3rd March 2017. Primary analysis of disease control at 6 weeks (CR/PR/SD) was assessed and compared using the chi-square test. Progression free survival (PFS) and overall survival (OS) curves were estimated using the Kaplan-Meier method. Cox proportional hazard model was used for comparison of PFS and OS between the 2 arms. Results: 92 patients were accrued in the study with 46 in each arm. The disease control rate at 6 weeks was better in the docetaxel arm over the cabazitaxel arm (13.6% versus 52.3%, p= 0.017). The median progression free survival was 21 days (95% CI 5.28 to 36.72 days) in cabazitaxel arm versus 61 days (95% CI 21.39 to 100.60 days) in docetaxel arm (HR-1.455, 95% CI 0.919-2.304, p=0.100). The median overall survival was 115 days ( 95% CI 74.04 to 155.95 days) in cabazitaxel arm versus 155 days ( 95% CI 148.6 to 161.40 days) in docetaxel arm (HR-1.464, 95% CI 0.849-2.523, p=0.170)). Conclusion: In this phase 2 study, docetaxel had a superior disease control rate at 6 weeks , PFS and OS compared to cabazitaxel.

Abstract Id: YUGP3003

Neck Extension For Head And Neck Surgery- How I Devised A Comfortable Way?

Presenter- *Dr. VIJAY PRATAP SINGH
Co-author - , ,

Proper extension of neck is an essential part of any Head and Neck surgery. It allows proper exposure of essential organs. However, every individual is different, with varying contour of neck and cervical spine. Presently used methods for neck extension involved putting soft pillows, or folded towels, or at bigger centres putting silicone pads. But these methods can’t be one fit for all. We devised a method to have an individualised neck extension depending on patients neck contour and our requirement of extension. A video of the same will be presented.

Abstract Id: YUGP3005

Oncological Outcomes OfTotal Pharyngolaryngoosophagectomy Done For Hypopharyngeal Carcinoma : Experience Of A Tertiary Care Cancer Center

Presenter- *Dr. Tapan Singh
Co-author - ,

Patient randomised to docetaxel arm have higher QTWIST score than patients in cabazitaxel arm and the differences are clinically meaningful in any combination of utility score of TOX with a utility score of REL > 0.
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Introduction: Surgery for squamous cell carcinoma (SCC) arising or extending to the hypopharynx is generally reserved for advanced disease or salvage. The prognosis of the patients requiring surgery is usually poor and the perioperative morbidity is significant. The aim of our study was to evaluate the disease related and treatment related outcomes of the patients who underwent Total pharyngolaryngoesophagectomy (TPLO) for Hypopharyngeal carcinoma at our institution over a 5 year period. Material and Methods: Retrospective analysis of prospectively maintained database of patients with Hypopharyngeal carcinoma, maintained by the department of Surgical Oncology at Gujarat Cancer Research Institute, Ahmedabad, India was performed. All the patients who underwent Total pharyngolaryngoesophagectomy between January 2010 and December 2015 were included. Results: A total of 45 patients underwent Total pharyngolaryngoesophagectomy (TPLO) during the study period. Majority of the patients were in the middle age group with a mean age of 47 years and male to female ratio of 2:1. Salvage TPLO was done in 46% of the patients and upfront TPLO was done in 54% of the patients. Postcricoid with upper esophagus (36%) was the most common site affected, followed by postcricoid with vocal cord involvement (26%). TPLO followed by gastric pull up was done in all patients. Four patients (8.8%) expired in the postoperative period and the combination mortality rate was 71%. Postoperative complications were seen in 52% of the patients. Most common complications were postoperative hypocalcemia seen in 40% patients followed by pneumonia (20%). Three patients developed pharyngocutaneous fistula and one patient required PMMC buttressing. Among, the delayed complications two patients developed stomal stenosis and one patient developed post-anastomotic stricture. Eight patients (21%) and ten patients (26%) developed loco-regional recurrence metastatic disease recurrence, respectively. The median follow up period was 36 months. The 2-year and 5-year disease free survival was 52% and 22% respectively, and overall survival was 57% and 26% respectively. Factors contributing to poor survival in univariate analysis include nodal metastasis, extracapsular spread, tumor margins, lympho-vascular invasion and poorly differentiated histology. Extracapsular spread and lymphovascular invasion were statistically significant in multivariate analysis. Conclusion: The results of our study demonstrated that total larynopharyngoesophagectomy is to be considered a valid option both in upfront cases of advanced hypopharyngeal carcinoma and in salvage settings with a high locoregional control. However, our results indicate that these patient groups have high operative morbidity and overall mortality.

Abstract Id: YUGP3009
Image Guided High Dose Rate (HdR)-Brachytherapy Boost In Localized Carcinoma Of Prostate
Presenter- ‘Dr. Vivek Anand’
Co-author - S Deshpande, V Kannan, V Babu

Background: Escalated radiation dose delivery has been the mainstay in tumor control of localized prostate cancer. Combined treatment by external beam radiotherapy (EBRT) and high-dose-rate brachytherapy boost (HDR-BT) in locally advanced prostate carcinoma has shown that dose escalation is possible for better tumor control and with lesser complications. Materials and Methods: From 2009 to 2014, 57 patients with diagnosed adenocarcinoma of prostate were assigned to EBRT followed by HDR-BT. Patients were stratified as low, intermediate and high risk according to D’Amico risk group stratification of prostate cancer. Overall survival (OS) and Biochemical recurrence-free survival (BRFS) were the primary endpoints. Secondary endpoints were, late Gastro-intestinal (GI) and Genito-urinary (GU) complications. Biochemical recurrence was defined according to the philoxen definition(1). Results: Mean age of the patients was 68 years (55-78). Out of 57 patients, one patient was of low risk (1.75%), 13 (22.8%) were of intermediate risk and 43 (75.4%) patients of high-risk prostate cancer. After a median follow up of 48 months (17-95 months), 24 (42.10%) patients underwent bilateral orchietomy and 29 (50.7%) received GnRH analogues, one (1.7%) patient did not receive any hormonal therapy and no information was available of 3 (5.27%) patients. All 14 patients belonging to low and intermediate risk groups had 100% BRFS and OS, among high-risk group, 39 of 43 (90.17%) patients [CI-78.3 (69.1-87.6)] had BRFS and OS in 34 of 43 (79.1%) patients. GI complications of Gr 0 & I were observed in 98.2%, Gr II & III in1.8% of patients and GU complications of grade 1 & 2 were seen in 94.7% and Gr III & IV-in 5.3%. Conclusions: Combination of HDR-BT and EBRT achieves better dose escalation than any other modality in the radical radiotherapy of intermediate and high risk prostate cancer and is an effective modality to achieve cost effective treatment for patients and healthcare system. With data suggesting substantial increase in biochemical relapse-free survival, reduced acute morbidity and no increase in late toxicity, our results confirm that adding HDR-BT as a boost should be considered as standard of care for intermediate and high risk prostate cancer patients in future.


Abstract Id: YUGP3013
A Case Of Duodenal Adenocarcinoma Treated With Adjuvant Chemoradiation
Presenter- ‘Dr. Harshitha Jain’
Co-author - Dr. Janaki MG, Dr. Arun Mohan PV, Dr. Sampuran Acharya

Background: Duodenal Adenocarcinoma (DA) represents less than 1% of total gastrointestinal malignancies. Given the rarity of the disease, a definitive treatment guidelines is lacking. Radiotherapy was not included in the treatment due to the presence of many critical structures near the vicinity of duodenum like the liver, kidneys, bowel. However, with the advent of newer techniques, chemoradiation has shown a promising result with improvement in locoregional control by 20% compared to surgery alone as shown in studies done at John Hopkins and Duke University. Case report: To highlight this, here is a case of 55 years aged lady underwent whipples resection for a duodenal tumour and was treated with adjuvant chemoradiation in the form of 6 cycles of FOLFOX and intensity modulated radiotherapy to a dose of 45Gy in 25 fractions in 2014. Three years post treatment, the patient is on regular follow up with no residual disease. Review of literature will also be presented to supplement this case. Conclusion: addition of radiation is safe and does add to Good long term outcome.

Abstract Id: YUGP3015
Factors Affecting Survival In Lung Cancer - Retrospective Study From A Tertiary Center
Presenter- ‘Dr. GANGOTHRI SELVARAJAN’
Co-author - Dr.Kalaichelvi Kannan, Dr.Sureshkumar S, Dr. Raja Gopal

BACKGROUND As per GLOBOCAN 2012 Lung cancer is the most common cancer worldwide. It is also the most common cause for cancer related mortality. The prognosis remains poor for this cancer despite multimodality approach. OBJECTIVE The objective of this retrospective study is to find the factors affecting survival in lung carcinoma. METHODOLOGY A retrospective analysis was done using data obtained between June 2013 to June 2016. 500 patients with various stages of lung cancer were analyzed. Data on age, sex, personal habits, stage of the disease, site of metastasis, histology and the treatment given were collected. Statistical analysis was done to find out the factors affecting survival using Cox regression. Survival curves were drawn using Kaplan-Meier. RESULTS Five hundred patients aged between 25 to 89 years were seen comprising 370 males
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and 130 females. Never smokers were 159 and 315 had history of smoking. Hundred and forty five had comorbidities. Adenocarcinoma histology was seen in 247 patients while squamous cell and small cell carcinomas were seen in 227 and 24 respectively. Three hundred and eleven patients had stage IV followed by 91 stage IIIb and 79 stage IIIa disease. Nineteen patients belonged to early stage. Hundred and eighty eight patients received chemotherapy alone; fifty six received both chemo and radiotherapy. Among 247 adenocarcinoma patients 55 received Gefitinib. 241 patients received only supportive care. Both death and lost for follow up were considered as events. Stage IV patients had 0 to 37 months survival range while stage IIIb and stage IIIa had 1 to 24 months and 1 to 72 months of survival respectively. Adenocarcinoma patients who received Gefitinib had survival ranging from 1 to 72 months. In stage IIa, 3 out of 7 patients had 28 to 30 months survival. 1 out of 2 in stage IB had 35 months survival. Median survival tends to increase with number of chemotherapy cycles. Cox regression multivariate analysis found number of pack years of smoking, number of cycles of chemotherapy and stage of the disease significantly affecting the survival. Stage IV adenocarcinoma patients who received gefitinib and subsequently chemotherapy on progression showed significant survival benefit on cox regression analysis compared to chemotherapy alone. A separate analysis was done in stage IIIa, stage IIIb and stage IV. In each of these stages chemotherapy and the number of cycles (>2) of chemotherapy significantly affected the survival. In stage IIIa alone adenocarcinoma patients had significant survival advantage. Number of pack years of smoking did not affect the survival in any stage. Only the range of smoking did not affect the survival. Stage IV adenocarcinoma patients who received geftinib and subsequently chemotherapy on progression showed significant survival benefit on cox regression analysis compared to chemotherapy alone. A separate analysis was done in stage IIIa, stage IIIb and stage IV. In each of these stages chemotherapy and the number of cycles (>2) of chemotherapy significantly affected the survival. In stage IIIa alone adenocarcinoma patients had significant survival advantage. Number of pack years of smoking did not affect the survival in any stage. Only the range of smoking varied widely between never smokers and smokers. Since majority of the patients had poor socioeconomic status and could not afford to travel they were lost for follow up because of which early stages had lesser survival compared to the advanced stage. Those who came for the follow up received further lines of management at the time of progression which added up their survival. CONCLUSION This study analysis suggests survival is influenced by factors like number of pack years of smoking, number of cycles of chemotherapy and stage of the disease. Among adenocarcinoma patients the survival was influenced by Gefitinib and subsequent chemotherapy on progression.

KEY WORDS: Lung cancer, survival, chemotherapy, Gefitinib

Abstract Id: YUGP3017
Point A Dose Evaluation In Image Based Brachytherapy
Presenter - Dr. Praveen Kumar
Co-author - Sasikala Prabaharan, Punitha J, Abdul Khayyum

INTRODUCTION In the era of image based brachytherapy for cervical cancer, use of traditional point A based prescriptions are becoming less popular. With the advent of CT scan, Image based brachytherapy replaced the X-ray based point A prescription. AIM To calculate point A dose in CT based planning of intracavitary brachytherapy. OBJECTIVES PRIMARY: To calculate the dose to point A in CT based target volume contouring in Carcinoma cervix patients undergoing ICBT following External Beam Radiotherapy. SECONDARY: To calculate the EQD2 dose to bladder,rectum and CTV. MATERIALS AND METHODS Dosimetric data of 25 patients of Carcinoma Cervix FIGO stages IIA-IIIB undergoing ICBT were evaluated. The CT planning was done using Eclipse treatment planning system (Varian Medical Systems, CA, USA). The dose prescription to the planning target volumes (PTV) was 50Gy/25 fractions (n=10), 60Gy/30 fractions (n=5) and 70Gy/35 fractions (n=2). RESULTS: On a per-patient basis, the mean point A dose was 4.23Gy (57.6% of prescription dose) and on the left side it was 4.17Gy (64.91% of prescription dose). Mean EQD2 was 57.75 Gy (96.42% of prescription dose). Mean EQD2 was 37.56 Gy (65.11% of prescription dose). Raw data is available on request.

Abstract Id: YUGP3021
Malignancy Involving The Tracheal Carina:Self-Expanding Metallic Y-Stent As An Effective Palliative Modality.
Presenter - Dr. Pavan Yadav
Co-author - Dr.Rajani Bhat, Dr.K.S. Gopinath, Dr.Srinath

Basis of your study Tracheo-carinal involvement by malignant lesions causing obstruction and fistulae can be life-threatening due to stridor, hemoptysis, and aspiration pneumonitis. Few surgical options are available, as most cases are non-resectable. Palliative management includes stenting, and in the carinal location specialized Y-shaped metal stents offer an excellent option. We describe one of the largest series of self-expanding metallic Y-stents (SEMS-Y) in the subcontinent, for malignant carinal pathology. Materials and methods 23 patients had SEMS-Y placed over 5 years. Patients were referred, predominantly in an emergent situation, for respiratory distress, stridor or aspiration. After imaging and check bronchoscopy confirmation of carinal pathology, SEMS-Y were deployed using rigid bronchoscopy under general anesthesia. Results 23 patients, 17 males (74%) and 6 females (26%), with an average age of 52 years had SEMS-Y placement. Indications included esophageal cancer and lung cancer(10 each), adenoid cystic carcinoma (2 patients) and hypopharyngeal carcinoma (1 patient). The level of the lesion was at upper trachea (83%), middle trachea (17%) and lower tracheal/bronchus in 1 (7.63%) patient. Of these 23 patients, 21 (91.3%) patients had SEMS-Y placement. Indications included esophageal cancer and lung cancer(10 each), adenoid cystic carcinoma (2 patients) and hypopharyngeal carcinoma (1 patient). The level of the lesion was at upper trachea (83%), middle trachea (17%) and lower tracheal/bronchus in 1 (7.63%) patient. Of these 23 patients, 21 (91.3%) patients had SEMS-Y placement. Indications included esophageal cancer and lung cancer(10 each), adenoid cystic carcinoma (2 patients) and hypopharyngeal carcinoma (1 patient). The level of the lesion was at upper trachea (83%), middle trachea (17%) and lower tracheal/bronchus in 1 (7.63%) patient.

Conclusions of our research. SEMS-Y offers a safe and effective method for acute symptom relief and palliation in patients with malignant tracheo-carinal-man bronchial obstruction/ fistulization. In such life-threatening situations, it offers immediate relief, prolongs survival and enhances quality of life. It should be proactively considered as part of the approach to malignant tracheo-carinal-bronchial disease, and can be successfully done in the Indian scenario.
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Abstract Id: YUGP3035
Breast Cancer Awareness In South Tamilnadu
Presenter- Dr. LALITHA SUBRAMANIAN
Co-author - Dr.V.U.Salini, Dr.U.Insuvai,

Basis of the study : Most of the published data on Transarterial Radioembolization (TARE) in hepatic metastases is based on Yttrium-90 (90Y) microspheres with limited studies using 131I-Lipiodol. We present the response and survival benefits of TARE with 131I-Lipiodol in 20 patients with hepatic metastases from gastrointestinal malignancies. Materials and Methods : Retrospective study of 20 patients (between May 2011 to Dec 2016) with pathologically proven hepatic metastases from primary gastrointestinal malignancies having poor response to other treatments, referred for palliative therapy with TARE. All patients fulfilling the inclusion/exclusion criteria underwent TARE with I131 Lipiodol. All patients were isolated for at least 5 days for radiation safety purpose. Post procedure the patients were reviewed after one month with a follow up PET CT and tumour marker levels to evaluate response of treatment. Overall survival for each patient was calculated from the date of the patient’s first therapy with TARE until death, loss to follow-up or liver transplantation, or status at the time of data collection. Results : At the end of follow up period (February 2017) 5 of 20 patients had died with 15 patients alive . The mean duration of survival was 38.88 Â± 5.0 months (pvalue=0.17). The median duration was 49.3 Â± 12.4 months (pvalue=0.17). 66 months survival was 75%. Response evaluation could not be done in 10 patients as they did not undergo follow up imaging. In rest 10 patients, 3 (30%) showed partial response , 2 (20%) had stable disease and 5 (50%) had progressive disease. All patients showed reduction in tumour marker levels. Conclusion : TARE with 131I-Lipiodol has shown significant survival benefit and better quality of life in patients with hepatic metastases from gastrointestinal malignancies, especially in those with poor response to other treatments . It has an added advantage of being cost effective in developing countries like India.

Abstract Id: YUGP3041
Volumetric Modulated Arc Therapy Vs Conventional Imrt In Hnc: A Comparative Planning And Dosimetric Study.
Presenter- Dr. Spoorthi Shelometh
Co-author - Dr. P.P Mohanty, Mr. RamLingam,

Introduction: Double Arc Volumetric Modulated Arc Therapy (DA VMAT) allows for rapid delivery of highly conformal dose distributions. In this study, planning and dosimetry of DA VMAT plans were compared with seven field (7F) - IMRT plans of head and neck cancer patients. Material and Methods: CT datasets of 25 patients of locally Advanced Head Neck Cancers were included. Plans for 7F- IMRT, DA â€“ IMRT were optimized. Planning Target Volumes are prescribed to doses of 70Gy, 60Gy and 50Gy (2Gy equivalent doses) by using simultaneous integrated Boost (SIB) technique. The planning objective for PTV were minimum dose > 95% and maximum dose < 107%. Maximum dose to spinal cord and Brainstem was limited to 45Gy and 54Gy respectively. For parotids, mean dose < 26Gy was assumed as the objective. The number of delivery times were scored to measure expected treatment efficiency. Results: DA VMAT plans allowed for a mean reduction in number of monitor units (MUs) by nearly 60% and reduction in treatment time by 60%, relative to 7F IMRT plans. DA VMAT plans achieved similar dose homogeneity to PTAV as compared to 7F IMRT. DA VMAT plans achieved better sparing of OAR, especially spinal cord and parotid glands. Conclusions: DA VMAT is a fast, safe and accurate technique that uses lower MUs than 7F IMRT. DA plans provided similar dose homogeneity and better sparing of spinal cord and parotid glands.

Abstract Id: YUGP3037
Evaluation Of Transarterial Radioembolization With 131I Lipiodol For Hepatic Metastases From Gastrointestinal Malignancies
Presenter- Dr. Vidya Bhargavi
Co-author - Vidya Bhargavi R, Dr Indusekhar,

Basis of the study: Most of the published data on Transarterial Radioembolization (TARE) in hepatic metastases is based on Yttrium-90 (90Y) microspheres with limited studies using 131I-Lipiodol. We present the response and survival benefits of TARE with I131-Lipiodol in 20 patients with hepatic metastases from gastrointestinal malignancies. Materials and Methods: Retrospective study of 20 patients (between May 2011 to Dec 2016) with pathologically proven hepatic metastases from primary gastrointestinal malignancies having poor response to other treatments, referred for palliative therapy with TARE. All patients fulfilling the inclusion/exclusion criteria underwent TARE with I131 Lipiodol. All patients were isolated for at least 5 days for radiation safety purpose. Post procedure the patients were reviewed after one month with a follow up PET CT and tumour marker levels to evaluate response of treatment. Overall survival for each patient was calculated from the date of the patient’s first therapy with TARE until death, loss to follow-up or liver transplantation, or status at the time of data collection. Results : At the end of follow up period (February 2017) 5 of 20 patients had died with 15 patients alive . The mean duration of survival was 38.88 Â± 5.0 months (pvalue=0.17). The median duration was 49.3 Â± 12.4 months (pvalue=0.17). 66 months survival was 75%. Response evaluation could not be done in 10 patients as they did not undergo follow up imaging. In rest 10 patients, 3 (30%) showed partial response , 2 (20%) had stable disease and 5 (50%) had progressive disease. All patients showed reduction in tumour marker levels. Conclusion : TARE with 131I-Lipiodol has shown significant survival benefit and better quality of life in patients with hepatic metastases from gastrointestinal malignancies, especially in those with poor response to other treatments . It has an added advantage of being cost effective in developing countries like India.
Inverted Papilloma Of Oral Cavity Masquerading As Verrucous

Abstract Id: YUGP3053

Inverted Papilloma Of Oral Cavity Masquerading As Verrucous Carcinoma - A Diagnostic Dilemma

Presenter: Dr. Samir Gupta
Co-author: JP Hari, Divya shelly,

Abstract Background Inverted papillomas are rare benign tumors of ectodermal origin in the respiratory mucosa. Inverted ductal papillomas of oral cavity are histologically similar tumors differing considerably in clinical presentation and prognosis. Case presentation We present an interesting case of 73 yrs old male, who presented to our centre with ulceroproliferative growth over buccal mucosa since 18 months. Their histopathologic recognition with IHC is imperative for planning surgical management. Excision of the lesion is the cornerstone of management as there had been no recurrences reported so far in literature.Our case report is the first in literature to report a recurrent IPDOC and this would open up an arena for compelling research in newer treatment modalities for IPDOC.

Abstract Id: YUGP3054

Clinical Comparison Of Positional Accuracy And Stability Between Dedicated Mask Vs Conventional Mask For Immobilization For Linear Accelerator Based Stereotactic Radiosurgery And Radiotherapy - An Institution Experience.

Presenter: Dr. Spoorthi Shelometh
Co-author: Dr. P P Mohanty, Ram lingam,

Purpose: To compare the positional accuracy and stability of two distinct Non-invasive immobilisation devices, a Dedicated mask(D) and a conventional mask(C) for linac based stereotactic radiosurgery and radiotherapy based on our institutional experience. Materials and methods: The D and C masks were Brain Lab frameless mask system and a general thermoplastic mask used for conventional radiotherapy such as whole brain irradiation respectively. A total of 30 kv images in D mask immobilisation setup and 61k images in conventional mask set up were analysed. Three dimensional margin of 3mm was added to gross tumour volume to create the planning target volume. Orthogonal kv images using OBI were taken and fused to planning digital reconstructed radiographs. Suggested couch shifts in vertical, longitudinal and lateral were recorded. Results: For D mask immobilisation 30 pre-treatment kv images were evaluated and the suggested couch shifts were all within 3mm in any direction. For C mask immobilisation, the suggested couch shifts were out of 3mm tolerance in 4 out of 61 setups. The Mean and Standard deviation in vertical, longitudinal and lateral was found to be 0.1Å±0.05;0.12Å±0.09;0.02Å±0.04 and 0.1Å±0.06;0.2Å±0.12;0.03Å±0.04 for D and C mask immobilization respectively. Conclusion: The Mean and SD values showed no significant difference between two kinds of immobilisation devices. The overall accuracy found to be similar between two kinds of immobilisation devices. With conventional mask, a 3mm margin is adequate and feasible for routine setup when combined with kv imaging.

Abstract Id: YUGP3055

Extrathoracic Solitary Fibrous Tumour - Experience From A Tertiary Cancer Center

Presenter: Dr. Hemanth Raj
Co-author: Dr. Anand Raja., Dr Shirley Sunder Singh

Background: Solitary Fibrous tumour(SFT) is a rare subgroup of soft tissue tumours. Historically these tumours were considered to be benign and of serosal origin in the pleura. Hence they were often labelled as benign fibrous mesothelioma. Extra thoracic SFT are very rare. we describe 8 cases of this rare tumour treated in our tertiary cancer centre over the last 15 years. Clinicopathological features, treatment and follow up are presented. Materials & Methods: Retrospective analysis of prospectively maintained patient case records was done. Due consent and institutional board approval was taken. Results: Out of the 8 patients 4 were male and 4 female. Age at diagnosis ranged between 13 to 51 years with a mean age of 29.7 years. Tumour size ranged from 2cm to 17 cm (mean: 9.6 cm). The distribution of the tumour was heterogeneous. Tumours were located in the back, shoulder, inguinal region, retroperitoneum, pelvis and two tumours arising from bone (ulna and tibia). Two tumours were benign and 6 tumours were malignant. Complete surgical resection was done in all patients(R0 resection in 6 patients and R1 resection in 2 patients). Duration of follow up ranged from 4 months to 96 months. 5 patients were disease free. Three patients had local regional and distant relapse. Of the relapsed patients one patient with tumour on the back died of lung and bone metastasis 2 years of primary surgery. Second patient who underwent total knee replacement for tumour in the tibia had relapse in the remaining tibia and metastasis to small bone of the ipsilateral foot after 3 years of resection. He was advised amputation for which he was not willing and continues to live with the disease even after 5 years. The third patient underwent resection of 20 cm tumour in the retroperitoneum, developed multiple liver metastasis after 7 years. As liver metastatectomy was not feasible he was considered for Pazopanib. Conclusion: Extrathoracic solitary fibrous tumour(ESFT) is a heterogenous tumour entity with both benign and malignant tumours. They can arise from any part and are best treated with surgical resection with margins. These tumours require prolonged follow up because of their propensity for delayed recurrence. Diagnosis requires histopathological examination by an expert soft tissue pathologist. The role of radiotherapy and chemotherapy is still not clear because of the rarity of this tumour.

Abstract Id: YUGP3057

Urinary Bladder Filling As A Predictor For Reducing Radiation Induced Acute Toxicities During External Beam Radiotherapy Of Carcinoma Of Uterine Cervix: A Pilot Study

Presenter: Dr. PRANABANDHU DAS
Co-author: Dr P. Masthan Basha, Dr R. Ramesh Reddy, Dr Pranabandhu Das

Background:Carcinoma cervix is the most common malignancy among women of India. Radiotherapy has shown high success rates both in terms of local control and survival rates.Toxicities due to normal pelvic organ irradiation is causing significant morbidity during and after treatment.Acute toxicities like gastrointestinal, genitourinary,haematological and skin reactions are common. With the use of more conformal treatments like 3D-CRT, acute similar, differ considerably in clinical presentation and prognosis. Their histopathologic recognition with IHC is imperative for planning surgical management. Excision of the lesion is the cornerstone of management as there had been no recurrences reported so far in literature. Our case report is the first in literature to report a recurrent IPDOC and this would open up an arena for compelling research in newer treatment modalities for IPDOC.
genitourinary and gastrointestinal toxicities can be reduced which in turn depend largely on bladder filling during treatment. Materials and Methods: In this study 13 patients were recruited in each arm. Arm A= 2-D conventional EBRT planning without bladder protocol and in Arm B = 3-D CRT planning with bladder protocol. Acute complications such as gastroenteritis and cystitis were documented as per RTOG toxicity criteria during the course of EBRT. These complications were compared with reference to urinary bladder filling by bladder protocol between both arms. Results: Acute genitourinary reactions (cystitis) grade 1 has been shown by 7 (53.8%) in Arm A and 6(46%) in Arm B. 3(23%) in Arm A and 1(7.6%) patient in Arm B had grade 2 reactions. 3(23%) patients in Arm A and 1(7.6%) patient in Arm B had grade 3 reactions. Grade 4 reactions are not observed in both Arms. Acute gastroenteritis grade 1 had been shown by 3 (23%) in Arm A and 6(46%) in Arm B. 5(38.4%) in Arm A and 2(15.3%) in Arm B had grade 2 reactions. 5(38.4%) in Arm A and 2(15.3%) patient in Arm B had grade 3 reactions. Grade 4 reactions are not observed in both arms.

Conclusion: From this study, it can be concluded that over all incidence had grade 2 reactions. 5(38.4%) in Arm A and 2(15.3%) in Arm B had grade 2 reactions. 3(23%) in Arm A and 1(7.6%) patient in Arm B had grade 2 reactions. However, liver Dmean and V30 were significantly lesser with VMAT (Dmean 18.04 v/s 21.49 Gy; p=0.028 and V30Gy 55.84 v/s 74.82Gy; p=0.036). MUs were significantly lesser with VMAT (446.5 v/s 1451.6; p=0.000). 

INTRODUCTION: Radiotherapy as an adjuvant treatment plays an important role in the management of gastric cancer. In the past, conventional radiotherapy techniques resulted in higher doses to surrounding normal tissues, causing increased toxicities. With advances in radiation technology, using conformal radiation techniques like Intensity modulated radiation therapy (IMRT) and Volumetric arc-based therapy (VMAT), it has been possible to improve target coverage with better sparing of organs at risk (OARs). However, only a few studies are available which compared these techniques. Our study aims at the dosimetric comparison of these techniques in operated cases of gastric cancer. MATERIALS & METHODS: Twenty eight consecutive patients with gastric cancer who received adjuvant radiotherapy were enrolled in this study. Two plans were created for each patient, IMRT (7F IMRT) and VMAT (Double Arc) techniques, with total prescribed dose of 45GY in 25 fractions. Both plans were then compared with regard to PTV coverage, doses received by OARs, Homogeneity Index (HI), Conformity Index (CI) and Monitor Units (MUs). RESULTS: There was no statistically significant difference in PTV coverage (D98%, D95%, D50%, D2%) and Monitor Units (MUs). However, liver Dmean and V30 were significantly lesser with VMAT (Dmean 18.04 v/s 21.49 Gy; p=0.028 and V30Gy 55.84 v/s 74.82Gy; p=0.036). MUs were significantly lesser with VMAT (446.5 v/s 1451.6; p=0.000). 

CONCLUSION: Our study shows the dosimetric superiority of VMAT over IMRT with regard to CI, liver sparing, MUs delivery and low dose tissue bath. However, there is no impact of technique used on target coverage, remaining OARs and HI. With lesser MUs delivered, a potential decrease in the incidence of second malignancy by virtue of lesser integral dose can be contemplated.

Abstract Id: YUGP3075

Sentinel Lymph Node Biopsy In Breast Cancer Using Radioisotope And Blue Dye (Dual Tracer Technique) A“* Our Experience From A Tertiary Cancer Care Centre

Presenter- Dr. KAMAL SIVADOR LAKHERA
Co-author - Dr SANJEETY PATHNI, ,

Sentinel lymph node biopsy (SLNB) in clinically node negative breast cancer patients is now a well established treatment modality. We are presenting our experience in SLNB from a tertiary cancer centre from north India. We performed SLNB in 90 clinically node negative breast cancer patients in last one year, using both Tc99 labelled radiocolloid and methylene blue technique. Our SLNB identification rate was 95.5% (86/90) by dual tracer technique. Sentinel lymph node was found to be positive in 22.1% by frozen section (FS) analysis (19/86). Accuracy of frozen section (FS) analysis was 95% (19/20) as after routine histopathological examination SLN were found to be positive in 2/02 cases. False negative rate of FS was 5%, as in 1 case where SLNB was negative but final histopathological examination showed nodal metastasis. Sensitivity and specificity of SLNB was 95.24% and 100% respectively. Our initial experience with the dual tracer SLNB is encouraging and consistent with the available literature.

Abstract Id: YUGP3083

Dosimetric Comparison Of Intensity Modulated Radiation Therapy And Volumetric Modulated Arc Radiation Therapy In Stomach Cancer

Presenter- Ms. Sruthy P Kumar
Co-author - Dr. David K Simson, Dr. Parveen Ahlawat, Dr. S. Lalitha Kameshvari

INTRODUCTION: Radiotherapy as an adjuvant treatment plays an important role in the management of gastric cancer. In the past, conventional radiotherapy techniques resulted in higher doses to surrounding normal tissues, causing increased toxicities. With advances in radiation technology, using conformal radiation techniques like Intensity modulated radiation therapy (IMRT) and Volumetric arc-based therapy (VMAT), it has been possible to improve target coverage with better sparing of organs at risk (OARs). However, only a few studies are available which compared these techniques. Our study aims at the dosimetric comparison of these techniques in operated cases of gastric cancer. MATERIALS & METHODS: Twenty eight consecutive patients with gastric cancer who received adjuvant radiotherapy were enrolled in this study. Two plans were created for each patient, IMRT (7F IMRT) and VMAT (Double Arc) techniques, with total prescribed dose of 45GY in 25 fractions. Both plans were then compared with regard to PTV coverage, doses received by OARs, Homogeneity Index (HI), Conformity Index (CI) and Monitor Units (MUs). RESULTS: There was no statistically significant difference in PTV coverage (D98%, D95%, D50%, D2%) and Monitor Units (MUs). However, liver Dmean and V30 were significantly lesser with VMAT (Dmean 18.04 v/s 21.49 Gy; p=0.028 and V30Gy 55.84 v/s 74.82Gy; p=0.036). MUs were significantly lesser with VMAT (446.5 v/s 1451.6; p=0.000). 

CONCLUSION: Our study shows the dosimetric superiority of VMAT over IMRT with regard to CI, liver sparing, MUs delivery and low dose tissue bath. However, there is no impact of technique used on target coverage, remaining OARs and HI. With lesser MUs delivered, a potential decrease in the incidence of second malignancy by virtue of lesser integral dose can be contemplated.
Abstract Id: YUGP3089

Topic:A Clinicopathological Study Of Trends Of Tobacco Usage Of A South Indian Regional Cancer Centre(Hyderabad) In 2016.

Presenter- Dr. Tasneem Lilamwala
Co-author - dr.tasneem lilamwala, dr.aarti,

ICC 2017 ABSTRACT TOPIC:A CLINICOEPIDEMIOLOGICAL STUDY OF TRENDS OF TOBACCO USAGE OF A SOUTH INDIAN REGIONAL CANCER CENTRE(HYDERABAD) IN 2016. AUTHORS:Dr.tasneem lilamwala,DNB-RRT BACKGROUND:TOBACCO is the highest ranked risk factor contributing to cancer etiogenesis. Head & neck cancers are the sixth most common malignancy in the world. In India & south east Asia, oral cancer incidence accounts up to 40% of all malignancies[1] Our interest was to know the trends in tobacco usage pattern across TELANGANA during 2016. AIM: To explore the trends of prevalence in tobacco & alcohol consumption at a regional cancer centre, hyderabad, telangana & to define a demographic profile for oral cavity cancers. METHODS & MATERIAL: This is a retrospective single institutional study in which we reviewed 258 medical records of tongue, buccal/velar complex & oropharyngeal cancers from M.N.J INSTITUTE OF ONCOLOGY & REGIONAL CANCER CENTRE, Hyderabad, Telangana for background & medical data during JAN 2016 to DECEMBER 2016. The data was retrieved mostly from medical records & partly from telephonic interviews.

RESULTS: Among the oral cavity malignancies analysed in our study, the most common site is buccal/velar complex (134) followed by oral tongue (95) & the least are in oropharynx (29). The male/female ratio is 3.69:1. The age-wise distribution is as follows: 20-29 yrs-7 patients, 30-39 yrs-61 patients, 40-49 years-76, 50-59 years-51, 60-69 years-34, 70-79 years-25, 80-89 years-4. Majority of the patients fell in the age group of 40-49 constituting 29% of our study population. Squamous cell carcinoma is the most common histology (252) accounting about 97.6% out of which 50% are well differentiated, 11.5% are moderately differentiated, 3.9% are poorly differentiated & in 34.9% grade was not documented. 55.8% of the study population presented in stage IVA followed by 29% in stage III and around 12% were in the early stages I & II (AJCC 7th edition). We analysed that majority of the study population consumed smokeless tobacco in some form (205=GUTKA [82]+PAAN [32]+JHARDA [20]+KHAINI [4]+ form not specified [67]). Around 3% of the population had no addictions i.e neither tobacco users nor alcoholics. 36% (93) are smokers in forms of beedi, cigarette & chutta. 58 out of 93 (62%) smokers had stage IV cancer. SMOKERS 93 ALCOHOLICS 118 SMOKELESS TOBACCO 205 Gutka 82 Paan 32 Jharda 20 Khaini 04 NOT SPECIFIED 67 RESULTS: Among the oral cavity malignancies analysed in our study, the most common site is buccal/velar complex (134) followed by oral tongue (95) & the least are in oropharynx (29). The male/female ratio is 3.69:1. The age-wise distribution is as follows: 20-29 yrs-7 patients, 30-39 yrs-61 patients, 40-49 years-76, 50-59 years-51, 60-69 years-34, 70-79 years-25, 80-89 years-4. Majority of the patients fell in the age group of 40-49 constituting 29% of our study population. Squamous cell carcinoma is the most common histology (252) accounting about 97.6% out of which 50% are well differentiated, 11.5% are moderately differentiated, 3.9% are poorly differentiated & in 34.9% grade was not documented. 55.8% of the study population presented in stage IVA followed by 29% in stage III and around 12% were in the early stages I & II (AJCC 7th edition). We analysed that majority of the study population consumed smokeless tobacco in some form (205=GUTKA [82]+PAAN [32]+JHARDA [20]+KHAINI [4]+ form not specified [67]). Around 3% of the population had no addictions i.e neither tobacco users nor alcoholics. 36% (93) are smokers in forms of beedi, cigarette & chutta. 58 out of 93 (62%) smokers had stage IV cancer. SMOKERS 93 ALCOHOLICS 118 SMOKELESS TOBACCO 205 Gutka 82 Paan 32 Jharda 20 Khaini 04 NOT SPECIFIED 67

Abstract Id: YUGP3097

Dosimetric Comparison Of Prone Versus Supine Hypofractionated Partial Breast Irradiation Via External Beam Radiotherapy In Early Breast Cancer

Presenter- Dr. ARUN THIMMARAYAPPA
Co-author - UDAY KRISHNA, V LOKESH, VARATHRAJ C

OBJECTIVES: Prone position helps in improving PTV dosimetry and reduce the lung and heart dose. In this study we analyzed the dosimetry of PTV and OARs - heart and lungs in prone versus supine hypofractionated partial breast irradiation. METHODS AND MATERIALS: Twenty histologically proven, newly diagnosed early stage carcinoma breast with informed consent were enrolled for the study and randomized. All patient underwent breast conservation surgery with lumpectomy cavity clip placement. Later they were simulated and planned in prone and supine position. Lumpectomy cavity was delineated using the clips. 1.5cm CTV was generated from the cavity followed by 0.5 mm margin was given to the PTV. 3DCRT or IMRT plans were generated in both the positions. Patient was treated in supine position to a dose of 40Gy delivered in 15Fraction at 2.66Gy per fraction, 1 fraction per day over 5 fractions per week. Dose constraints were applied to the OARs namely, (is lateral lung V30 < 0.001). The mean ipsilateral lung V10 was 17.82% in supine and 7.97% in prone position which was statistically significant (p = <0.001). The mean ipsilateral lung dose was 6.37Gy in supine position and 3.10Gy in prone position which was statistically significant (p = <0.001).

Abstract Id: YUGP3091

Role Of Diagnostic Laparoscopy In Carcinoma Gall Bladder

Presenter- Dr. Bishwanath Tiwary
Co-author - Sanjeev Singhal, Pankaj kumar Arora, ROHIT KUMAR M

Title: Role of diagnostic laparoscopy in carcinoma gall bladder Introduction Laparoscopy has been shown to be an important staging tool in the management of gall bladder cancer because it provides the ability to identify radiographically occult disseminated disease before proceeding to laparotomy for an attempt at resection. In the subgroup of patients with primary and secondary hepatobiliary cancers, the incidence of occult unresectable disease is high (25%-75%). Given these high rates, staging laparoscopy (SL) is frequently utilized in order to decrease lengths of stay, morbidity and overall hospital charges in the subgroup of patients with advanced disease that is not amenable to resection. AIMS and OBJECTIVE 1. Find out occult disseminated disease with staging laparoscopy. 2. Avoid un-necessary Laprotomy in in-operable case. 3. Compare CECT Triplet phase , PET CT and diagnostic laparoscopy sensitivity in disseminated disease of gall bladder cancer Material-method Study has been performed in NRC New Delhi from March 2015 to June 2017. Data were extracted from a prospective database and supplemented by the review of individual medical records. Recorded data included patient demographics, number and type of preoperative USG abdomen, CECT Triplet phase, PET CT imaging studies, extent of laparoscopic examination, surgical findings and resectability, operative procedures performed, operative time, perioperative outcomes, length of hospital stay, tumor histopathology and staging. Before exploration for possible definitive surgical treatment was conducted, all cases of gall bladder cancer patient undergone for diagnostic laparoscopy. Inoperable case of CA GB undergone for laparoscopy guided biopsy only and operable patient undergone for radical surgery for cancer gall bladder. Statistical analysis done with chi-squared test and Fisher’s exact test. Result: 80 Patient with radiological suspicious case for carcinoma gall bladder taken for diagnostic laparoscopy. 16(20%) patient who was operable radiologically, diagnosed as inoperable on diagnostic laparoscopy. 16(20%) patient was operable on both diagnostic laparoscopy and radiologically. 48 (60%) patient was inoperable in both diagnostic laparoscopy and radiologically. Conclusion: Gallbladder cancer is an aggressive malignancy, and a high proportion of patients have advanced-stage disease at presentation. Over the past several years, incidental diagnosis after cholecystectomy for presumed benign disease has increased and is now the most common reason for presentation. Diagnostic laparoscopy with complete resection is the treatment of choice in patients with localized disease; however, radiologically occult DD is found at diagnostic laparoscopy in a subgroup of these patients (20%). A number of prior studies have shown that laparoscopy is an effective staging tool for many abdominal malignancies, particularly those of hepatopancreatoabdominal origin, which include a high proportion of occult metastatic disease that can be detected laparoscopically.
Abstract Id: YUGP3102
Robotic Assisted Neck Dissection – A Prospective Assessment Of Feasibility And Oncological Safety
Presenter - Dr. Kalyan Chakradr
Co-author - Dr.Rishi Khosa, Dr.Sourabh Sharma, Dr.Amol Padegaonkar

INTRODUCTION Elective neck dissection in clinically N0 neck of oral cavity squamous cell carcinoma (SCC) provide pathologically proven nodal stage, which helps in determining whether adjuvant therapy is required. Conventional neck dissection was accomplished with the adoption of a trans cervical scar which in most cases results in Introduction of robotics in head and neck surgery has facilitated access to neck using less cosmetically obtrusive incisions. The aim of the study is to evaluate the surgical feasibility and oncologic safety of RAND which is expected to maximize the post treatment cosmesis and functional outcome in carcinoma of oral cavity. MATERIALS AND METHODS A prospective analysis of thirty-nine patients diagnosed with Squamous Cell Carcinoma(SCC) of oral cavity with clinically negative neck who underwent elective robotic assisted neck dissection at Kokilaben Dhirubhai Ambani Hospital, Mumbai between July 2015 and June 2017 was done. Patients clinical information, surgical records (Time for working space creation, Direct vision time, Robotic console time), amount and duration of drainage, length of hospital stay, number of retrieved lymph nodes and complications were assessed. RESULTS Average time required for working space creation was 38.40 minutes. Mean Direct Vision time for dissection was 53.56 minutes and total mean Non-Robotic time was 92.36 minutes. Mean operating time at robotic console was 114.02 minutes. The average total operating time was 206.38 minutes. Average Blood loss was 143 ml. per patient. Mean duration of drain placement was 4 days. Average duration of hospital stay was 6.9 day. Average number of nodes retrieved per case was 15.56 nodes. Three patients have developed necrosis of skin flap in retro auricular region of which two were managed conservatively and one required surgical intervention. Three patients had palsy of marginal mandibular nerve in postoperative period. On evaluation for Disease status during Follow Up, 34 patients were found to have locoregional control of disease, 1 patient (4.16%) had in field recurrence which was managed by curative RT, 2 patients (8.33%) developed contralateral nodal recurrence which was managed by surgical resection and adjuvant RT, 1 Patient (4.16%) developed second primary in opposite buccal mucosa, 1 patient (4.16%) developed distant pulmonary metastasis. CONCLUSION The paradigm shift from trans cervical incision to the retro auricular incision in neck surgery with the application of robotics will open a new era of minimally invasive head and neck surgery. This approach was feasible and safe, with satisfactory cosmetic results for patients with cN0 oral cavity SCC. Longer operation time remains the drawback of this procedure. However, the surgical morbidity and oncologic validation of the procedure should be verified with further prospective clinical studies with longer follow-up periods.

Abstract Id: YUGP3105
Significance Of Preoperative Serum C-Reactive Protein As An indicator Of Malignant Potential In Oesophageal Carcinoma
Presenter - Dr. Amit Patil, Dr. Sourabh Sharma, Dr. Amol Padegaonkar

INTRODUCTION Serum C reactive protein is an acute phase reactant and a known indicator of malignant potential of tumour. Preoperative serum C-reactive protein (CRP) levels have been shown to be of prognostic significance in patients with advanced esophageal carcinoma. The aim of the present study was to examine the relationship between clinicopathological status and preoperative C-reactive protein concentration in patients undergoing resection for oesophageal carcinoma. MATERIALS AND METHODS Fifty-two patients with oesophageal carcinoma who had been treated by oesophageal resection and reconstruction with gastric conduit from December 2015 to March 2017 were evaluated. Preoperative serum CRP was measured, and the relation between the elevation of serum CRP and the clinicopathological factors and prognosis of the patients was investigated. RESULTS The preoperative serum CRP concentration was within the normal range (< 5 mg/dL) in 32(64%) patients. Elevated serum CRP levels (>5mg/dl) was seen in 20 (36%) patients. 17 patients with a CRP > 5 mg/dl had Tumour staging of T3/T4 and 77% of patients in the group with elevated CRP levels had metastatic spread to lymph nodes. Thirty-one patients received neoadjuvant therapy before surgery. of the 31 patients 23 patients had CRP level <5mg/dl. Of 8 patients with elevated CRP, 6 patients (75%) had T3/T4 tumours and 75% of patient’s nodal metastasis. Of 21 patients who underwent primary surgery elevated CRP level was seen in 12 patients. Of 12 patients with elevated CRP levels 91% of patients had tumour staging of T3/T4 and 90% of patients had nodal positive disease while only 50% of patients had nodal positive disease in patients with normal CRP levels. The tumour stage(T3, T4) and the proportions of lymph node metastasis were significantly larger in patients with preoperative elevation of serum CRP than in patients without preoperative elevation of serum CRP (85% versus 28.1; P .0.001, and 77% versus 38%, P .0.001, respectively). During follow up 6 patients developed locoregional recurrence, 5 patients were detected with distant metastasis and 2 patients died due to disease. Of 11 patients who developed recurrence during the follow up 8 patients had elevated preoperative serum CRP. CONCLUSION In conclusion, the preoperative elevation of serum CRP can be a simple and useful marker for evaluating the malignant potential of the tumours in oesophageal carcinoma.

Abstract Id: YUGP3108
Case Of 20 Yr Old Asps - A Rare Abbreviation
Presenter - Dr. Sunit Lokwani
Co-author - Dr Shashidhar V.K., Dr Manjunath N.

Full Title: CASE of ASPS: A RARE ABBREVIATION Article Type: Case Report
Keywords: ASPS, Alveolar Soft part Sarcoma, Lung Metastasis, Thigh Swelling ABSTRACT Alveolar soft part sarcoma (ASPS) is a rare, distinctive sarcoma, typically occurring in young patients. The disease runs a relatively indolent clinical course, wherein the prognosis is poor and is often characterised by late metastases. Since its formal description by Christopherson et al at Memorial Sloan Kettering Cancer Center, New York, USA, ASPS has been the subject of considerable interest for pathologists and clinicians, owing to its unique microscopic features, uncertain line of differentiation and unpredictable clinical behaviour. In the past several years, our understanding of the genetic events underlying the pathogenesis of ASPS has greatly increased. It is usually seen in young patients of < 30 years of age though there is an age range of 0-74 years. Most of the patients are young females. It usually occurs in extremities specially thigh, buttock, oral cavity, pharynx including tongue, mediastinum, sometimes from pulmonary vein, stomach, retroperitoneum, uterus, vagina, and orbit. The most common site of the tumor is lower extremities in adults[8], representing about 60% of ASPS cases. It is a very vascular tumour and bruise is usually present. Local recurrence rate is 20-33% and the tumor is known to have late recurrences. Incidence of metastasis is 66% & the most common metastatic sites are Lung, Bone, Central Nervous System and Liver. Despite the occurrence of metastases in up to 79% of patients, 5-year overall survival rates range from 45 to 88%. Here we present a case of a 20 year old girl, with thigh swelling since 1 year, with associated symptom of shortness of breath. Clinically, she had a diffuse swelling over the lateral aspect of left thigh, 14cms below the Anterior superior iliac spine and 40 cms in circumference. Swelling was firm, non mobile, fixed, smooth surface and non tender. Inguinal lymphadenopathy was present on both sides, measuring approx 1x1 cm. Investigative evaluation showed a Soft tissue Space Occupying Lesion in Lateral compartment of thigh involving the vasti on Contrast Magnetic Resonance Imaging. An X-ray and a Computed
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Tomography scan of the chest showed multiple nodular opacities in both lungs, pointing to a metastatic disease. A biopsy of the swelling was carried showed tumor cells arranged in nesting and organoid pattern. The cellular nests were separated by sinusoidal vascular channels lined by flattened epithelium. The nuclei were vesicular with prominent nuclei and no mitotic figures were seen. Based on the above stated findings, a diagnosis of Alveolar Soft Part Sarcoma was made. On Immunohistochemistry, tissue showed PAS positivity with non immunoreactive score for CKc, Vimentin, S100, Desmin and myogenic stains, thus, confirming the diagnosis. Following the above immunohistochemical confirmation, post literature search & after Expert discussion and consultation, plan was made to keep the patient on surveillance and close follow up. As this is a rare presentation, there are no standard guidelines for the management of this subset of Sarcoma cases. Surgical management has some role but no role of chemotherapy has been documented and most of the cases were kept on surveillance. We report this case of ASPS with Pulmonary mets, continued on surveillance management.

Abstract Id: YUGP3112
Role Of Video Assisted Thoracoscopy Surgery (Vats) In Esophageal Cancer
Presenter- Dr. Bishwanath Tiwary
Co-author - SANJEEV SINGHAL, PANKAJ K ARORA, SHIRISH K MARBATE

Title: Role of video assisted thorascopy surgery (VATS) in esophageal cancer
Introduction: Radical esophagectomy is one of the most effective means for the treatment of esophageal cancer. In conventional surgery, resection of the esophagus is conducted by thoracotomy, followed by dissection of the lymph nodes around the esophagus and conduit reconstruction. It is limited by extensive surgical injury, and a higher incidence of postoperative complications and mortality. Video-assisted thorascoscopic surgery (VATS) is minimally invasive surgical approach has ever since been increasingly recognized as it opened a brand new way for the surgical treatment of esophageal cancer. VATS is with better outcomes in terms of blood loss, postoperative pain intensity and postoperative recovery time compared with traditional surgery.

AIMS and OBJECTIVE Compare outcome in terms of blood loss, postoperative pain intensity and postoperative recovery time in VATS with open thoracotomy for esophagectomy. Material method: Study has been performed in NRCH New Delhi from March 2015 to June 2017 in 30 cases. In which 22 cases for open thoracotomy and in 8 cases for VATS. The patient is first positioned in the prone position with padded with silicon pad at proximal part of chest and at hip. With one-lung ventilation, after the right lung collapses, a 10-mm trocar port is created in the 7th intercostal space at the posterior axillary line. The thorascopy is placed to identify the presence of pleural adhesions and tumor invasion. CO2 is injected to maintain a pressure of 6mmHg. A 10-mm working port is created in the 4th intercostal space at the posterior axillary line, a 5-mm secondary working port in the 9th or 10th intercostal space at the subscapularis line. The locations of the above ports will depend on the specific anatomical characteristics and the site of esophageal cancer. Using an ultrasonic scalpel, the inferior pulmonary ligament is cut through to the pulmonary vein to expose the pleura on the surface of the esophagus along its course. After endoscopic separation, the azygos vein is dually clamped with a Hem-O-Lok mechanism, and cut. The normal lower segment of the esophagus below the cancer is divided. Lifted with the aspirator, the esophagus is gradually exposed upwards to the top of the chest cavity and downwards to the diaphragmatic hiatus. Meanwhile, the mediastinal lymph nodes are dissected (around the trachea, lung ligament, around the esophagus, below the carina, and along the left and right laryngeal nerves). A chest tube is inserted through the observation port, and a mediastinal drainage tube from the secondary working port. The operation ports are then closed one after another as the end of the VATS procedure. Then turn

the patient in supine position for laparotomy, left lateral neck incision and completion of esophagectomy and reconstruction of conduit.

Result: In the treatment of esophageal cancer, esophageal resection is one of the most effective means. In conventional surgery, resection of the esophagus is conducted under direct vision, including three approaches from the right thoracotomy, abdomen, and neck incision respectively. All of them are associated with extensive surgical injury, high risks of postoperative complications, and high mortality rate, especially significant impact on the respiratory function. The incidence of postoperative pulmonary complications is as high as 20% to 40%, one of the main causes of death in the perioperative period. VATS approach preserved the intact structure of the chest cavities with little impact on the respiratory function, which increased the postoperative recovery speed and significantly reduced the incidence of postoperative complications. Out of 8 patient in one case converted to open thoracotomy because of post chemo-radio adhesion. Conclusion: In summary, VATS is technically feasible and safe, which provides satisfactory short-term outcomes with less injury, quicker recovery and fewer postoperative complications. Further observation will be needed on its long-term outcomes.

Abstract Id: YUGP3114
The New And Innovative AECE Non-Tunneling Technique Of Port Insertion For Chemotherapy Infusion In Cancer Patients: A Single Centre Study In 155 Patients
Presenter- Dr. Hiamnshu Koyani
Co-author - Himanshu Bhartekumar Koyani, Abhishek Jain, Abhinav Deshpande

INTRODUCTION Infusion of chemotherapy via a subcutaneously implanted venous port system is an attractive alternative to infusion via peripheral veins, peripherally inserted central catheters or tunnelled catheters. Subcutaneous venous chest ports can be placed into jugular and subclavian veins using surface landmarks and imaging assistance. During placement of subclavian port, first needle is pierced through skin into vein. After aspiration of venous blood, guide wire is introduced, position of wire confirmed and skin incision is placed. Then dilator is introduced and catheter with chamber is placed. We are describing a different AECE Non Tunnelling Technique™ for port insertion.

MATERIAL AND METHODS Chemports were inserted in total 155 patients in a duration of around 1 year from July 17th, 2016 to July 20th, 2017. All the patients were of carcinoma breast. In this technique, first incision is placed in infraclavicular region. Skin and subcutaneous tissue is cut and reached up to pectoralis major muscle. Then port needle is introduced into subclavian vein from the incision and rest of the procedure is completed. RESULTS In our experience, AECE Non tunnelling technique is easy to perform, less time consuming and less cumbersome. In case of inadvertent subclavian artery puncture, the pressure can be applied more effectively on subclavian artery. In case of a failed subclavian vein puncture, the catheter can be inserted into the ipsilateral cephalic vein from the same incision. Complications during insertion were as follows: Inadvertent arterial puncture was seen in 10 patients. (6.4%) Hematoma and Cardiac arrhythmia was seen in 1 patient (0.6%). In 1 patient the catheter was lying in the mediastinal cavity immediately after insertion. That was removed immediately. None of our patients developed air embolism, pneumothorax, perforation (heart, major vessels) and pleural irritation. Complications due to catheter related issues were catheter dislocation in 3 patients(1.9%), catheter entrapment (AECEpinch-off syndrome™) in 1 patient (0.6%), catheter leakage in 1 patient(0.6%) , catheter thrombosis/occlusion in 4 patients (2.5%), migration or torsion of the port chamber in 2 patients(1.2%), infection in 1 patient(0.6%) and cutaneous necrosis in 0 patient. In 3 patients ports had to be removed due to blockage and migration in the chest wall. Vascular complications occurred in the form of left subclavian vein thrombosis in 1 patient (0.6%). CONCLUSION The AECE Non tunnelling technique of port insertion is a new and innovative technique which is very simple and easy to acquire. This does not result in complications.
Abstract Id: YUGP3118

A Rare Presentation Of Bilateral Testicular Plasmacytoma: A Case Report And Literature Review.
Presenter- *Mr. Kazi Iftekhar Uddin Ahmed*
Co-author - Ishrat Sultana, ,

Introduction: Plasmacytoma is a rare plasma cell neoplasm. Extramedullary plasmacytomas are commonly found in the head and neck region. They rarely occur in the testis, and are commonly associated with concurrent multiple myeloma at the time of diagnosis. Isolated plasmacytoma of the testis is very rare, with few cases reported worldwide. Case presentation: A 60-year-old Bangladeshi man presented with a painless bilateral testicular mass treated by orchietomy. After histopathological examination it was proved as plasmacytoma. All other investigations targeting multiple myeloma were negative. He is now on chemotherapy for treatment of his disease.

Conclusion: Isolated plasmacytoma of the testicle is a rare cause of testicular mass, and is seldom reported in the literature. Patients with this disease require careful monitoring because of their high risk of progression to multiple myeloma. In case of diagnosing an older patient presenting with bilateral testicular swelling, plasmacytoma should be kept in mind. Author details: 1. Consultant , Oncology, Mymensingh Medical College Hospital. Mymensing, Bangladesh. 2. Registrar, Oncology, Delta Hospital Limited. Dhaka, Bangladesh.

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Abstract Id: YUGP3120

Comparison Of Dosimetry And Acute Toxicities In Head And Neck Cancer Patients Treated With Imrt With Helical Tomotherapy.
Presenter- *Dr. Yashawini BR*
Co-author - Dr Kumara Swamy, ,

PURPOSE: To compare dosimetry and acute toxicities in Head and Neck Cancer patients treated with IMRT and Helical Tomotherapy.

OBJECTIVES: Primary Objectives: a) To compare dose to organs at risk (Spinal cord and Parotids) and dosimetric parameters between IMRT and Helical Tomotherapy in Head and Neck Carcinomas. b) To compare overall treatment time, acute toxicities (skin, mucous membrane, salivary gland and hematological) during treatment between these two groups. Secondary objective: a) To assess the quality of life of patients between two groups.

MATERIALS AND METHODS: Thirty patients with histologically proven Squamous cell carcinomas of Head and Neck were treated with chemoradiotherapy, to a dose of 60-70Gray in 30-35 fractions. This study consists of 2 arms: IMRT arm and Tomotherapy arm. 15 consecutive patients treated under IMRT and 15 patients were treated under Helical tomotherapy, along with concurrent chemotherapy. PTV1 encompasses low risk PTV which receives 50Gy; PTV2 encompasses intermediate risk which receives 54Gy to 60Gy and PTV3 encompasses high risk PTV which receives 66-70Gy. After completion of planning, dose to the Organs at Risk (OARs) and targets were evaluated, and tabulated. Acute toxicities during radiotherapy were assessed using FACT questionnaire. RESULTS: On evaluation of plans we found that V95% in PTV1 is 91.82% for IMRT and 99.25% for Helical Tomotherapy. Similarly for PTV2, it is 96.85% for IMRT and 99.68% for Tomotherapy and for PTV3, it is 90.67% for IMRT and 99.73% for Tomotherapy. For PTV3, V110% is 0.11% for IMRT and 0.01% for Tomotherapy. Homogeneity index in IMRT arm is 0.285 and it is 0.206 Tomotherapy arm. Conformity index is found to be 1.04 for IMRT plans and 1.06 for Tomotherapy plans. When mean dose to contralateral Parotids is evaluated, it is 26.91Gy in IMRT arm and 25.97Gy in Tomotherapy arm. Max dose to spinal cord is better in tomotherapy (43.07Gy in IMRT and 34.41Gy in Tomotherapy).

Acute toxicities in both arms are comparable. CONCLUSION: There is statistically significant reduction in Spinal Cord maximum dose and point doses in Tomotherapy plans compared to IMRT. The decrease in Spinal Cord dose can increase the tolerance reserve which can be useful in dose escalation or re-irradiation if required. There is also decrease in contralateral Parotid doses (not statistically significant).

There is improvement in target coverage in tomotherapy plans than IMRT plans. Conformity index, homogeneity index, acute toxicities between two arms are comparable. Key words: Head and Neck Carcinoma, IMRT, Tomotherapy, Conformity index, Homogeneity Index, RTOG, OAR.

Abstract Id: YUGP3122

Radical Brachytherapy For Early Stage External Auditory Canal Squamous Cell Carcinoma: A Feasibility Study Using Plastic Ear-Bud As An Applicator
Presenter- *Dr. KANHU CHARAN PATRO*
Co-author - Dr Chira Ranjan Khadanga, MR E B RAJMOHON, DR P S BHATTACHARYYA

D Squamous cell carcinoma (SCC) of External Auditory Canal (EAC) is extremely rare. Although surgery followed by radio (chemo) therapy is the contemporary standard of care, radical radio (chemo) therapy has been successfully used as an anatomical as well as functional organ preservation modality. Radical Brachytherapy (BT) is a promising alternative in early stage SCC-EAC. We report our initial experience on the feasibility of using commercially available plastic ear-bud along with soft flexible ear-piece of stethoscope as a radioactive source career applicator of remote after-loading HDR Ir192. Keywords: Squamous Cell Carcinoma (SCC) External Auditory Canal (EAC) Plastic ear-bud, ear-piece of stethoscope

Abstract Id: YUGP3124

Nasolabial Flap For Reconstruction Of The Moderate To Large Defects Of Lips Following Cancer Resection
Presenter- *Dr. MANTHAN MERJA*
Co-author - DR. SHASHANK J PANDYA, DR. J. D. PATEL, DR. MEHUL PATEL

Introduction : The nasolabial flap, while a common flap for the repair of other facial defects, is an under-recognized option for the reconstruction of the lower lip defects after tumor resection. Methods : In this study we analysed retrospectively the utility of nasolabial flap for the reconstruction of moderate to large lower lip defect in 24 lower lip cancer cases (20 males and 4 females) who underwent excision of lower lip tumors along with neck dissection for lymph nodal clearance, for Squamous Cell Carcinoma lip, between 2013 and 2016 at GCRI, Ahmedabad. Results : This study analysed 24 patients of age ranging from 47 years to 85 years, with a follow up ranging from 6 months to 3 years. All the defects were reconstructed in a single stage. We achieved good lip seal and at least good oral competency. There was no flap necrosis in any case, and all the reconstructed lips preserved their height. 2 patients (8.3%) developed wound dehiscence which were managed well with conservative management and 1 patient (4.1%) developed an ocutaneous fistula (salivary leak) which later on required secondary closure after initial conservative management. No any patient developed microstoma or lip shortening. Conclusion : The nasolabial flap is a versatile, reliable local flap for reconstruction of medium to large size lower lip defects following excision of lip tumors, with good cosmetic outcomes and negligible donor site morbidity.

Abstract Id: YUGP3129

Clinical Outcome Of Imrt Vs 3dct In Head And Neck Cancer: A Retrospective Comparison.
Abstracts

**Presenter - Dr. Gopa Ghosh**
Co-author - Dr. Gaurav Gupta, Dr. Anupam Malviya,

**Introduction:** The transition from two-dimensional conventional radiotherapy (2D-RT) to three-dimensional conformal radiotherapy (3D-CRT) and further technological evolutions in the field of radiotherapy, led to the successful clinical implementation of intensity modulated radiation therapy (IMRT) which constitutes an evolution of 3D-CRT. The IMRT is in existence in clinical practice since 1995, resulting in a significant amount of clinical data from patients undergone this specific technique of radiotherapy owing to its related presumed clinical benefit. The IMRT technique gives the ability to create treatment fields with varying beam intensity by using inverse planning and optimization algorithms to treat irregularly shaped target volumes with extremely high precision whilst reducing the radiation delivered to the surrounding normal tissue and critical structures. The outcome in head and neck cancer. PARSPORT was the first institutional prospective trial comparing IMRT with conventional RT in Head and Neck cancer which showed reduction in severe xerostomia but no difference in non xerostomia related toxicity and 24 months follow up showed no difference in loco regional or overall survival Except for early T1.2 N0 stages, the prognosis for patients with oral cavity cancer (OCC) is dismal than for carcinoma in other sites of the head and neck (HNC). The aim of this study was to assess disease outcome in OCC (oral cavity cancer) following IMRT as compared to 3D-CRT. Aim: This retrospective study was designed to compare clinical outcome in terms of toxicity profile and local control (LC) of IMRT with Three Dimensional Conformal Radiotherapy (3D CRT) in head and neck cancer. Materials and Methods: Between January 2013 and July 2015, forty patients of carcinoma buccal mucosa and carcinoma alveolus were referred for post-operative (19) or definitive (21) radiation therapy by IMRT. 28 of the 40 patients (70%) presented with locally advanced T3/4 or recurrent tumor. Total radiation doses delivered were between 60-70 Gray @ 2 Gray/ fraction, combined with concurrent cisplatin based chemotherapy in 29 out of 40 (73%). Patient outcomes toxicities and local control were analyzed retrospectively from patient records. In addition, comparisons were performed between this IMRT cohort and a group of 42 conventionally irradiated (3DCRT) definitive or postoperative patients treated over the same period Results: The 3D-CRT group demonstrated significantly more acute toxic effects compared with the IMRT group in our analysis. Acute Grade 3 or greater toxic effects to the skin occurred in 5 of 40 (12.5%) patients in the 3D-CRT group compared with 3 of 40 (7.5%) patients in the IMRT group. Acute Grade 3 or greater toxic effects to the mucus membranes occurred in 23 of 40 (57.5%) patients in the 3D-CRT group and only 16 of 40 (40%) patients in the IMRT group. Statistically significant dysphagia development in 34 of 40 (85%) patients in 3D-CRT group compared with 23 of 40 (57.5%) patients in IMRT group, while statistically significant xerostomia developed in 29 of 40 patients in 3D-CRT group (72.5%) compared with 18 of 40 (45%) patients in IMRT group. Of all assessed treatment subgroups, local control (LC) rate was highest for patients treated with postoperative IMRT (89% LC at 2 years) followed by postoperative 3DCRT patients (79% LC at 2 years) and lastly poorest LC rates (43% and 32% at 2 years) were seen in definitively irradiated patients with IMRT and 3DCRT respectively. LC rate for T1 stage (83%, n = 6) was significantly higher, than that for T2-4 (LC 55%, n = 76) as expected. Conclusion: In our comparative study, IMRT was associated with a statistically lower incidence of Grade 3 or greater xerostomia, acute toxic effects to skin and mucus membranes than 3D-CRT. In addition, compared to 3D-CRT, IMRT had less feeding tube use during radiotherapy. After evaluation of this study it was observed that local control in oral cavity carcinoma following definitive IMRT was substantially lower than following post-operative IMRT with similar trend observed with conventional 3D-CRT too. Patients treated with IMRT as definite therapy were no better than those treated with 3D-CRT. However, higher local control rates of >85% were observed in OCC >Stage I with combined modality treatment, more so in the IMRT group. These findings suggest that a combined modality approach with definitive surgery and adjuvant radio-therapy preferably with IMRT may be the treatment of choice in stage II, III and operable stage IV OCC. Besides improved LC rates observed with IMRT, additional benefits of reduced late radiation related toxicities in the form of less xerostomia and osteo-radionecrosis supports its early implementation especially in the post-operative setting. CONFLICTS OF INTEREST: NONE Permission of study obtained : Yes

**Abstract Id: YUGP3135**

**Hypo-Fractionated Simultaneous Integrated Boost Vmat As An Alternative Modality To Conventional Vmat In The Definitive Treatment Of Head And Neck Cancer Â© A Prospective Randomized Study**

**Presenter - Dr. Rahshi S**
Co-author - Dr Bhaskar V, Dr Sanjeet Kumar Mandal, Dr Bhanumathy G

**Background:** In Head and Neck Squamous Cell Carcinoma (HNSCC), single modality treatment either surgery or radiotherapy for early stage and combined modality such as, surgery followed by adjuvant radiotherapy or concurrent chemo-radiotherapy for late stage are the standard of care. The sequential IMRT delivers the same fraction size (1.8 to 2 Gy) for all target volumes with successive field sizes reduction in midst of treatment using imaging modality to protect critical normal structures. Volumetric-modulated arc therapy (VMAT) is a dynamic arc based treatment technique for IMRT; combining simultaneously varying dose rate, gantry speed and the shape of the multi-leaf collimator aperture, thereby offering advantages of better plan in comparison to IMRT4. There are only limited experiences with VMAT technique for head and neck cancer in terms of treatment outcome and toxicity. However, there is a renewed interest in dose fractions larger than 2 Gy for curative radiotherapy. The outcome of several large fractionation trials, mainly involving head and neck tumors have clearly demonstrated the importance of a)acceleration, to improve local control. Aims and objectives: â€¢ To compare the response between patients with head and neck cancer treated with SIB hypo-fractionated VMAT and Conventional VMAT. â€¢ To compare acute toxicities in both the arms Methods and Materials: Between January 2016 to May 2017 â€¢ Study patients â€¢ Oropharyngeal, hypopharyngeal and laryngeal cancer patients planned for definitive radiotherapy with or without chemotherapy. â€¢ Number of patients for the study- 20 i.e 10 patients in each arm. â€¢ ARM A: SIB VMAT. Treatment dose is 66 Gy to 68.2 Gy (2.2 Gy/#) to gross disease and 54 Gy to 55.8 Gy to subclinical disease in 30-31#. â€¢ ARM B: Con VMAT. Treatment dose is 50 Gy/25 Fr (2 Gy/#) to both gross & subclinical disease, followed boost dose of 20-22 Gy/10-11 Fr to gross tumor disease. SHORT RESULTS AND CONCLUSIONS: SIB VMAT shows a potential towards superior outcomes with reduced overall treatment time when compared to conv VMAT in the definitive treatment of head and neck cancer.

**Abstract Id: YUGP3137**

**Radiation Induced Chromosome Aberrations-Insights Gained From Hospital Based Study On Head And Neck Cancer Patients Undergoing Rt**

**Presenter - Dr. Rashi Kulshreshta**
Co-author - DR RASHI KULSHRESTHA, DR A.K. RATHI, DR SEEMA KAPOOR

**Aims & objectives: The current study was undertaken to estimate aberrations induced in chromosomes of peripheral blood lymphocytes of patients of Head & Neck Squamous Cell Cancer undergoing radiotherapy by measuring the frequency of Dicentrics & Micronucleated cells (CBMN) in blood. Materials and methods: 30 patients of Head & neck cancer were irradiated with a daily fraction of 2 Gy, consecutively for 5 days every week for 6-7 weeks in radical/ adjuvant settings. Aberrations were measured in these patients by analyzing blood samples taken before starting treatment (day 0),
Abstract Id: YUGP3143

Comparison Of Treatment Techniques In Craniospinal Irradiation
Presenter - Ms. Sajini Kurup
Co-author - Dr. Abhijit Mandal, Radhika V Kartha, Ankur Maurya

ABSTRACT: Comparison of different techniques for Craniospinal Irradiation Sajini S Kurup, Abhijit Mandal, Radhika V Kartha, Ankur Maurya, Chhape Ram, Satish Devangan, Satyajit Pradhan, U P Shahi, Lalit M Aggarwal Department of Radiotherapy and Radiation Medicine, Institute of Medical Sciences, Banaras Hindu University Varanasi â€“ 221005 Purpose: To compare conformity index, homogeneity index, dose to OAR in craniospinal irradiation when treated by 3D-CRT and RapidArc techniques. Material and methods: Six patients of craniospinal irradiation in the pediatric age group were taken who were treated by different methods during October 2016-June 2017 by a 6MV Linac â€“ Photon beam (Unique performance, Varian). The analysis was performed for each treatment technique and were compared with each other. Field matching technique was used in 3D-CRT plan using the field alignment tool available in the treatment planning system. Each plan was compared on the basis of the conformity index, homogeneity index and dose to OAR using the treatment planning system Eclipse â€“ version 11.0.31. The patients were treated by conventional regime in which the prescribed dose was 36 Gy in 18 fractions (200 cGy per fraction) and 36 Gy in 20 fractions (180 cGy per fraction) in first phase of the treatment respectively. Result: The analysis was carried out for the patients in the age group of 4 to 15 years comprising two female and four male patients. The conformity indexes (CI), homogeneity index (HI) and body mean dose of the plans generated were as shown in the table below. CI HI Body Mean Dose RapidArc 1.023 1.14 1370.78 cGy 3D-CRT 1.21 1.12 1346.95 cGy The OAR doses in RapidArc and 3D-CRT was found to be Right kidney (1309 cGy vs. 1250.2 cGy), Left Kidney (1190.6 cGy vs. 1278.1 cGy), right lung (1192.85 cGy vs. 997.36 cGy), left lung (1141 cGy vs. 1044.68 cGy), comparable and within tolerance. Conclusion: More conform and homogeneous dose distribution to the target volume was observed in RapidArc as compared to conventional planning with comparable dose to the normal structures. But it is seen that the body mean dose in Rapid Arc plans (1370.78 cGy) were comparatively higher than the body mean dose in 3D-CRT plans (1346.95 cGy). The field alignment method (fully computerised) used in 3-D-CRT also resulted in an effective method in treating CSI as it is simple to execute with minimum setup error.

Abstract Id: YUGP3145

Patient Specific Qa Tests For Imrt And Vmat Using Different Dosimetric Tools: A Comparative Study
Presenter - Ms. Radhika V Kartha
Co-author - Dr. Abhijit Mandal, Sajini S Kurup, Ankur Mouriya

ABSTRACT: Patient specific QA tests for IMRT and VMAT using different dosimetric tools: A comparative study Radhika V Kartha, Abhijit Mandal, Sajini S Kurup, Ankur Mouriya, Chhape Ram, Satish Devangan, Satyajit Pradhan, Sunil Chaudhary, Uday P Shahi, and Lalit M Aggarwal Department of Radiotherapy and Radiation Medicine, Institute of Medical Sciences, Banaras Hindu University, Varanasi (UP) â€“ 221005 Aims and Objectives: Purpose of this study is â€“ To compare the pre-treatment patient specific quality assurance (QA) results obtained with two dosimetric tools - Electronic Portal Imaging Device (EPID) and MatriXX Evolution (2-D ion chamber array) by evaluating gamma index (gamma), dose difference (DD) and distance-to-agreement (DTA) for different head and neck cancer patients treated by IMRT/VMAT. â€“ To find the accurate dosimetric tool among these for the patient specific QA by seeing their passing rates. Material and Methods: In this study, ten Carcinoma head and neck patients were taken who were treated by IMRT/VMAT during April 2015 to June 2017 by a 6MV LINAC â€“ Photon beam (UNIQUE performance, Varian). The plans were created on Eclipse treatment planning system (version 11.0.31) using Anisotropic Analytical Algorithm (AAA). Patient-specific QA was carried out by generating verification plans for each patient followed by the irradiation onto an ion chamber array (MatriXX Evolution) and an electronic portal imaging device (EPID). Analysis of MatriXX Evolution was carried out by myQA® software (version 2.5.10.0) provided by IBA Pvt. Ltd. and that of EPID was done with the in-built calculation model (Portal Dose Image Prediction [PDIP]) provided by Varian available in the TPS. Gamma analysis of measured dose distribution with the TPS generated dose distribution for all the plans was carried out using a passing criterion of gamma ? 1, dose difference (DD) ? 3%, distance-to-agreement (DTA) ? 3 mm. The passing rates of the two dosimetric tools were compared. Result: Passing rates ( ? 95% Â± standard deviation), average gamma value and the average dose difference between the TPS generated dose distribution and the measured dose distribution by both the dosimetric tools (MatriXX Evolution and EPID) were obtained and given in Table 1. For all the plans, an average difference of 0.1 for the ? index and 0.77 % for DD were observed between the two dosimetric tools. All the results obtained were under tolerances (DD ? 3 %, DTA ? 3 mm, ? ? 1). Table.1 Comparison between MatriXX Evolution and EPID Dosimetric parameter MatriXX Evolution EPID Passing rate 97.88% 95.23% SD 0.35% 2.70% Gamma 0.46 0.36 DD 1.28% 2.05% DTA 0.79 mm NA * STD: Standard deviation *EPID does not provide the value of DTA. Conclusion: MatriXX Evolution results are in good agreement with the TPS generated values than the values measured by EPID for all plans. However, Gamma value with both the systems is more or less same. Therefore, our study suggests that QA results and its consistencies depend on the choice of dosimetric tool. EPID can be used as a routine QA tool since it is a time saving method whereas MatriXXEvolution can be used for absolute dosimetry.

Abstract Id: YUGP3147

A Retrospective Analysis Of Set Up Errors In Intensity Modulated Radiotherapy (Imrt) Of Head And Neck Malignancies In Correlation With Planning Target Volume (Ptv) Margin
Presenter - Dr. Pettikota Mathasan Basha
Co-author - Dr R. Ramesh Reddy, Dr KVL Anusha, Dr Pranabandhu Das

Background: IMRT for Head and Neck cancers is gaining importance because of its ability to spare normal organs efficiently while preserving the therapeutic outcome. For this a rigid patient set up is needed. A PTV margin of 0.5 cm is usually given around the Clinical Target Volume (CTV) for compensating movements during intermediate patient position reproducibility in our institute. This position is checked regularly with a daily Cone Beam CT (CBCT) for first 3 days followed by weekly CBCT during the treatment period. Materials & Methods: From June 2015 to August 2016 all the head and neck squamous cell cancers treated by IMRT are included in the study. Weekly CBCT are reviewed for corrections in X, Y, and Z co-ordinates denoting for Horizontal, Longitudinal and Vertical planes is noted. A mean of all the shifts were obtained and analysed. Results: A Total of 75 patients were treated during this period. 664 CBCTs are reviewed. On analysis, mean X, Y, and Z of 74 patients (98.66%) were within 0.5 cm. For 61 patients, all the mean errors were within 0.3 cm (1.33%). Mean displacement was 0.19 cm with a SD of 0.08 Conclusion: 0.5 cm PTV margin to CTV was well adequate and with further strict immobilisation, it can be further reduced to 0.3 cm, at least in selected cases.
Abstract Id: YUGP3149

Prospective Evaluation Of Acute Toxicity And Quality Of Life Of Patients Undergoing Post Operative Chemoradiation In Oral Cancer.

Presenter- Dr. Cessal Kainickal
Co-author - Dr Cessal Thommachan Kainickal, Dr.Zahid, Dr.Rejinsh Ravi Kumar

Purpose/Objectives: Surgery followed by adjuvant treatment is the standard of care in locally advanced oral cancers. Postoperative chemoradiation has shown improved results in patients with high risk features such as margin positive disease and extra capsular spread(ECS). However it is associated with significant toxicity in majority of patients. This study was carried out to evaluate acute toxicities and quality of life of patients undergoing postoperative chemoradiation (CRT) in oral cancer. Materials/Method: Between 1st March 2015 to 30th June 2016, 26 patients with locally advanced squamous cell carcinoma of oral cavity were included in the study. The post operative radiation(RT) dose was 60-66 Gy at 2Gy per fraction to the tumor bed and high risk nodal region and 50 Gy to low risk nodal region. Cisplatin 80 mg/m2 q3 weekly was administered concurrently. Acute toxicities were evaluated using Radiation therapy oncology group (RTOG) criteria and National cancer Institute Common Terminology criteria for adverse events (CTCAE) version4. Toxicities were evaluated weekly during RT, and after completion of RT at one, two and three months. The quality of life of these patients was assessed using European Organization for Research and Treatment of Cancer (EORTC) QLQ30 and QLQ H&N 35 before RT, at the time of completion of RT, one and three months after completion of RT.

Results: Median age was 52 years. Twenty five patients had ECS and one patient had margin positive disease. All patients completed the planned course of radiotherapy. Six(23%) patients had radiotherapy interruptions ranging two days to ten days due to various reasons. Only 11(42%) patients completed the full course of chemotherapy. Grade 3 mucositis was observed in 42% of the patients and Grade 3 skin reaction was seen in 8% of patients. Nasogastric tube feeding was given in 65% of patients. Seven (27%)patients had grade 2 anemia and two patients (8%) had grade 2 Neutropenia . None of the patients developed Grade 4 toxicity. Most of the quality of life parameters were significantly deteriorated by CRT in the immediate period which improved by three months following treatment. Conclusions:Post operative CRT is associated with severe morbidity. It is feasible, but selection criteria should be stringent and patient should be properly monitored during and immediately following treatment. Efficacy results are pending.

Abstract Id: YUGP3151

Prospective Evaluation Of Acute Toxicity And Pathological Response Of Patients Treated With Platinum Based Induction Chemotherapy In Locally Advanced Oral Cancer.

Presenter- Dr. Cessal Kainickal
Co-author - Dr.Cessal Thommachan Kainickal, Dr.Jobin Jose, Dr.Rejinsh Ravi Kumar

Purpose/Objectives: Surgery followed by adjuvant treatment is the standard of care. Induction chemotherapy has minimal role in operable disease. Borderline operable or Inoperable disease may benefit from Induction Chemotherapy. Incorporation of Taxanes resulted in increased efficacy in addition to Cisplatin and 5FU. Materials and Methods: Between February 2016 and August 2016, Sixty two patients received Induction chemotherapy for locally advanced oral cancer. Patients received TPF or PF. Primary end points were Acute toxicity and Response rate. Acute toxicity was evaluated during each cycle using National Cancer Institute Common Toxicity Criteria . Results: Median age was fifty one years. Majority of patients were males(92%) . Tongue was the most common site (54.8%) followed by Gingivo-buccal complex (32.3%). Most of the patients were stage IV-A (79%), stage IV-B comprised (14.5%) and only (6.4%) were Stage III . Initially 48.3% (30/62) patients were operable, 38.7% (24/62) were borderline operable and 12.9% (8/62) patients were inoperable. 43.5% (27/62) received TPF and 56.4% (35/62) received PF . Three patients (11%) who received TPF developed grade IV neutropenia. Four patients (14.8%) treated with TPF developed Grade III mucositis. Two(3%) toxic death were present and both received TPF. None of the patients underwent surgical resection after Induction chemotherapy who were initially declared inoperable(8/62). Ro Surgical resection was possible in 54%(13/24) of borderline inoperable disease and 76.6%(23/30) of operable disease. Thirty six patients(58%) underwent surgical resection. None of the patients attained complete pathological response. Partial response was attained in 66.6 % (24/36). Conclusion: Acute toxicity was higher in patients treated with TPF. None of the patients underwent surgical resection after Induction chemotherapy who were initially inoperable. More than half of patients underwent surgical resection who were initially borderline operable. Two third of the patients attained partial pathological response.

Abstract Id: YUGP3153

Direct Monitoring Of Intraprostatic Motion Via Intrafraction Motion Management For Prostate Hypofractionated Vmat Irradiation: First Clinical Results In Malaysia

Presenter - Ms. Stephanie Loo
Co-author - Mohd Khairul, Nur Idalia, Ida Suzanah

Background: In this study we report the first clinical results in Malaysia of monitoring the prostate movement during the VMAT delivery through the use of Intrafraction Motion Management (IMM) system (Varian Medical Systems). The software made automatic marker detection in prostate cancer patients with fiducial markers (FMs) feasible with auto beam hold should there be a discrepancy in the FMs positioning. Method: Imaging data of patients with prostatic carcinoma treated with RapidArc technique on a Truebeam STx linear accelerator were evaluated. Patients were positioned supine in customised vacuum bags and adhered stringent bowel preparation and bladder protocols. Each patient had 3 implanted gold FMs and underwent a hypofractionation regimen of 70 Gy in 28 fractions. 2D kV images were automatically acquired at 8-second intervals during treatment delivery via â€“triggered imagingâ€™. The actual position of the FMs was directly compared with their expected position represented by a green circle on the acquired image. Results: Treatment time with IMM was assessed and compared to non-IMM. Retrospective analysis of the average displacement of the markers from the 2D kV images was tabulated in the superior-inferior, antero-posterior and lateral directions. Images acquired from the lateral dimension are difficult to analyze retrospectively due to overlapping of FMs. Conclusion Verification of intrafraction prostatic motion is now possible with simultaneous treatment delivery. However, continuous assessment is required should there be future plans for margin reduction or dose escalation where late rectal toxicity is at risk.

Abstract Id: YUGP3155

Retrospective Review Of Buccal Mucosal Carcinomas Treated With Surgery Followed By Adjuvant Therapy Or Observation Â€“ Impact Of Pathological Factors On Survival

Presenter - Dr. Sarthak Tandon
Co-author - Dr Munish Gairola, Dr Parveen Ahlawat, Dr Inderjit Kaur

Background: The impact of adjuvant therapy tailored to pathological factors has been well established for head and neck cancers. However, with better understanding of tumour biology, new AJCC TNM 8th edition, newer treatment modalities and techniques, it becomes important to re-evaluate these factors and assess survivability accordingly. Method: A retrospective review of 100 patients with diagnosed squamous cell carcinoma (SCC) of buccal...
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mucosa from July 2005 to March 2012. All patients had surgery followed by assessment for adjuvant therapy. Survival analysis was performed using Kaplan-Meier, univariable and multivariable Cox regression model. Result: With a median follow-up of 6.35 years, the 3 year OS and 5 year OS was 68.5% and 61.5% respectively. Out of 100 patients, 71 patients received adjuvant radiotherapy and 16 patients received concurrent chemotheraphy. Sixty seven patients belonged to stage I and II whereas 33 patients belonged to stage III and IV. Univariate analysis showed significantly poor overall survival for patients with higher grade, higher pT, pN and clinical stage, PNI, LV1 and margin positivity. On multivariate analysis, patients with PNI positive disease (PNI absent: HR 0.496, 0.277 – 0.886, p = 0.016), node positive (N+ HR: 2.359, 1.055 – 5.273; p = 0.036) and margin positivity (for close and positive; HR 2.084; 1.059 - 4.102; p = 0.034) had significantly worse survival. Conclusion: PNI positivity, node positivity and margin positivity adversely affects the outcome of the survival significantly in a case of SCC buccal mucosal carcinomas.

Abstract Id: YUGP3165
Urinary Bladder Filling As A Predictor For Reducing Radiation Induced Acute Toxicities During External Beam Radiotherapy Of Carcinoma Of Uterine Cervix: A Pilot Study
Presenter - Dr. Hemanth Kumar
Co-author - Dr.P.Mathan Basha, Dr.R.Ramesh Reddy, Dr.Pranabandhu Das

Background:Carcinoma cervix is the most common malignancy among women of India. Radiotherapy has shown high success rates both in terms of local control and survival rates. Toxicities due to normal pelvic organ irradiation is causing significant morbidity during and after treatment. Acute toxicities like gastrointestinal, genitourinary,haematological and skin reactions are common. With the use of more conformal treatments like 3D-CRT, acute genitourinary and gastrointestinal toxicities can be reduced which in turn depend largely on bladder filling during treatment. Materials and Methods:In this study 13 patients were recruited in each arm. Arm A= 2-D conventional EBRT planning without bladder protocol and in Arm B= 3-D CRT planning with bladder protocol. Acute complications such as gastroenteritis and cystitis were documented as per RTOG toxicity criteria during the course of EBRT. These complications were compared with reference to urinary bladder filling by bladder protocol between both arms. Results:Acute genitourinary reactions (cystitis) grade 1 has been shown by 7(53.8%) in Arm A and 6(46%) in Arm B. 3(23%) in Arm A and 1(7.6%) patient in Arm B had grade 2 reactions. 3(23%) patients in Arm A and 1(7.6%) patient in Arm B had grade 3 reactions. Grade 4 reactions are not observed in both Arms. Acute gastroenteritis grade 1 had been shown by 3 (23%) in Arm A and 6(46%) in Arm B. 5(38.4%) in Arm A and 2(15.3%) in Arm B had grade 2 reactions. 5(38.4%) in Arm A and 2(15.3%) in Arm B had grade 3 reactions. Grade 4 reactions are not observed in both arms. Conclusion: From this study, it can be concluded that over all incidence of acute GU and GI complications are less with bladder protocol compared to no bladder protocol during external beam radiotherapy of carcinoma cervix with radical intent.

Abstract Id: YUGP3167
Clinical Advantage In Post-Mastectomy Radiation Therapy Without Using A Bolus On Chest Wall
Presenter - Mr. Shintaro Shibata
Co-author - Masahiko Okamoto, Hiroki Kiyohara, Hiroyuki Kato

Objective. To evaluate efficacy and toxicity of post-mastectomy radiation therapy (PMRT) without using a bolus on chest wall. Methods. Consecutive 63 patients with breast cancer who received PMRT without using a bolus on chest wall between October 2011 and December 2016 were analyzed. Fifty-three patients received chemotherapy before PMRT. Total dose for initial target was 50 Gy in 25 fractions with 6 MV X-rays, and 4 resected margin positive patients received 9 Gy in 3 fractions with electron beams as boost irradiation for possible residual lesion. Results. All patients completed the treatment and the median follow-up since the initiation of PMRT was 22.3 months (range, 5.16–58.7 months). At the time of analysis, 1 patient (1.6%) had a local recurrence, 1 patient (1.6%) had a supraclavicular lymph node recurrence, and 5 patients (7.9%) had died of breast cancer. The 2-year estimated overall survival, local control and disease-free survival rates after PMRT were 86.9% (95%CI, 71.9%–94.5%), 98.4% (95%CI, 89.6%–99.8%) and 83.9% (95%CI, 70.6%–91.9%), respectively. Seven patients developed Grade 2 dermatitis as acute toxicities. In late toxicities, none of the patients developed Grade 2 or higher dermatitis and only 1 patient developed Grade 3 radiation pneumonitis. Conclusion. PMRT without using a bolus on chest wall reduced severe toxicities without compromising local control.

Abstract Id: YUGP3175
Stereotactic Body Radiotherapy With Temporary Organ Displacement
Presenter - Dr. ROBIN KHOSA
Co-author - Dr Sapna Nangia, Dr Vijay Singh Rawat, Mr Sanjay Rout

Stereotactic body radiotherapy (SBRT) is increasingly being recognized as a treatment modality for achieving better cure rates/palliation. Tolerance to organs at risk is the most crucial determining factor in defining dose to the target structure. Routine measures to decrease organ at risk (OAR) toxicity includes a good immobilization and daily image guidance with small planning target volume margins. Despite these measures proximity of critical structures like bowel or kidney may limit doses to target structures, resulting in poor local control rates. We present a technical innovation used to treat a case of inoperable sacral fibrosarcoma in which rectum and bowel were very close to the sacrum. Conventional radiotherapy in such cases is associated with average response rates with high toxicity to adjacent rectum. SBRT in such cases is increasingly being recognized as treatment of choice. A routine SBRT plan would have resulted in doses to rectum much higher than acceptable limits. Artificial displacement of rectum away from sacrum was the only possible means of safely delivering such high doses. Radiotherapy planning CT scan was done in prone position. A plastic catheter was inserted in the space between sacrum and sigmoid colon under CT guidance. An artificial space was created by injecting normal saline mixed with small amount of contrast in same position. About 4-5 cm separation was targeted. Treatment dose of 30 Gy in 3 fractions was planned with daily cone beam CT (CBCT) scan prior to delivery. Since normal saline is absorbed within minutes, on table fluid mixture with contrast was injected to achieve a separation of 4-5 cm. The same was confirmed on CBCT scan. The same exercise was repeated prior to delivery of each session. Dosimetric parameters were achieved with doses to rectum and lower bowel much lower than acceptable tolerance limits.

Abstract Id: YUGP3177
ÅEÖCutaneous Horns ÅÈ Just The Tip Of An Iceberg Of Oral CancerÅÈ
Presenter - Dr. PRIYANKAR SINGH
Co-author -

Cutaneous horn is a bulging mass of keratin and is also called as Comu Cutaneum. It presents itself as a circumscribed, conical, hyperkeratotic dense protrusion with epithelial cornification above the skin surface simulating the horn of an animal, in response to a wide range of underlying benign and malignant pathological changes. It actually results from the extension of another lesion, such as a Wart, Seborrheic Keratosis, Actinic Keratosis, Dermatofibroma, Keratoacanthoma, or Carcinoma (including basal and squamous cell cancers). The horn occurs commonly in sun exposed areas or areas...
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Prone to actinic radiation, like ears, face, scalp, arms, and dorsal hands but can also occur in areas not exposed to sunlight like penis, lower lip mucosa and nasal vestibule. Cutaneous horn is usually thick, firm, and pincutculated and its shape can vary from straight to curved and twisted. Its size may range from a few millimeters to several centimeters in length and colour from white or yellow to brown or black. Though benign, a cutaneous horn holds the potential to be premalignant or malignant. An increased risk of malignancy is noted if the lesion is tender at the base, larger in size, occurring in an older individual, or occurring in a patient with other cancerous lesions. Cutaneous horns in association with a malignant or premalignant base are more common in patients with a history of other malignant or premalignant lesions. Though morphologically similar to horns in animals human horns are histologically very different as they are not composed of superficial hyperkeratotic epidermis, dermis, and centrally positioned bone as seen in animal horns. In past, very less cases of cutaneous horn have been reported and all of these had an associated tumor at its base. Due to frequent association of malignant or premalignant changes at the base, cryosurgery is not suggested for the treatment of cutaneous horns as it doesn’t ensure full thickness excision of the tumour and also is not appropriate for the treatment of squamous cell carcinomas. Therefore, adequate therapy requires wide excision with a tumour-free margin of at least 1 cm, particularly in the facial region where the incidence of malignancy is higher. So a Cutaneous horn is just the tip of an iceberg of a tumor with malignant potential.

Abstract Id: YUGP3183
Prospective Analysis Of Thyroid Stimulating Hormone Levels In Patients With Well Differentiated Thyroid Carcinoma Post Thyroidectomy With A Quality Of Life Analysis
Presenter - Dr. Abhijit Das
Co-author - Dr Anis Basha, Prof Arvind Krishnamurthy.

Introduction: Well differentiated thyroid cancers have become one of the fastest growing malignancies in the world including in India. The mainstay of current medical treatment for well differentiated thyroid cancers is surgery that entails a total thyroidectomy, which is followed by radioactive iodine therapy in intermediate and high risk patients. Radioiodine uptake is Thyroid Stimulating Hormone (TSH) dependent, traditionally 4 to 6 weeks is the withdrawal period after surgery for an optimal uptake. Various studies have demonstrated that during this period majority of patients develop the distressing symptoms of hypothyroidism with have an adverse impact on the quality of life. Aim: The objective of this study is to ascertain the trend of rise of TSH levels in blood during the withdrawal period prior to the performance of Iodine-131 diagnostic scans. Further, the study also aimed at studying the quality of life of patients during the said period. Material & Methods: A prospective analysis of the TSH levels in 40 consecutive patients diagnosed with well differentiated thyroid carcinoma preoperatively and at 2nd and 3rd weeks post thyroidectomy and compared with demographic variables. We also compared the preoperative quality of life with postoperative withdrawal period using questionnaire (EORTC QLQ C-30) Results: The mean levels of TSH in the pre-operative period, 2nd week and 3rd week were 3.22 U/ml, 51.08 U/ml and 87.00 U/ml respectively. 85 % of the patients had TSH levels > 30 U/ml by the second week and 95 % patients at the end of third week. Our study showed that younger patients tended to have better thyroid hormone suppression. The mean TSH level in the second post-operative week was 69.5 U/ml for patients < 30 years 49.51 U/ml for patients 31-45 years and 32.25 U/ml for patients above 60 years. Similarly in the third week, the TSH levels was significantly higher in patients 60 years (54.25U/ml) (p < 0.01). There was no significant difference between gender, histology and the TSH levels. Comparing the rate of increase in the TSH levels in the 3rd week was directly related to the TSH levels at 2nd week postoperatively (p 0.001) and irrespective of the preoperative TSH levels. Quality of life assessment by QLQ C-30 questionnaire showed that there was a significant impaired in global health status (p 0.001). It also showed significant functional impairment such as emotional function (p 0.02) and a non significant impairment in physical function when compared between preoperative period and 2nd and 3rd week of withdrawal period postoperatively. Conclusion: Our study reiterated the known fact that thyroid hormone withdrawal for 4-6 weeks following thyroidectomy resulted in symptomatic hypothyroidism and impaired quality of life in a majority of the patients. More importantly, our study showed that a significant number of patients (95%) reached the prerequisite levels of TSH by the third week. This information can be directly applied in clinical practice; by limiting the period of thyroid hormone withdrawal. This simple treatment modification, apart from enhancing the quality of life of thyroid cancer patients, has the potential for a positive economic impact in the overall health care.

Abstract Id: YUGP3189
A Profile Of Paediatric Solid Tumours: A Single Institution Experience In Kashmir
Presenter - Dr. Namita Sharma
Co-author - Prof. Gull M. Bhat, Prof. Sheikh A. Aziz, Prof. M. Maqbool Lone

OBJECTIVES: The purpose of this retro-prospective study was to study the epidemiological characteristics and outcomes of children with solid tumours at our institution. METHODS AND MATERIALS: Three hundred and three paediatrics patients registered at regional cancer centre (RCC), Sher-i-Kashmir Institute of Medical Sciences (SKIMS), Srinagar, Kashmir between January 2008 and June 2014, were analysed with regard to demographic status, presenting complaints, investigations, treatment, morbidity and outcomes. Standard statistical methods were used for analysis. RESULTS: Among 19,880 patients registered at RCC, SKIMS from January 2008 till June 2014, 986 (4.9%) were of paediatric age group. Of these, 303 (30.7%) patients had paediatric solid tumours. Male to female ratio was 1.04, there were no infants (up to 27 days), 6% were infants and toddlers (28 days-23 months), 39% were children (2-11 years), 55% were adolescents (12-19 years). There were 86% rural patients and 14% urban patients. Most common were CNS tumours (25.74%) followed by germ cell tumours (14.52%), PNET/Ewing sarcoma (13.86%), Wilms’ tumour (8.9%), osteosarcoma (6.6%), rhabdomyosarcoma (5.6%), colorectal cancer (5.28%), neuroblastoma (4.9%), retinoblastoma (2.6%). Outcomes: 33.9% patients went into remission, 35.64% were defaulters, 2.97% had stable disease, 2.31% had partial response, 20.79% expired and 3.96% were still on treatment. Of all these patients, 5.29% had a relapse. CONCLUSIONS: There were some differences in the spectrum of diseases in Kashmir as compared with the rest of India and western series. Across the series, an advanced stage of presentation, a high incidence of default and poor follow-up was seen. Multiple inter-related factors are responsible for the poorer outlook of childhood cancer in Kashmir.

Abstract Id: YUGP3191
Oncological & Voice Outcome After Transoral Laser Microsurgery For Early Stage Glottic Carcinoma.
Presenter - Dr. Bhavin Vadodariya
Co-author - Dr. Murtaza Luxmidhara.

Title- Oncological & Voice outcome after Transoral Laser Microsurgery for early stage glotic carcinoma. Introduction-Over the last two decades, data reported in literature have demonstrated that micro-endoscopic laser surgery can be considered as a valid alternative to radiotherapy and open neck surgery for the treatment of early glotic cancer. Aims- To define indications for micro-endoscopic laser surgery in early glotic carcinoma (Tis, T1a and T1b and select T2 glotic cancers) & to examine patterns of local recurrences and related retreatment methods. Methods -A cohort of 30 patients with previously untreated early glotic carcinoma, subjected to Transoral...
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laser Microsurgery (TLM) between June 2012 and June 2017, was retrospectively examined. This study comprises of cases operated by single surgeon with a mean follow-up of 60 months. Depth and extension of excisions were graded according to European Laryngological Society Classification, and included 5 types of cordectomy. Each patient underwent pre-operative assessment in form of Hopkins endoscopy, CT scan of Neck with Larynx with 1 mm thickness cut, preoperative suspension laryngoscopy under general anaesthesia to evaluate site, extent of disease and accessibility of larynx. All patients were explained about procedure and quality of voice. Actuarial overall survival, disease-free survival, ultimate local control, and laryngeal preservation rates at 5 years were evaluated. Quality of Voice was evaluated by Voice Handicap Index-30(VHI-30)

Results- Actuarial Overall survival, Disease-free survival, Ultimate local control, and laryngeal preservation rates at 5 years, were 100 %, 90 %, 94.34%, 100 %, respectively. Survival curves for overall and disease-free survival were calculated from the date of diagnosis using the Kaplan Meier method. 3(10%) patients with local recurrences were managed with larynx-sparing treatment: a Transoral laser Microsurgery (TLM) was repeated in 1 patient who had a recurrence after 1 year. 2 patients were advised Radiotherapy, among them one had a close margin in T2b disease in anterior larynx so curative radiotherapy was advised, but patient did not take radiotherapy and at 5 months of follow up, he is alive and disease free. Another patient had a recurrence within 1 yr. He underwent curative radiotherapy, he is alive and disease free. All other patients were alive and disease-free at the last follow-up. Voice handicap Index-30(VHI-30) was measured for quality of voice. All patients had change in voice mild to severe. Another patient had a moderate to poor quality of voice due to Type III cordectomy and T2b Disease. One had a long term husky voice due to bilateral vocal cord lesion. All other 26 patients(86.67%) had a good quality of voice at follow up visits. Discussion- Understanding the diffusion pathways and timing of laryngeal glottic cancer is important both for treatment and prognosis. Correct knowledge of the subsites of the larynx and the routine use of preoperative and intraoperative diagnostic assessment is useful in the selection of the appropriate type of resection. Microendoscopic laser surgery is effective for early glottic carcinoma, with oncological results comparable to those observed following radiotherapy or conventional partial laryngectomy and numerous advantages like favourable cost-effectiveness ratio, less morbidity, low complication rate, and the possibility of further treatment with other procedures such as surgery or radiotherapy. Conclusion- Microendoscopic laser surgery is efficacious for early glottic carcinoma, with oncological results comparable to those observed following radiotherapy or conventional partial laryngectomy, however, in this case, local recurrences have a greater range of re-treatment options.

Abstract Id: YUGP3197
Pre-Treatment Neutrophil Lymphocyte Ratio As Surrogate Marker Of Survival In Non-Metastatic Head And Neck Cancer Patients: An Observational Study Presenter- Dr. Vijay Agarwal Co-author - Honey Roseabin, Dr. Raghavendra Rao M, Velusamy Mani

Basis of study: Neutrophil lymphocyte ratio (NLR) is known to be a surrogate marker of inflammation and have been shown to predict mortality in patients with heart disease and cancer. In this study we evaluated the influence of pre-treatment NLR on overall survival in head and neck cancer patients. Material and Methods: In this study 189 subjects with diagnosis of non-metastatic head and neck cancer were analysed for neutrophil lymphocyte ratio at baseline before start of their cancer directed therapy. The mean age of the study sample was 54.5±11.8. Forty two percent underwent surgery followed by adjuvant chemo radiation while remaining underwent concurrent chemoradiation. Neoadjuvant chemotherapy was done in 29.4% of the study population. Mean NLR was 3.4±3.13 ROC analysis revealed 2.23 as cutoff for NLR. Based on these cutoffs a Kaplan Meir analysis on overall survival showed significantly improved survival (67.5% vs 58% at their mean estimates of 52 and 36 months) in those with 2.23 (Log Rank T2=5.5, p=0.02) . Lower NLR also showed better disease free survival (44 vs 33 months, Log Rank T2=4.8, p=0.03) Conclusion: The results suggest pre-treatment NLR as predictive marker of survival in non-metastatic head and neck cancer patients.

Abstract Id: YUGP3201
Pre-Treatment Platelet Lymphocyte Ratio As Surrogate Markers Of Survival In Non-Metastatic Head And Neck Cancer Patients: An Observational Study Presenter- Dr. Vijay Agarwal Co-author - Honey Roseabin, Dr. Raghavendra Rao M, Velusamy Mani

Basis of study: Platelet lymphocyte ratio (PLR) is known to be a surrogate marker of inflammation and have been shown to predict mortality in patients with heart disease and cancer. In this study we evaluated the influence of pre-treatment PLR on overall survival in head and neck cancer patients. Material and Methods: In this study 189 subjects with diagnosis of non-metastatic head and neck cancer were analysed for platelet lymphocyte ratio at baseline before start of their cancer directed therapy. The mean age of the study sample was 54.5±11.8. Forty two percent underwent surgery followed by adjuvant chemo radiation while remaining underwent concurrent chemoradiation. Neoadjuvant chemotherapy was done in 29.4% of the study population. Results: Mean PLR was 12.7±8.8. ROC analysis revealed 9.49 as cutoff for PLR. Based on these cutoffs a Kaplan Meir analysis on overall survival showed significantly improved survival (69% vs 56% at their mean estimates of 46 and 39 months) compared to 9.49 (Log Rank T2=8.1, p=0.005). Lower PLR also showed better disease free survival (44 vs 33 months,Log Rank T2=8.2, p=0.004). Conclusion: The results suggest pre-treatment PLR as predictive marker of survival in non-metastatic head and neck cancer patients.

Abstract Id: YUGP3207
A Study Of Single Fraction Versus Multiple Fractions Of Radiotherapy For Painful Bone Metastasis Presenter- Dr. NUKALA RAJYA LAKSHMI Co-author - DR.M.PANDU RANGA KUMARI,

ABSTRACT PAGE: Objectives : The purpose of this study is to compare single fraction Radiotherapy(8 gray) with multiple fractions Radiotherapy(30 gray in 10 fractions) in the treatment of painful bone metastases in terms of 1. Pain palliation(Verbal Rating Scale) 2.Functional Outcome(ECOG Performance Scale) 3.Analgesic Requirement 4.Duration of Overall Response Materials and Methods: In this study 40 patients with painful bone metastases from any primary, localised to single region that could be encompassed in single Radiotherapy field are included. All these metastases are radiologically verified.These 40 patients are randomly divided into two arms with 20 patients in each arm. Arm-A patients received 8 gray of radiotherapy in single fraction,Arm-B patients received 30 gray in 10 fractions at the rate of 3 gray per fraction.A single direct field or two parallel opposed fields are planned depending upon the site of metastases. Two arms were compared in terms of efficacy of pain palliation(Verbal Rating Scale),Functional Outcome(ECOG Performance Status),Analgesic Requirement,Duration of Overall Response .before RT ,immediately,1 week,4 weeks,8 weeks,12 weeks after RT. Results: Two arms are equal in terms of Pain palliation,Functional Outcome Analgesic
**Abstract Id: YUGP3209**  
**Myoepithelial Carcinoma Of Breast**  
Presenter: Dr Priyanka Malekar  
Co-author: Dr Bhavin Vadodariya, Dr. M.I. Laxmidhar, Dr. Shakuntala Shah

Myoepithelial carcinoma of the breast is rare and difficult to diagnose owing to its varied morphological characteristics, composed entirely or almost entirely of malignant spindle cells with myoepithelial differentiation. Limited number of case reports have been described till date and therefore the biological behavior and treatment protocol have not been determined yet and presents a challenge for diagnosis and treatment. Here in we present a case of 80 years old female patient in outpatient room came with complaints of lump in right breast with right axillary enlarged nodes. On radiological imaging spiculated mass with BIRADS V and Fine needle cytology was suggestive of malignant cells. Patient opted for modified radical mastectomy and axillary dissection. Final histopathology revealed spindle shaped cells with moderate to marked severe atypia and abnormal mitosis. On immunohistochemistry ER, PR and Her2 neu were negative. Tumor was positive for high molecular weight cytokeratin, S-100 protein, SMA & CD 10. Finally diagnosis of high grade myoepithelial carcinoma of breast was established. Postoperative adjuvant therapy in the form of chemotherapy given. There are not sufficient data available to define the role and effectiveness of first-line chemotherapy, although it remains the only therapeutic choice in cases with distant metastasis or recurrence disease. However, none of the regimes used thus far have been proven effective (including carboplatin, paclitaxel, doxorubicin, cyclophosphamide, gemcitabine and oral capecitabine).  
A multidisciplinary treatment approach is recommended, taking into account all the particularities of this rare type of cancer and its ambiguous biological behavior. Keywords: Myoepithelial carcinoma, Immunohistochemistry, breast carcinoma

**Abstract Id: YUGP3213**  
**Hypofractionated Radiotherapy For Node-Positive Prostate**  
Presenter: Dr AVIPSA DAS  
Co-author: SRIRAM PRASATH, B ARUN, SANJOY CHATTERJEE

Introduction Node positive prostate cancer is a unique subgroup, with varied practice on locoregional treatment. The feasibility and results of treatment with hypofractionated radiotherapy (RT) has not been widely reported. We have routinely used standard regimens of hypofractionated RT for node-positive disease and report our results of toxicity, biochemical control and survival here. Methods Medical records of patients diagnosed with prostate cancer between February 2011 to April 2016, with radiologically involved pelvic nodes on MRI/CT without distant metastases were analysed. All patients were treated with long term androgen deprivation therapy (ADT) with orchectomy or 2-3 years of LHRH agonists, and hypofractionated RT. Post radiotherapy, patients were followed up with PSA and clinical examination at regular intervals. Acute and late toxicities were assessed using Radiation Therapy Oncology Group acute and late morbidity scoring criteria. Biochemical control and survival was computed using Kaplan-Meier survival curve. Results A total of 61 patients were identified with node positive disease, with median age of 68 years, and median initial PSA level of 40.1 ng/mL. The majority, 50(81.9%) had T3 disease, Gleason score of 6, 7 and 8-10 was present in 13.1%, 39.3% and 47.6%. All were treated with hypofractionated intensity modulated radiation therapy (IMRT); initial 4 patients (6.6%) to 65Gy/25Fr/5wks, and 57 patients (93.4%) to 60Gy/20Fr/4 wks with a dose of 44Gy/20Fr to the pelvic nodes with simultaneous integrated boost (SIB). Twenty five patients (41%) who had residual radiologically enlarged nodes after 3-6 months of ADT received nodal boost to the involved nodes, to a dose of 54-60Gy (median 54Gy) as SIB. Incidence of late Gr 2+ GI and late Gr 2+ GU toxicities were 13.1% and 18% respectively, with no grade 4 toxicities. With a median follow up of 36 months, 8 (13.1%) patients developed biochemical failure, with 2 patients failing locoregionally and the rest with distant metastases. The 3 year biochemical control rate was 91%, and the projected 5 year biochemical control rate is 82%. The 5 year projected overall survival is 91%. Conclusion This is one of the few series reporting results of hypofractionated RT in node positive prostate cancer. Hypofractionated RT with long term ADT for node positive prostate cancer patients is feasible, and results in excellent biochemical control rates at 3 and 5 years, with acceptable late toxicities rates.
Abstract Id: YUGP3219
A Large Carotid Body Tumour: A Rare Case Report
Presenter: Dr. Mrinal Shankar
Co-author - Dr Manisa Pattanayak, Dr Sunil Saini,

Carotid body tumour (CBT) is one of the most common jugular paraganglioma involving the carotid body chemoreceptors. We report the case of a 22 year young man who presented with complaint of large painless progressive swelling in right upper neck for 3 years duration. On examination, swelling appeared pulsatile and arising from carotid vessel. MRI Neck and MRA performed revealed large well defined hypervascular mass lesion encasing right common carotid artery, its bifurcation and ECA, with feeders from ECA. Patient was undertaken for surgical excision (Shamblin Grade-III) through exposure in neck, extended by midline sternotomy and mandibulotomy approach, tumour was completely dissected. Patient recovered well from surgery without any sequelae. HPE revealed CB paraganglioma. At two years follow up, he is recurrence free. The surgical removal of CBT has a good result.

Abstract Id: YUGP3226
Use Of Intraoperative Ultrasound For Excision Of Palpable Breast Cancer
Presenter: Dr. Shashikant Saini
Co-author - Dr. Tanay Shah, Dr. Parth Patel, Dr. Arvind Thakuria

Introduction: For clinically low volume breast cancer patients subjected BCS, there is always a concern regarding achieving microscopically negative margins and avoid inadvertent resection of excessive volume of breast tissue which subsequently hampers cosmesis. In this prospective study, we utilised intra-operative ultrasound to guide resection with optimum margins in patients subjected to BCS. This was compared to palpation guided resection. We found significantly better results in terms of margin negativity and at the same time avoiding excessive volume resection of breast tissue. Materials and methods: A total of 80 patients of invasive breast carcinoma (T1-2, N0-1, M0) (39 patients in USG guided BCS â€“ group A and 41 patients in palpation guided BCS group - B) were enrolled in the study. In the group-A intraoperative localization was performed using a multifrequency 10-MHz linear array ultrasound probe and tumours were excised under USG guidance. In group-B, tumour excision was guided by the palpation skills of the surgeon with the aim of achieving grossly 1 cm margin circumferentially. Specimen volume measurements were performed by using a water displacement technique. After placement of marking sutures specimens were sent for histopathological examinations. Results - Mean age in the group-A was 44.46 years and in group-B was 48.42 years. 60% patients had lumps in the upper outer quadrant. Out of 39 patients, one patient (2.56%) in study group and out of 41 patients 5 patients (12.19%) in control group had positive margin in pathology report. Mean of specimen volume in group-A was 42.67 ml and in group-B it was 57.97 ml\[p= 0.011]\] Mean of excess volume removed in study group was 4.19 ml and in control group it was 24.11 ml. Conclusion: We found significantly better results in terms of margin negativity and at the same time avoiding excessive volume resection of breast tissue. The use of Nimorazole along with concurrent chemo-radiation is a safe option for treating patient with locally advanced head and neck cancers. Mutational markers and circulating hypoxia markers can give added information for identifying the patients who benefit most from the treatment. Irrespective of the stage of disease, it is the tumours with increased hypoxic signatures that are likely to benefit from the use of a hypoxic radio-sensitive like Nimorazole.

Abstract Id: YUGP3234
Temporal Bone Resection-Case Series
Presenter: Dr. Aishwarya Jayaprakash
Co-author - DR SATISH NAIR, DR AJITH NILAKANTAN,

BACKGROUND: Primary Temporal bone carcinomas are rare tumors of head and neck region. Most of them are squamous cell carcinomas arising from EAC. Earlier, treatments of temporal bone carcinomas were poor with high degree of morbidity and mortality. Presently, with improved microsurgical techniques and adjuvant treatment, successful management of these rare tumors is feasible. We present a series of cases of Temporal bone carcinomas treated at a super specialty tertiary care center with review of literature. PURPOSE: A case series to study the presentations and treatments of Temporal bone carcinomas with the review of literature. MATERIALS AND METHODS: Retrospective chart review of all patients treated for temporal bone carcinoma at the tertiary care super specialty hospital. The clinical features, treatment and results have been discussed with the review of literature. RESULTS: A total of 12 patients underwent treatment for Temporal bone carcinomas. All patients had primary tumor arising from the temporal bone. 8 patients (66.3%) had squamous cell carcinoma, 1(8.3%) had basal cell carcinoma, 1(8.3%) had plasmacytoma, 1(8.3%) had basosquamous cell carcinoma and 1(8.3%) had adenoid cystic carcinoma. Most common clinical features were hearing loss and growth in EAC followed by otorrhoea and ear bleed. One patient presented with facial palsy. All patients were staged according to Pittsburg grading system. In a total of 12 patients, 6 (50%) were in stage T2N0M0, 3(25%) in T3N0M0 and 3
Abstract Id: YUGP3236

Prevalence Of Lymph Node Metastasis In Epithelial Ovarian Cancer- A Single Institution Experience

Presenters: *Dr. Natasha D Souza
Co-author: Dr. H. B. Tongaonkar, Dr. Samar Gupule,

Background: Lymphadenectomy in patients with ovarian cancer continues to be a topic of controversy due to the increased morbidity and operating time and itâ€™s uncertain impact on survival. The objective of this study was to delineate the prevalence and distribution pattern of pelvic and para-aortic lymph node metastases and the lymph node characteristics, such as histological subtype, in patients with epithelial ovarian cancer. Materials and Methods: 245 patients enrolled in the study were proved cases of primary epithelial ovarian cancer who underwent surgery (primary or interval cytoreductive surgery) and received chemotherapy (adjuvant or neoadjuvant or both). The distribution of nodal metastasis was identified in each cohort (primary and interval cytoreductive surgery) along with related clinic-pathological factors (stage of disease, grade, histological type). The correlation between lymph nodes suspicious on pre-operative CT scan and those proved metastatic on histopathological examination were also studied. Results: 85 (34.7%) underwent primary surgery and 160 (65.3%) underwent interval cytoreductive surgery. 38 (44.7%) patients who underwent primary surgery were staged as Stage III as per the FIGO staging guidelines. 208 (84.9%) had serous ovarian tumors and 209 (85.3%) had high grade disease. Lymphadenectomy was done in 223 (91%) of the patients out of which 69 (81.1%) were in patients who underwent primary surgery and 154 (96.3%) were in those who had undergone interval cytoreductive surgery. The rate of lymph node metastasis was highest in serous ovarian carcinomas. Nodal metastasis was histopathologically proved in 85 (38.1%) of the patients. 40.4% (78/193) patients with serous tumors and 23.3% (7/30) with non-serous histology had metastatic lymph nodes. 10 (14.5%) of the patients in the primary surgery cohort and 49 (31.8%) in the interval cytoreduction cohort had metastatic lymph nodes with no suspicious lymph nodes on the pre-operative CT scan. There was no significant association between CT scan findings and histopathologically proved lymph node metastasis (p=0.4240 for primary surgery and p=0.1957 for interval cytoreduction). Conclusion: Lymphadenectomy proves to be of prognostic as well as therapeutic importance. However, the effect of systematic lymphadenectomy on prognosis in ovarian cancer remains unknown, due to the lack of prospective randomised controlled studies. Further studies are also required for accurate pre-operative assessment of lymph nodes on CT imaging.

Abstract Id: YUGP3240

Transarterial Chemoembolization With Lipiodol For Unresectable Hepatocellular Carcinoma

Presenter: *Dr. Pannag Desai K N
Co-author: Pannag Desai K N, Indusekhar S, Vidya Bhargavi R

Aims & Objectives: To evaluate response and survival outcomes in unresectable HCC patients treated with TACE in a tertiary care oncology hospital at Bangalore. Methods and Materials: Clinical, laboratory and radiological data of all patients undergoing Transarterial Chemoembolization (TACE) with Lipiodol for treatment of hepatocellular carcinoma, presenting to HCG Hospital, Bangalore between January 2013 and December 2016 were collected. Post TACE follow up details to assess response was tabulated. The tumor response was classified based on mRECIST Criteria. The overall survival of the patient was assessed from the date of diagnosis until death, loss to follow up or status at the time of data collection.

Results: A total of 78 patients (71 males, 7 females; mean age 62.5 Â± 11.7 years) undergoing 126 TACE procedures were included in the study. The Child’s classification was: A - 61 patients and B - 17 patients. Barcelona Clinic staging was: A - 8 patients, B - 59 patients, and C - 11 patients. The overall survival (OS) was 21.65 Â± 1.6 months at the end of 3 year follow up. 33, 24 and 21 patients had partial response (PR), stable disease (SD) and progressive disease (PD) respectively. The overall survival was 24.7 Â± 2.4, 23.3 Â± 3.0 and 15.8 Â± 2.5 months among PR, SD and PD groups respectively. 15, 21 and 9 patients had Type 1, 2, 3 & 4 lipiodol depositions respectively. The overall survival was 31.1 Â± 1.5, 21.8 Â± 2.5, 13.1 Â± 1.5 and 13.7 Â± 1.6 months among lipiodol deposition type 1, 2, 3 & 4 groups respectively. Conclusions: TACE resulted in significant reduction of tumor bulk. The degree of lipiodol accumulation is a prognostic factor in patients with unresectable HCC. Tumor response based on mRECIST combined with complete lipiodol deposition was better for identification of major tumor necrosis.

Abstract Id: YUGP3246

Correlation Of Thyroid Volume With Development Of Hypothyroidism In Carcinoma Breast Patients Treated With Radiation Therapy By Different Fractionation

Presenter: *Dr. Nivedita Sarkar
Co-author: DR. GOVARDHAN H B, DR. KHALEEL I, DR. SRIDHAR P

Background: Hypothyroidism is common following radiotherapy to the neck in patients with Hodgkinâ€™s lymphoma and head & neck tumors where whole or large parts of the thyroid gland are located within the target volume. The association between radiotherapy and hypothyroidism in breast cancer patients has been investigated in only a few studies. On the other hand, radiation exposure to parts of the thyroid gland seems unavoidable in breast cancer patients receiving radiotherapy to the ipsilateral supraclavicular fossa. Studies reveal that hypothyroidism is related to volume of thyroid gland and dose received. This study is taken up to find such correlation between volume of thyroid and thyroid function test. This study also aims to find the effect of different fractionation on thyroid toxicity. Materials and methods: A total of 83 patients treated with adjuvant radiation therapy in carcinoma breast were taken up for this study. All patients were treated with 3DCRT. V20, V30, V40 and V50 calculated for all patients using standard DVH. Base line thyroid function test and clinical assessment was done before radiotherapy. All patients were treated with 50Gy in 25 fractions (Conventional arm; n=43) or 40Gy in 15 fractions (Hypo fractionated arm; n=40) to chest wall and supraclavicular fossa. After therapy thyroid function test and clinical evaluation were done at every 3 months interval for all patients for a year. Relevant statistical tests were used for analysis. Results: There were 43 patients in the Conventional arm and 40 in the Hypo fractionated arm. Mean age was found to be 47.85 years. Majority of patients were in the post-menopausal age group (52.5%) having T2 disease (60%), N2 disease (42.5%) and stage IIIa (50%). 85% patients had undergone Modified Radical Mastectomy. All patients...
had Infiltrative Ductal Carcinoma with 45% Luminal Type A. All the patients had normal thyroid function before radiation therapy. Mean thyroid volume was found to be 10.3cc. Mean dose received by thyroid gland was 47.5Gy in the Conventional arm and 38Gy in the Hypo fractionated arm. The V20, V30, V40 and V50 of thyroid gland in the Conventional arm were 60.6, 56.5, 53.3 and 35.2% respectively. The V20, V30 and V40 of thyroid gland in the Hypo fractionated arm were 61.3, 57.2 and 54% respectively. The V20, D20, D30, D40 and D50 were 37.5Gy; 31.5Gy, 36.2Gy & 35.2Gy in Hypofractionation arm and 49.4Gy, 48.1Gy, 44.9Gy & 42.5Gy in Conventional arm respectively. Mean TSH change between baseline and 1 year was 40.9% in the Conventional arm and 35.2% in the Hypo fractionated arm. Patients were followed up weekly for assessment of toxicity during radiotherapy. n=83 SUBCLINICAL HYPOTHYROIDISM CLINICAL HYPOTHYROIDISM TOTAL BASELINE (0 MONTH) 0.116TH MONTH 6 6 12 CONVENTIONAL ARM 5 3 8 (n=43) HYPOFRACTIONATED ARM 1 3 4 (n=40) 1 YEAR 6 9 15 CONVENTIONAL ARM (n=43) 4 5 9 HYPOFRACTIONATED ARM 2 4 6 (n=40) No significant correlation was observed with radiation dose to thyroid gland and thyroid function test. A significant correlation was noted with TSH level and thyroid volume in the 50Gy arm. Thyroid volume was correlated with the development of hypothyroidism. 10cc was taken as the median volume of reference. Thyroid volume

Abstract Id: YUGP3248

Increased Risk Of Endometrial Carcinoma Among Night Duty Women

Presenter- Ms. PIYALI JANA

Co-author - DR. DEBARSHI JANA, DR. SAMBHUNATH BANDYOPADHYAY,

Introduction: Endometrial Carcinoma is one of the most common gynaecological cancers in worldwide as well as India. Parity, age at first birth, oral contraceptive use, smoking, age at menarche, age at menopause and their hormone-modulating effects are already established significant risk factors in western women. The aim of our study was to evaluate an increased risk of endometrial cancer for night workers female. Material and Methods: In this hospital based study total 150 patients attend at gynaecological OPD in our institute of Eastern India. A well designed proforma containing various parameters under study was maintained computer. For statistical analysis data were entered into a Microsoft excel spread sheet and then analysed by SPSS 20.0.1 and Graph Pad Prism version 5. Results: Nulliparity, older age at first birth, early menarche, and late menopause were increased risk of endometrial cancer. Statistical significant risk was found for night workers women than without night workers women. Women working rotating night shifts for a long duration have a significantly increased risk of endometrial cancer. Discussion and Conclusion: Our results suggested that women who work at night may benefit from cancer prevention approaches. In our good clinical practice to identify the high risk factors among the women of eastern India may help for early detection and prevention of Endometrial Carcinoma in this region.

Abstract Id: YUGP3252

Types Of Treatment Delay In Patients Of Carcinoma Cervix And Their Effect On Survival- A Single Institute Study

Presenter- Dr. NIVEDITA SARKAR

Co-author - DR. GOVARDHAN H B, DR. KHALEEL I, DR. SRIDHAR P

INTRODUCTION: Cervical cancer is the most common gynecological malignancy in our country. Early diagnosis and timely initiation of treatment of cancer patients may improve survival and quality of life. Various measures of delay can be encountered during diagnosis and treatment initiation. Our study is aimed at finding the pattern of such delay in carcinoma cervix patients and factors affecting it. We also aim to note the correlation of these factors on survival.

MATERIALS AND METHODS: A total of 200 patients were recruited in 2014 and followed up for a period of 3 years till June 2017. Patients presenting to or referred to the department of radiation oncology were recruited. All the patients were enrolled along with history and socio-demographic details. Patterns of Primary delay, Secondary delay, Tertiary delay and Quaternary delay were also noted. Primary delay was taken as appearance of first symptom till seeking a clinician advice. It was correlated with patients’ socio-demographic details. Secondary delay was taken as seeking a clinician advice till a confirmed diagnosis and was correlated with different insurances and departmental delay in diagnosis. Tertiary delay was taken as time period from a confirmed diagnosis to treatment initiation and was correlated with various insurances, planning method, patient co-morbidities and socio-demographic details. Quaternary delay was taken as prolongation of treatment due to either patient related or treatment related. Each patient was followed up for a period of 3 years. The data collected included patients belonging to insurance or non-insurance, individual dates of each investigation and treatment given. Overall Treatment Time was also calculated and correlated with survival. Initial tumor size and lymph node involvement was also correlated with survival. RESULTS: Our study included 200 patients of carcinoma cervix with mean age of 50.87 years and majority of patients belonging to post-menopausal age group. Most of the patients belonged to FIGO stage IIB & IIB. 84% of the enrolled patients were illiterate and 90% belonging to lower socio-economic status (Modified Kuppuswamy Scale). 73% of patients had insurance and 27% patients paid for their treatment. MEAN ALL PATIENTS WITH INSURANCE ILLITERATE (n=200) (n=146) (n=168) AGE 50.87years 50.46years 51.45years OVERALL TREATMENT TIME (OTT) 64.5days 64.89days 65.25days PRIMARY DELAY 2.92months 3.01months 3.01months SECONDARY DELAY 8.35days 8.07days 8.23days TERTIARY DELAY 39.62days 42.78days 41.94days QUATERNARY DELAY 10.55days 10.89days 11.25days OVERALL SURVIVAL 89% 90% 91% MEAN SURVIVAL 29.67months 29months 29.58months DISEASE FREE SURVIVAL 27.63months 26.71months 27.48months METASTASIS FREE SURVIVAL 27.93months 27.12months 27.68months Quaternary delay was noted in 34% patients i.e., 38 patient related & 30 treatment related. Majority of the patients were treated by 2D technique of Radiotherapy followed by LDR brachytherapy and Cisplatin as the radio sensitizer. Acute and chronic toxicity was also noted. Tumor response was evaluated post External Beam Radiotherapy, post Brachytherapy and at 1st follow-up. 3 years Overall Survival and Disease Free Survival was correlated with Overall Treatment Time. 22 patients were dead at the end of 3 years. 18 patients had local recurrence and 12 had distant metastasis at the end of 3 years. The correlation between primary, secondary, tertiary delay with overall survival was 0.087, 0.036, 0.087, respectively (p

Abstract Id: YUGP3254

Retrospective Analysis Of Acute & Late Gastrointestinal And Hematological Toxocities With Extended Field Radiation In Gynaecological Malignancies- A Single Institution Data.

Presenter- Dr. Chaitanya Kumar

Co-author - ShagunJuneja, Anirudh Punnakal, Charu Garg

RETROSPECTIVE ANALYSIS OF ACUTE & LATE GASTROINTESTINAL AND HEMATOLOGICAL TOXICITIES WITH EXTENDED FIELD RADIATION IN GYNAECOLOGICAL MALIGNANIES- A SINGLE INSTITUTION DATA. Chaitanya Medichelme MBBS, Shagun Juneja MD, Anirudh Punnakal MD, Charu Garg MD, Anil Kumar Anand MD,Ashish Bhang MBBS, Parneet Singh DNB. Department of Radiation Oncology, Max Cancer Center, Max Super Speciality Hospital, Saket, New Delhi. Purpose: The aim of this study is to report a preliminary analysis of our clinical experience with extended field pelvic (conformal) radiation, with or without concurrent chemotherapy, in gynaecological malignancies. Methods and Materials: 27 women with gynaecological malignancies (17 with
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Carcinoma Cervix and 10 with Carcinoma Endometrium) were treated between November 2009 and October 2015 with Extended Field abdomino-pelvic radiation. All patients were treated with conformal radiation (Intensity Modulated Radiotherapy or Volumetric Modulated Arc Therapy). All patients underwent CT Simulation followed by target and OAR delineation as per RTOG guidelines. Dose prescribed was 45-50 Gy in 1.8Gy per fraction and boost to gross node upto 54-56 Gy. Planning was done on Eclipse Planning system, and treatment was delivered on 6 MV linac. Concurrent chemotheraphy was given when indicated. All toxicities were scored according to Common Terminology Criteria for Adverse Events (CTCAE v 4.03). Dosimetric parameters were correlated with toxicities. Results: Median follow up was 9.5 months (Range 0-52 months). 14 (51.8%) patients developed Grade 1&2 acute hematological toxicity and 1 (0.4%) developed grade 4 toxicity. 3 (11.12%) patients had late toxicity in the form of prolonged leucopenia, SAIO, and Irritable Bowel Syndrome. 1 patient did not complete her treatment due to persistent leucopenia (Grade 3). Conclusion: Extended field Radiation in Gynaecological malignancies is a reasonably well tolerated procedure when treated with IMRT or VMAT, with acceptable toxicity profile.

Abstract Id: YUGP3256
Right Internal Jugular Vein Chemopo Insertion Technique Å€ Our Experience With 1150 Patients
Presenter - Dr. KAMAL KISHOR LAKHERA
Co-author - Dr SANJEEV PATNI

Chemoport (central venous access port) is a convenient method for chemotherapy administration. Here we are presenting our cumulative experience with the chemoport insertion from a tertiary cancer care centre, where we have inserted 1150 chemoports in last 8 years. Right sided IJV is our preferred side using seldinger technique guided by anatomical landmarks. Only in 23 (2%) patients we have used open access technique due to various reasons. Intraoperative C-arm and Doppler ultrasound help was taken in only 5 (0.4%) cases. Pneumothorax, haemorrhax and local hematoma (1%) were few of the early postoperative complications. Major complications included port site infection (0.5%), catheter blockage (1.2%), IJV or subclavian vein thrombosis (0.1%), which were the major cause of preplanned port removal. Other rare complications included port chamber exposure or twisting and catheter displacement (1%). We had one case of catheter migration to heart (right atrium) and one case of intraoperative mortality in a young child due to subclavian vein tear and bleeding. We can conclude that chemoport insertion is a relatively safe procedure except few complications which are inherent to surgical central venous line access.

Abstract Id: YUGP3258
Clinical And Dosimetric Outcomes Of Interstitial Brachytherapy Using Template (Mupit) In Locally Advanced Carcinoma Cervix Å€ A Single Institutional Experience
Presenter - Dr. Ashish Bhangé
Co-author - Dr. Abhishek Gulla, Dr. Anirudh Punnakal, Dr. Anil Kumar Anand

Background: Carcinoma cervix commonly presents at locally advanced stages such as FIGO stage IB- IVA. External beam radiation therapy ± concurrent chemotheraphy followed by brachytherapy (BT) forms the mainstay of treatment in such cases. Interstitial Brachytherapy is used in cases with distorted anatomy, extensive (lower) vaginal wall involvement, bulky residual disease post external beam radiation therapy (EBRT) and parametrium involvement upto lateral pelvic wall so as to cover target volumes adequately. Aim: To determine clinical and dosimetric outcomes in locally advanced carcinoma cervix cases treated with External beam radiation therapy ±/– concurrent chemotherapy followed by interstitial brachytherapy using template MUPIT (Martinez Universal Perineal Interstitial Template). Material and Methods: Retrospective analysis of 40 patients of locally advanced carcinoma cervix treated from Dec. 2009 to June 2016. Initial treatment: EBRT (dose: 45-50.4Gy in 25-28 fractions) Å€ concurrent chemotheraphy followed by interstitial brachytherapy using MUPIT. Procedure done under spinal anesthesia using clinico-radiological findings to cover target adequately. Median No. needles inserted-25 (Range 17-29). Planning CT scan done and target volumes (GTV,B, IRCTV) contoured. BT Prescription dose (normalized to 5mm box surface): 20–25Gy in 5 fractions given twice daily with minimum 6 Hrs. gap in-between using HDR Ir192 source. Patients were followed up over median duration of 29.5 months. Kaplan Meier survival analysis and log rank test were performed. Survival Curves were plotted for survival rate calculation. Statistical analysis was performed using SPSS program for Windows, version 21.0. Results: The mean target volume doses achieved - HRTV D90 â€œ 83.86Gy (Range: 76.3 â€“ 98.6 Gy), IRCTV D90 â€œ 72.89Gy (Range: 61.94-79.7 Gy), mean V100: 164.23cc (Range: 115.58-196.17 cc), mean V200: 17.20cc (Range: 8.74-32 cc). The mean V200/V100 was 10.26%. At 2 years, locoregional control (LRC) was 74.2%, disease free survival (DFS) was 64.9% and overall survival (OS) was 67.1%. At 3 years the LRC - 66.6%, DFS - 58.2% and OS - 67.1%. Chronic rectal toxicity was seen in 9 patients (Grade 3(n=3), Grade 4(n=2)), while late Grade 3 bladder toxicity was seen in 1 patient. Conclusion: Uniform dose coverage of larger target volumes can be achieved with interstitial brachytherapy as compared to historical controls of intracavitary brachytherapy. This dosimetric advantage results in achievement of excellent locoregional control and survival rates with equivalent complication rate as compared to conventional intracavitary brachytherapy. Interstitial Brachytherapy remains brachytherapy of choice in locally advanced carcinoma cervix.

Abstract Id: YUGP3268
Pmmc In Preserved Mandible: Why Less Often Used?
Presenter - Dr. Hemantkumar Nemade
Co-author - Sagar Mortha, Bhargaw I, Jonathan GT

Objective To study the role and feasibility of the PMMC flap reconstruction in intact mandible for buccal mucosa and GBS tumour. Material, Methods and results: Study included patients who were operated between July 2012 to Sept 2016 for carcinoma buccal mucosa / GBS with marginal mandibulectomy and reconstruction with PMMC flap. 142 patients underwent above surgery and 78 patients received adjuvant therapy. None of the patient required revision reconstruction. Very few patients had minor complications and managed conservatively. There was no delay in commencement of adjuvant treatment. Majority of the patients have acceptable cosmosis and mouth opening with minimal morbidity including donor site. With minimum 3 months and maximum 50 months follow up no patient presented with Osteoradionecrosis. Conclusion: PMMC flap reconstruction after marginal mandibulectomy is robust, and cosmetically acceptable option with minimal complications.

Abstract Id: YUGP3270
Epidemiological Features And Management Of Oral Cancer Patients Å€ Experience From A Single Private Comprehensive Cancer Care Center In The State Of Odisha
Presenter - Dr. Manjunath N M L
Co-author - Dr Manjunath N M L, Dr K Panda, Dr B B Nayak

Background Oral cancer is the most common cancer in India. Geographical variations, genetic make up of population and the varied environmental risk factors play a role in the different type of tumor and patient characteristics. Challenges in the management of oral cancer patients in India include, delay in the presentation with high volume of advanced disease to be handled, affordability of patients and lack economical support especially in the non-governmental organizations.
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and lack of awareness among patients and their relatives. Present study, a retrospective analysis of a prospectively maintained data, portrays the epidemiological features and management of patients with oral cancer presented to a private comprehensive cancer care hospital in the state of Odisha, India. Methods: Data of all the patients diagnosed with oral cavity squamous cell carcinoma was collected from the database. Patients with incomplete details and diagnosis other than squamous cell carcinoma were excluded. Results: A total of 481 patients were considered for the analyses, managed between January 2016 and December 2016. Among 481 patients, 371 (77%) were males and 110 (23%) were females. Mean age among the present cohort of patients was 50 years with age group 50 to 60 years being most common. Majority of the patients (67%) presented with locally advanced cancers with left sided tumors being more common (290 patients, 60%). Buccal mucosa and alveobuccal sulcus regions were the most common sites (234 patients, 49%) followed by tongue (95 patients, 20%) and other subsites as depicted in figure 3. All the patients underwent resection with curative intent and a 1 cm gross resection margins with or without bone and skin. Margin negative resection could be achieved in 82% of patients. Nodal involvement was seen in 36% of patients in the final histopathological assessment. One hundred and sixty three patients underwent microvascular reconstruction including radial free flap, Free fibula flap and anterolateral thigh flap. Conclusion: Management of oral cancer patients is a major oncological and reconstructive challenge in India due to the advanced nature of disease at presentation. Inspite of socioeconomic constraints, these patients can be managed even in a private cancer centers with optimum outcomes. This is possible through coordinated team efforts.

Abstract Id: YUGP3274

Prospective Cohort Study On Prognostic Correlation Of Biomarkers (Her-2Neu, Ki-67, P16Ink4A) In Cervical Carcinoma Patient Undergoing Definite Radiation Therapy

Presenters: Dr. Hage Sonia
Co-author: Yengkhom Indibor Singh

Title: Prospective cohort study on prognostic correlation of biomarkers (Her-2neu, ki-67, P16ink4A) in cervical carcinoma patient undergoing definite radiation therapy. Authors: Hage Sonia1, Yengkhom Indibor Singh2 1- PGT Department of Radiotherapy, RIMS, Imphal 2- Professor Department of Radiotherapy, RIMS, Imphal

Abstract: Background: Despite recent advances in the immune mechanisms of cervical cancer and complex management opportunities, relapse remains still an actual issue. Personalized treatment may be possible through use of biomarkers for sensitivity to anticancer agents and radiation treatment. Although these biomarkers show promise, there is not enough evidence to justify their use in routine practice, further validation is needed. Aims: To evaluate the prognostic correlation of expression of biomarkers (HER-2/neu, Ki-67, P16INK4A) in cervical carcinoma with the response to definitive radiation therapy. Material and methods: This is a prospective cohort study conducted in the Department of Radiotherapy and Pathology, RIMS, Imphal to correlate expression of Her-2neu, Ki-67 and P16INK4A in biopsy proven carcinoma cervix stage II/A-IVA, aged between 36-76 years, with a good performance status, absence of metastasis, HIV and major medical co-morbid conditions willing to undergo definite radiation treatment were included for the study. 25 consecutive patients between September 2015 and July 2016 were accrued in the study. All the fresh biopsy specimens or paraffin embedded tissue blocks were sent for HPE confirmation and IHC expressions prior to treatment. The definitive radiation therapy was given and the responses were correlated with the expression of biomarkers. All patients were followed up, data were entered and analysed using IBM SPSS (Version 21). Results: The commonest mode of presentation was 60 years of age. Expression of Her2/neu 3+ was 5/25 (20%), 2+ was 3/25 (12%) & no expression was 17/25 (68%) and Ki67 index of Insignificant to 39%

was 5/25 (20%), 40 to 49% was 5/25 (20%), 50 to 69% was 9/25 (36%), 70 and above was 6/25 (24%) and also P16INK4A positivity in 24/25 (96%) of cases were noted. A positive correlation was noted with high expression of Ki67 (Pearson Correlation was 0.363), Her2/neu (Pearson Correlation was 0.231) and P16INK4A (Pearson Correlation was 0.152) with the treatment outcome. There was no correlation with the expression of IHC biomarkers with the FIGO staging. Conclusion: Although there was a positive correlation with high expression of Ki67 >50% and Her2/neu 3+ with the treatment outcome and progression free survival, the result of the present study do not confirm clear significance. High partial response and time to tumor progression was seen with high expression of Ki67 >50% and Her2/neu 3+. Further research with larger sample size may be required for validation.

Abstract Id: YUGP3276

Correlation Of Magnetic Resonance Imaging (Mri) Apparent Diffusion Coefficient (Adc) Values With Treatment Outcome In High Grade Glioma Patients Undergoing Concurrent Chemoradiation

Presenters: Dr. Swaroopa Chundru
Co-author: Dr. Kumara Swamy, Dr. Jayanth, Dr. Shivakumara Swamy

Purpose: To study the correlation between magnetic resonance imaging (MRI) apparent diffusion coefficient (ADC) values and treatment outcome in high grade glioma patients undergoing concurrent chemo radiation. OBJECTIVES: a) PRIMARY OBJECTIVE: To correlate ADC values with the treatment outcome & to study the possibility of establishing ADC values as prognostic biomarker for treated high grade glioma patients. B) SECONDARY OBJECTIVE: To evaluate whether ADC values could help in stratifying treated patients into responders and non-responders after receiving concurrent chemo radiation. MATERIALS AND METHODS: 22 consecutive post-operative high grade glioma patients (20 Glioblastoma and 2 anaplastic astrocytoma) with 17 men, 5 women and mean age of 51 years (age group of 21-77 years) were analyzed. The ADC values of the tumour on pre-radiotherapy and post-radiotherapy MRI were determined from several regions of interest defined in the tumour preferably with avoidance of cystic or necrotic components. Radiotherapy along with concurrent 16 chemotherapy was undertaken in all cases according to hospital protocol. All the patients included in the study had at least one post radiotherapy MRI done. Kaplan-Meier survival curves, log rank test was used to evaluate the prognostic factors. RESULTS: The 18 months survival rates associated with low (1.0x10-3mm2 / sec) minimum pre-RT ADCs were 5 and 18 months respectively (p=0.004). The median follow-up period is 13 months. The patients with post RT minimum ADC value below 0.9 x10-3mm2 /sec had median survival of 6 months and patients with post RT minimum ADC value above 0.9x10-3mm2 /sec had median survival of 15 months (P value = 0.04). The patients with post RT overall ADC value below 1.3 x10-3mm2 /sec had median survival of 6 months and patients with post RT overall ADC value above 1.3x10-3mm2 /sec had median survival of 15 months (P value = 0.04). CONCLUSION: In high grade glioma patients, the ADC values pre-treatment (minimum, mean) and post treatment (minimum, mean and overall) correlate with treatment outcome. Patients who have tumours with low ADC values will have poorer prognosis. The minimum ADC at pre-treatment MR imaging is a useful clinical prognostic biomarker in high grade glioma patients. The minimum and overall ADC values from post treatment MR imaging are useful for patient risk stratification after completion of chemo radiation.

Abstract Id: YUGP3280

Neoadjuvant Chemotherapy In Epithelial Ovarian Cancer: An Institutional Experience

Presenters: Dr. Manikandan Lakshmanan
Co-author: Vijay Kumar, Naseem Akhtar, Sameer Gupta

Neoadjuvant Chemotherapy In Epithelial Ovarian Cancer: An Institutional Experience

Presenter: Dr. Manikandan Lakshmanan
Co-author: Vijay Kumar, Naseem Akhtar, Sameer Gupta
INTRODUCTION: Epithelial ovarian cancer is the second most common gynecological malignancy among Indian women. Primary debulking surgery remains the standard of care in advanced operable ovarian cancer patients, but is associated with morbidity. Neoadjuvant chemotherapy followed by delayed primary cytoreductive surgery maybe a better treatment strategy in advanced ovarian cancer. We present our experience of neoadjuvant chemotherapy in advanced ovarian cancer with special emphasis on treatment outcomes.

MATERIALS and METHODS: A retrospective analysis of advanced epithelial ovarian carcinoma (Stage III and IV) patients treated at the Department of Surgical Oncology at King George'€™s Medical University, Lucknow between 2012 and 2016 was done. RESULTS: A total of 128 patients with advanced ovarian carcinoma were treated during this period. Median age at diagnosis was 46 years. Among these patients, 82.03% underwent surgery, of which 84.76% were optimally cytoreduced. Papillary serous adenocarcinoma was the most common histological subtype (78.1%). Recurrence was seen in 82.3% patients, with a median time to recurrence 16 months (range 6.5 - 37 months). They were managed with second line chemotherapy and surgery. Median overall survival in our series for stage III was 38 months and 17 months for stage IV patients. Median progression free survival for stage III was 13 months and stage IV was 6 months.

CONCLUSION: Neoadjuvant chemotherapy facilitates surgery in advanced ovarian cancer and helps in assessing chemotherapy responsiveness. It provides an opportunity to modify systemic treatment if there no response to therapy or disease progression.

Abstract Id: YUGP3288
Presenter- Ms. Soumita Ghose
Co-author - Dr. Soumitra Shankar Datta,

Background: Life style associated cancers are one of the top 5 leading causes of death in the world and India sees a million new cases yearly. Early detection is an effective way to reduce incidences and mortality for preventable cancers. There is significant delay in detection for a large proportion of cancer patients in India. Lack of awareness about cancer has been shown to be a major contributor to treatment delay in many countries. The current study looked at the cancer awareness in an urban Indian population to address the gap of information about cancer prevention. Objectives: To quantify knowledge about cancer in an urban population and find socio-demographic associations of lack of knowledge. We also wanted to compare knowledge of people from general population with those having some knowledge due to a family member being under treatment. Methods: Data was collected from three stratum: family members of cancer patients, internet using community from general population, non internet using community dwellers. Subject selection was randomized. A pre-validated questionnaire was used. Data was analyzed using STATA 14. Results: Respondents (n=846) were family of cancer patients (n=146, 17.3%), community dwellers (n=175, 20.7%) and community internet users (n=525, 62.1%). No association of knowledge with age, gender, and income was found (p-values 0.84, 0.25, 0.93 respectively). Statistically significant association of cancer knowledge with education was found (p < 0.001). There is significant difference in knowledge between internet using and non internet using community (p < 0.001). Conclusions: Education impacts cancer knowledge of the population. The population having access to internet has a higher knowledge than non users; but exposure to cancer treatment does not result in higher knowledge on cancer. Implications These results will inform prevention and health education policies and aid in designing awareness and screening programs for preventing cancer.

Abstract Id: YUGP3290
Diagnostic Utility Of 68Ga- Psma Pet Ct In High Risk Prostate Cancer Prior To Definitive Surgical Treatment.

Presenter- *Dr. Smita Kulkarni
Co-author - P. ShanmugaSundaram, Padma Sundaram,

Roman numerals

Abstract Id: YUGP3292
Role Of Neoadjuvant Chemoradiotherapy In Locally Advanced Oesophageal Or Oesophagogastric Junctional Cancers - A Single Institute Analysis With Pathological Complete Response Rates
Presenter- *Dr. Lalitha Nellore
Co-author - Dr. Deleep Gudipudi, Dr. Lalitha Nellore, Dr Krishnam Raju

Objective: Neoadjuvant chemoradiotherapy (CTRT) with CROSS protocol followed by surgical resection is the standard of care in patients with resectable locally advanced oesophageal or oesophagogastric junctional (GEJ) cancers with improved survival rates. However, there are scant data on other neo adjuvant chemotherapy regimens followed by surgery where cross protocol couldn’€™t be implemented. We report our results in these patients with Neoadjuvant CTRT followed by Surgery Methods and materials: Sixty four patients with locally advanced oesophageal or GEJ cancers were treated with Neoadjuvant CTRT between April 2016 -May 2017. Post surgery, pCR rates were assessed in these patients with respect to CTRT regimens Results: Among 64 patients. 71% were squamous cell carcinoma (SCC), 20% were adeno carcinoma (AC) and other histologies were 9%, 95.3% of the patients received chemotherapy, out of which, 47.5% with 2 or 3 cycles of 3 weekly Cisplatin and 5FU, 24.5% with weekly Cisplatin and Oral Capecitabine and 18% with weekly Paclitaxel and Carboplatin. The median dose of radiation therapy was 45.9 Gy(Range 41.4 - 50.4Gy). Median total treatment duration for CTRT was 33 days(Range 38-45 days). 29 patients (45%) underwent surgery after a median gap of 65 days (Range 40- 90 days).Out of 29 patients who underwent surgery, 62% achieved pathological complete response (pCR) with 72% SCC and 16.6% AC histologies. The chemotherapy regimen with maximum pCR rates is Cisplatin and 5FU with 61% and 16.6% with weekly Cisplatin and Oral Capecitabine and 11% with weekly Paclitaxel and Carboplatin. In these patients, 44.4% received a radiation dose of 41.4 Gy, 11% received 45Gy and another 44.4% received 50.4Gy Conclusion: pCR is a well established prognostic indicator for Overall Survival in Esophageal cancers with Neoadjuvant CTRT and Surgery. The results from our institute have shown promising pCR rates with other CTRT regimens with tolerable toxicities for which prospective trials are warranted with different cost-effective CTRT regimens.
INTRODUCTION: Angioimmunoblastic T-cell lymphoma, AITL, is a rare type of non-Hodgkin's lymphoma arising from the T-cells (a type of white blood cell whose job it is to protect the body from infection). The word angioimmunoblastic is derived from the root words angio-™a term that refers to the blood vessels, and immunoblast™a term that identifies the most immature protective cells that compose the body™s immune response. This rare disease accounts for only 1% of all non-Hodgkin lymphoma cases. It occurs predominantly in individuals over the age of sixty and it affects men slightly more than women.. Symptoms common to all lymphomas are present in cases of AITL. These symptoms include the painless swelling of the armpits, groin, and/or neck, which are all the result of enlarged lymph nodes. Furthermore, many lymphoma patients experience night sweats and a loss of appetite. Unique to angioimmunoblastic T-cell lymphoma are skin rashes, joint pains, and various blood anomalies. These symptoms are the result of an immune reaction to anomalous proteins being produced by the cancer cells. Diagnosing AITL requires taking a biopsy (sample of the tumor tissue) and looking at the cells under a microscope. A series of other tests may be done to determine the extent, or stage, of the disease. These can include blood tests, a computed tomography (CT) scan, a positron emission tomography (PET) scan, a magnetic resonance imaging (MRI) scan, and a bone marrow biopsy. Recommended first-line therapy for treatment of AITL is either a clinical trial or a multiagent chemotherapy regimen such as CHOP (cyclophosphamide, doxorubicin, vincristine, and prednisone). Sometimes higher doses of chemotherapy followed by stem cell transplantation may be added to multiagent chemotherapy.

OBJECTIVE: In this report we describe an unusual presentation of Angioimmunoblastic T-cell lymphoma. A 54 year gentleman, c/o low grade fever, generalised itching since last 1 year, developed neck swelling from last 20 days. o/e dysphagia, low grade fever & weight loss present.LDH-917 u/l. B.M.examination &IUCN-uninvolved, USG abdomen-gb calculi., b/l renal cysts, splenomegaly.CECT NECK-enlarged palatine, nasopharynx & lingual tonsils, b/l cervical LN at all level, b/l axillary & superior mediastinal LN. Neck node biopsy & IHC-angioimmunoblastic T cell NHL-cd3,cd4,cd8, ki67- 75%, pd1,cd20+,cd10-,-cd21 -expanded dendritic network positive. &IUE-18F-FDG PET-CT scan reveal(06-04-2015): low grade metabolic activity ( max suv:1.46 in right axillary node) in bilateral cervical and axillary nodes, no active disease elsewhere in the body. &IUE-Diagnosis - Angioimmunoblastic T cell NHL, stage 2 disease. &IUE-Received 4 cycles of chemotherapy with &IUE-CHOEP&IUE™s regimen 3 weekly. Post 4 CHOEP, PET-CT (24/06/2015) show no any metabolic activity. &IUE-Received 2 more cycle of CHOEP. Figure 1:PET-CT(24/06/2015) show no any metabolic activity &IUE. After 1 month, he developed generalised itching. &IUE-PET CT reveal(24-09-2015):recurrence of disease. &IUE-Advised to undergo &IUE-SMILE&IUE™s regimen chemotherapy followed by bone marrow transplantation. but, he switched over to some alternate therapy and continued for next three months. &IUE-PET CT(25/02/2016) reveal: scan evidence of metabolic active residual disease(suv max 5.7) in bilateral cervical lymph nodes (largest measuring 10mm in sad) &IUE-bilateral level 1b &IUE-left left level 2,3 & 4. &IUE-As compared to previous PET CT dated 24-09-2015; there is complete metabolic resolution of bilateral axillary & inguinal lymph nodes, suggestive of significant response to treatment. &IUE-Livio good response, he continued same alternative therapy. &IUE-PET CT scan(07/07/2016) reveal: -low grade hyper-metabolic nodal pathology involving the bilateral cervical lymph nodes-suggested close follow up -rest of the scan findings are negative for any FDG avid significant hyper-metabolic pathology in the regions surveyed. He continued same alternate therapy. &IUE-PET CT scan (05/01/2017):no significant metabolic active residual/recurrent disease. Figure 2:PET-CT Scan(05/01/2017):No any significant metabolic active residual/ recurrent disease Discussion: ANGIOIMMUNOBLASTIC T-cell lymphoma represents 1% of all lymphomas. It was categorized as one of the peripheral (mature) T-cell lymphoma (PTCL) group. This disease is usually diagnosed among men who are 40 years or older. It is characterized by B symptoms (fever of over 38°C, drenching night sweats or unintentional weight loss), lymphadenopathy, polyclonal hypergammaglobulinemia. AITL is characterized by lymphadenopathy, night sweats, fever, weight loss, and autoimmune phenomena. Cutaneous manifestations, the presence of which portends a poor prognosis. Often the rash is a nonspecific, erythematous macular and papular eruption mimicking a morbilliform viral exanthem or drug eruption. Urticarial, nodular, petechial, purpuric, eczematous, erythodermic, and vesiculobullous presentations have also been described. In up to one-third of cases, the eruption occurs in association with a new medication, often leading to an initial misdiagnosis of drug hypersensitivity reaction. AITL can mimic infectious, autoimmune, or allergic etiologies and misdiagnosis of another type of lymphoma is not uncommon, as occurred in our case. Patients who have a delay in the correct diagnosis have similar outcomes as those correctly diagnosed at first presentation. There are no effective therapies for AITL. Corticosteroids, anthracycline-based chemotherapy, and autologous stem cell transplant are currently the mainstays of therapy. Initial response to chemotherapy is promising, but duration of response overall is poor and there is no increased survival. CONCLUSION: AITL is difficult to diagnose due to nonspecific clinical and histological findings. Cutaneous manifestations are seen in AITL, which may occur early or in advanced disease. Like all cutaneous metastases, the appearance of the lesions can vary greatly. Our case demonstrates that dermatologists and dermatopathologists can make this diagnosis in the appropriate clinicopathologic context utilizing appropriate immunohistochemical staining and gene rearrangement studies.
sites of HNSCC. Patients who were HPV positive had a significant better Overall survival & disease free survival. Further large scale studies are needed to correlate other prognostic variables with HPV infection and head and neck carcinoma.

Abstract Id: YUGP3304

Primary Pleural Primitive Neuroectodermal Tumour - A Rare Case Report
Presenter - Dr. Priya Eshpunyani
Co-author - Dr Ramakant Deshpande, Dr Kumar Doshi, Dr Sanjay Sharma

Ewing’s sarcoma family of tumours (ESFT) includes Ewing’s sarcoma, primitive neuroectodermal tumour (PNET), neuroepithelioma, atypical Ewing’s sarcoma, and Askin tumour and arise from postganglionic parasympathetic primordial cells located throughout the parasympathetic autonomic nervous system. PNET of the chest wall commonly affects the ribs, sternum, scapula, clavicle and soft tissues of the chest wall and pleura. Usually these tumors affect children and adolescents, with a peak incidence between 15 and 25 years forming 2% percentage of pediatric/young adolescent tumors. Frequently, this entity appears as a chest wall mass, with rapid growth that may erode the pleura. However, Primary pleural PNET is an extremely rare disease entity. We herein report a case of incidentally discovered primary pleural PNET in a 21 year old gentleman who presented with traumatic hemothorax due to blunt chest trauma. Video assisted thoracoscopy evaluation of the entire process showed organic clots, soft tissue debris with flimsy adhesions but no definite solid mass. Final histopathology of clots & debris revealed malignant small round cell proliferation consistent with PNET, further confirmed by immunohistochemistry (IHC). PET-CT scan did not reveal any primary lung or chest wall lesion. The patient underwent neoadjuvant chemotherapy followed by total pleurectomy. Final histopathology report showed deposits of primitive neuroectodermal tumour (PNET) over left pleura. IHC - CD 99, FL-1, BCL-2 positive. He had an uneventful recovery in the postoperative period. The patient received adjuvant chemo-radiotherapy. PET CT at end of treatment shows post surgical changes seen with surgical staples, minimal non avid pleural effusion. There is no evidence of disease in the study after 11 months of primary surgery followed by chemotherapy. Conflict of Interest: Nil

Abstract Id: YUGP3314

Assessment Of Periodontal Changes In Patients Undergoing Radiotherapy For Head And Neck Malignancy
Presenter - Dr. Gaurav Sharma
Co-author - Meenu Gupta, Arjun Lal, Mushtaq Ahmad

Background: Head and Neck Squamous Cell Carcinomas (HNSCCs) is the sixth most common cancer and the eighth most common cause of cancer death worldwide. Chemoradiotherapy is the most common modalities used in head and neck cancer (Oropharynx) treatment. Chemoradiotherapy has a potential role in locally advanced and advanced oral cavity tumours. Acute and late toxicity can occur during and after completion of Radiotherapy. Periodontium is most common dental tissue affected during course of radiotherapy. Materials and Methods: This observational study was designed to analyze the effect of radiotherapy on periodontal parameters in our patients prior to irradiation in the head and neck area, compared with 6 months following treatment. The statistical analysis was done using SPSS (Version 22). Results: The study sample consisted of total 50 patients of Carcinoma of Oral cavity and Oropharynx (M = 48, F = 2), of mean age 55 years. 92% of patients are tobacco user and majority (60% patients) had Carcinoma Tonsil. All periodontal parameters except oral hygiene index Stiller (OHI), clinical attachment level (CAL), gingival Index (GI) were significantly increased after radiotherapy. Similarly significant changes in radiological indices was also seen. Conclusion: There was significant changes in dental, Indices there was increase GI, CAL, and OHI after completion of radiotherapy. In this study, all cases of mandibular teeth was taken. Radiographically there was significant loss of bone density at periodontium and angle of mandible. Patients showed increase in acute and late toxicity during and after completion of radiotherapy. So, all patients with head and neck malignancy should undergo an oral examination before the initiation of cancer therapy with adequate prophylaxis.

Abstract Id: YUGP3308

Prediction Of Anticancer Drug Response In An Adjuvant Clinical Setting For Breast Cancers By Ex Vivo Live Tumor Phenotypic Assay Platform.
Presenter - Dr. Partha Nath
Co-author - Dr. Nabendu Murmu, Mr. Debarpan Mitra, Mr. Muthusami Oliyarashi

Basis: Our learning from the limited trajectory of biomarker guided and genomic assay based response prediction to inform clinical action ability of cancers led to the strategic rethink of developing and validating robust and individualized platform (CANScript) that make prediction based on multiple phenotypic inputs. Methods: Accelerated CANScript Enabled Personalized Treatment (ACCEPT) is an investigator initiated study aiming to predict response to anticancer drugs at clinic. Surgically resected tumors from primary breast cancer patients (n=30) were cultured in slices and treated with Epirubicin, Cyclophosphamide and SFU in CANScript platform for three days in presence of autologous growth factors, immune milieu and indication specific matrix support where patient tumor microenvironment was extensively preserved. The outcome was measured by integrating both pathological (tumor content, viability, proliferation and induction of apoptosis) and kinetic endpoints (cell viability and metabolism) into a single data trained M score algorithm as described (Majumder B et al., Nature Commun, 2015, Brijwani N et al., Scientific Reports, 2017). After 6 cycles of therapy, following surgery, patients were clinically evaluated for response based on multiple criteria including radiological examination. This short-term clinical response was compared with CANScript driven response prediction. Results: Out of 25 evaluable patients, outcome is available for ten patients (40%) till today. Data indicate that CANScript derived predictive scores for responders and non-responders were highly correlated with clinical observation. For all six clinical non-responders, CANScript guided outcome was found to be matched with clinical outcome. Similarly, for rest 4 patients, while CANScript predicted response, 3 patients showed clinical response. These preliminary data from an ongoing study are encouraging and more patients will be enrolled and follow up data will be collected. Conclusion: Phenotypic assay based platform technologies are emerging as a new frontier of individual response prediction based on the complex and dynamic interplay of tumor and stroma including immune network. CANScript guided response prediction of drugs at clinic, would offer further opportunity to incorporate phenotypic inputs for informed treatment decision in an adjuvant setting.

Abstract Id: YUGP3316

Weekly Versus Daily Low Dose Cisplatin In Chemoradiation Of Locally Advanced Head And Neck Cancers-Comparison Of Compliance And Clinical Outcomes
Presenter - Dr. Ayush Garg
Co-author - Dr. Piyush Kumar, Dr. Pavan Kumar, Dr. Arvind Kumar

Basis of study: Concurrent cisplatin with radiotherapy improves outcomes in locally advanced squamous cell carcinomas of the head neck. Cisplatin at 35mg/m2(weekly) raise compliance, hospitalization, and supportive care issues. So far, there are only few reports on efficacy and toxicity of low dose cisplatin. Hence the purpose of this study was to evaluate the compliance and clinical
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outcomes between weekly and daily low dose cisplatin chemotherapy regimen along with radiation.Material and Methods:Total 50 patients were included in the study from November 2015 to December 2016 with 25 in each group.Radiotherapy was given 70Gy/35# in Tweeks in both groups and Cisplatin was given at 35mg/m2weekly in Group I and 6mg/m2 daily in Group II.Assessment of toxicity was done by Radiation Therapy Oncology Group scoring criteria.WHO Response criterion was used to assess clinical response.Results:Group I(60%) and Group II(84%)patients completed planned Radiotherapy.In Group I 48% patients received less than 6 cycles and Group II 40% received <25 cycles chemotherapy.Median overall treatment time in Group I in was 51 days while in Group II was 52 days.During treatment Group III/IV Anemia was in 8 patients in Group I and 16 patients in Group II, the p value-0.011 was significant in the 4th week,grade III/IV Neutropenia and Mucositis were statistically insignificant between both groups.Post treatment Grade I/II Xerostomia seen in 16% patients in Group I(p value-0.03). There was no statistical difference in complete response between the two groups.In Group I 40% patients developed Progressive disease on follow up as compared to 12% in Group II(p value-0.02). Three patients expired during treatment in each group and 1 patient expired during follow up in each group. Conclusion:Low?dose daily cisplatin offers ease of administration in the outpatient clinic, better tolerability and better quality of life. Though overall median time was statistically insignificant but still Group II patients were more compliant in terms of patients receiving chemotherapy or completing radiotherapy. A long term follow up is needed to evaluate recurrence,late toxicities or second malignancy.

Abstract Id: YUGP3322
Vascularized Free Fibula Grafts For Reconstruction Of Bone Defects After Resection Of Bone Sarcoma In Extremities
Presenter - Dr. Vishnu Ramanujan
Co-author - Vishwamadesh.R, Antony Aravind, Anand Raja

Introduction: Wide resection of long-bone tumors can create a large intercalary bone defect requiring reconstruction. Such defects were traditionally reconstructed with prosthetic implants, allografts, and allograftâ€“prosthetic composites, all of which were associated with considerably high rates of complications and failure. Vascularised fibula has an advantage based on its ability to exploit the biology of normal fracture healing rather than the creeping substitution that is fundamental to the incorporation of a nonvascularized graft. Materials and Methods: We evaluated the results of limb sparing surgery for bone tumors reconstructed with vascularised free fibula in 13 consecutive patients from 2012 to 2016. These patients were too young for prosthetic reconstruction or had purely diaphyseal lesions. There were 7 males and 6 female patients with a mean age of 15.4 years (range 6–34 years). The bone defects were reconstructed in 7 humeri, 5 femurs and 1 radius. 8 patients had osteogenic sarcoma and 5 patients had Ewings sarcoma. 1 patient with femoral osteosarcoma had severe deep infection with septicemia which necessitated and above knee amputation 3 months following the surgery and was excluded from the study. The remaining 12 patients all received chemotherapy as per institution protocol. 1 patient had a soft tissue local recurrence which was subsequently excised and she had adjuvant radiotherapy. The mean duration of follow up was 30.3 months (range 12-56 months). Results: We have used the Capanna technique for all lower limb reconstructions where the fibula was placed in a slot in the graft bone which was then fixed with plates and screws and subsequently anastomosis was done. 1 patient developed infection which settled with débridement, 4 patients had post-operative foot drop which recovered in 2 patients. 1 patient had fracture of the transferred fibula which healed with conservative management. 1 patient with humerus reconstruction and 3 patients with femur reconstruction had nonunion at the diaphyseal osteotomy. 2 out of the 4 patients achieved union after bone grafting. The remaining patients are walking with crutches and a brace. Among the patients in whom union was achieved, mean time for radiologic union was 5 months for the metaphyseal osteotomy and 6 months for diaphyseal osteotomy. All but 1 patient had good to excellent MSTS scores on follow up. Conclusion: Reconstruction using vascularized fibula grafts after tumor resection in bone sarcoma cases considered unsuitable for tumor prosthesis because of very young age of the patients or an isolated diaphyseal tumor location of a long bone is feasible, oncologically safe and durable long term reconstruction option.

Abstract Id: YUGP3324
The Challenge In The Management Of Extremity Fibromatosis : Our Experience
Presenter - Dr. Vishnu Ramanujan
Co-author - Mohananraj Natarajan, Anand Raja

Background: Desmoid tumors are known for their varied clinical behaviour. Hence choosing a ideal management protocol remains challenging. This is further complicated by the rarity of these neoplasms and high recurrence rates following treatment. In our study we tried to answer these questions in the background of Indian scenario. Methods: Ours is a retrospective study of 41 patients with extremity fibromatosis who were operated between June-2002 and Nov-2012. The mean age for all patients was 29.2 years with 30 females and 11 males. The mean duration of follow up was 4.37 years. Results: 38 patients underwent wide local excision and 3 underwent limb ablative procedures. Post operative RT was delivered to 13 patients including the 8 patients who were margin positive on final histopathology. 17 developed recurrences (41.4%) including 5 out of 8 with margin positive resection. 10 of these 17 patients underwent repeat surgery. The remaining 7 patients with inoperable recurrence were put on metronomic chemotherapy and have stable disease except one. The DFS for patients treated with multimodality treatment was 62.6% at 3 years, 54.4% at 5 years and 44% at 10 years. Age, Sex, Type of presentation (Primary Or Recurrent), addition of Adjuvant Radiotherapy and Negative Frozen Section had no influence on disease free survival on statistical analysis. Only margin positive resection had a statistically significant effect on recurrence (p=0.05). Conclusion: The enigmatic on the tumor biology, natural history & optimal management of fibromatosis continues; Surgery remains the gold standard treatment and should be attempted only if R0 resection is possible without much morbidity to the patient; Non surgical modalities also has their role to play in the management of these neoplasms. Keywords: Fibromatosis, treatment options, recurrence, risk factors

Abstract Id: YUGP3336
Clinical Experience Of Two- Step Adaptive Radiation Therapy With Helical-Tomotherapy For Head And Neck Cancer.
Presenter - Mr. SOMORAT BHATTACHARJEE

TITLE: Clinical experience of two- step adaptive radiation therapy with Helical-Tomotherapy for head and neck cancer. PURPOSE OF STUDY: During radiation therapy due to weight loss and shrinkage of the tumour and the normal tissue the dose distribution of the delivered radiotherapy may not be covering the intended area after some fractions of the therapy. Hence to give better dose distribution for target area during the boost phase after phase-I of radiotherapy more accurately and sparing of OAR, which leads to minimizing the side effects, improvement of the quality of life of patients and also increases the response to treatment with better disease free survival and overall survival. MATERIALS and METHODS: Ten patients of head and neck cancers treated with two phase radiotherapy with helical tomotherapy combined with concurrent chemotherapy were included. Treatment planning PET CT scans was done before starting of PHASE-I radiation therapy [ CT-1] and at the fourth or fifth week of the radiation therapy another PET CT scan/ CT scan [CT-2]was done for Boost PHASE II RT. Radiation plans for full intended dose[66Gy-
Abstract Id: YUGP3338

Stereotactic Body Radiotherapy By Cyberknife Robotic Radiosurgery For Renal Cell Carcinoma

Presenters - Mr. SOMORAT BHATTACHARJEE

AIM: To evaluate outcomes of patients with renal cell carcinoma (RCC) and non-functioning contra-lateral kidney treated using stereotactic body radiotherapy (SBRT) by Cyberknife Robotic Radiosurgery. PUP: One of the well-established treatments for the local control of RCC is stereotactic body radiotherapy (SBRT). RCC patients are usually treated with SBRT for primary in the sole functioning kidney with contra-lateral kidney being non-functional. The option of nephrectomy, for patients with a sole functioning kidney, requires careful consideration due to associated morbidity following surgery. In such patients, SBRT could be a potential alternative to surgery, with low toxicity MATERIALS AND METHODS: Patients treated with SBRT for primary in the sole functioning kidney with contra-lateral kidney was completely dysfunctional from birth. (inoperable due to disease extension or comorbidities) between 2010 and 2013 were retrospectively analyzed. Patients were treated with Cyberknife Robotic Radiosurgery with doses ranging from 30Gy in 5 fractions to 30Gy in 3 fractions. The tumor sizes and SUV values were compared between the pre-treatment assessment and subsequent follow-up assessment. RESULTS: Use of SBRT for patients with primary RCC yielded a good local control rate with prolonged overall survival (64 Å±18.3 months) and good quality of life. The mean SUV change following SBRT was (4.5%). One showed complete response while other showed partial response. One case was not FDG avid. CONCLUSIONS: SBRT is a valuable alternative to surgery for patients with RCC in the sole functioning kidney and provides good local tumor control with satisfactory kidney function.

Abstract Id: YUGP3340

Outcomes Of Internal Hemipelvectomy For Pelvic Bone Sarcoma: What Are The Results?

Presenters - Dr. MANTHAN MERJA

Co-author - DR. ABHIJEET SALUNKE, DR. JAIMIN SHAH, DR. J. P. PANDIT

Introduction Pelvic bone sarcoma requires a multi-disciplinary treatment to achieve adequate oncologic local control and functional limb. Methods We have evaluated the results of internal hemipelvectomy from 2010 to 2017 .23 patients with pelvic bone tumors (13 with Ewing’s sarcoma, 9 with Osteosarcoma, 1 with chondrosarcoma) were treated by surgical resection. Results The mean follow-up was 18 months (0.3â€“5) years. In 12 patients reconstruction was performed and 11 were without reconstruction. A total of 3 patients (13%) had an infection develop at a mean follow up of 1 month. Surgical debridementâ€™s and antibiotics in three patients led to complete recovery. One patient had sciatic nerve injury. One patient had injury to femoral vein; was treated with femoral vein reconstruction. Two patients (9%) developed a local recurrence and were treated with best supportive treatment. Distal pulmonary metastases were seen in four patients and treated with supportive treatment. One patient died of disseminated intravascular coagulation with deep vein thrombosis two months following surgery. Five-year disease-specific survival rates of all patients were 83%. The mean functional MSTS score was 10(14â€“24). Conclusions Internal hemipelvectomy is an effective method of limb salvage following surgical management of pelvic bone sarcomas. The surgical site infection and flap necrosis tend to be minor complication and can be managed leading to optimal outcomes and justifies the need for this complex surgery. Key words: Internal Hemipelvectomy, Pelvis, Bone Sarcoma, Outcomes

Abstract Id: YUGP3346

S200

A Prospective Single Center Study Of Preoperative Blood Ordering Schedule, Indications And Actual Usage Of Blood And Blood Components Among Patients Undergoing Elective Curative Surgery For Major Oncological Resections.

Presenters - 'Dr. Md baheeruddin Inamdar

Co-author - Dr H Narendra, Dr Hanumanthu Rao, Dr K V Sreedhar Babu

INTRODUCTION: Patients undergoing major oncological surgery are at risk for severe bleeding and coagulopathy due to the tumour biology, pre-operative cancer therapies (chemo-radiation and immuno therapies), anatomic features of the surgical area (vascular proximity), complexity of the resection, and perioperative factors (haemodilution, hypothermia and metabolic derangements). The maximum surgical blood order schedule (MSBOS) was designed to aid the control of blood bank inventory stock by improving the efficiency of ordering blood for use in elective surgery. The MSBOS is a table of elective surgical procedures that provides the recommended number of units of blood to be cross-matched. The figures are derived from local analyses of the amount of blood transfused during individual surgical procedures. It aims for blood to be ordered and reserved for patients scheduled for surgical procedures according to a locally agreed tariff of expected blood usage. Unless a systematic study of the need for blood is done, the actual requirements on national basis cannot be estimated. Each institute should ideally develop its own MBOS for each of the type of surgery. There is little data in the world wide literature regarding the requirements of blood and blood components specific to patients undergoing oncological resections. Hence this study aims to look at the pattern of usage of blood and blood components within the hospital for oncological surgical conditions in the elective setting with an aim to develop an MSBOS.
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REVIEW OF LITERATURE: Blood utilization in elective operative procedures can be evaluated using various indices, such as the crossmatch to transfusion ratio (C-T) and the transfusion index (TI). These indices are calculated using the following formulas: C: T ratio = No. of units cross-matched / No. of units transfused TI = No. of units transfused /No. of patients cross-matched. Ideally the C-T ratio would be 1.0, any higher value means that more blood is being cross-matched than is being used. The amount of blood requested and cross-matched is usually determined based on routine, habit and previous experience of clinicians. Requests for large amounts of blood stem from the fear of not having sufficient blood available during surgery. An estimate of this is not having specific patterns and specifications for blood requests. The consequence of requesting large amounts of cross-matched blood pre-operatively is that a lot of the blood is not used. Furthermore, the cost of production, storage and separation of products, hospital, transfer, screening tests for blood safety and the typing and cross-matching add to the importance of appropriate application and use of blood products. It has been suggested that in surgeries usually requiring less than 0.5 units of blood, performing compatibility testing before surgery is not necessary and that it is sufficient to determine the patient’s ABO and Rh group and perform a type & screen. A better estimate of the need for transfusions may be obtained from parameters such as the cross-match to transfusion ratio (C/T ratio), transfusion probability (T%) and transfusion index (TI).[21-23] The C/T ratio, the most important parameter for estimating the need for blood during surgery, was introduced in 1975 by Henry and Boral. They suggested that a C/T ratio lower than 2.5 is a significant indicator of the need for blood transfusion during surgery. The T% was described for the first time by Mead et al. in 1980 and a value greater than 30% indicates considerable requirement of blood. The formula for transfusion probability(T%) T% = (No. of patients transfused / No. of patients cross-matched) x 100. A value of <30 is considered indicative of significant blood wastage.

AIMS AND OBJECTIVES: 1) To study the preoperative ordering schedule of blood and its components in patients posted for elective cancer surgery and 2) To study the pattern of use, CT ratio, TI ratio and T% for blood components 3) To derive institute specific MSBOS for elective curative cancer surgeries MATERIALS AND METHODS This is a prospective study of all biopsy proven, consenting, cancer patients of age 18 to 80 years undergoing elective curative cancer surgery at Sri Venkateswara Institute of Medical Sciences, following clearance from the team of surgeons and the ethical committee and approved by the institutional review board. A total of 740 patients underwent elective curative cancer surgery in the department of Oncology during a one year period from June 2016 to May 2017 at a single tertiary teaching hospital in South India. All patients were operated on during this period. Data included sex, age, history, physical examination, reason for surgery, type of surgery, stage of the disease, duration of surgery, any intraoperative adverse event, number of units of blood and its components transfused, duration of surgery and transfusion patterns. Blood type and Rh factor of all patients were determined preoperatively. The transfusion index(TI) was calculated using the following formula: T% = (No. of patients transfused / No. of patients cross-matched) x 100. The transfusion index(TI) was in the descending order for diagnosis of tumor% were as follows: oral cavity malignancy(maxilllectomy) 48.2% 25.9% 20.5% 7.6%, colon 44.9% 29.6% 22% 13.3%, urinary bladder 41.0% 23.4% 17.3% 9.5%, breast 40.3% 21.6% 16.0% 8.7%, larynx 40.0% 22.7% 16.2% 8.1%, lung 40.0% 22.7% 16.2% 8.1%, gastrointestinal 36.7% 20.8% 14.5% 7.4%, skin 36.1% 19.1% 13.1% 6.6%, tongue 35.8% 18.6% 12.7% 5.9%, head & neck 35.4% 18.4% 12.5% 5.7%, esophagus 34.7% 17.9% 11.9% 5.6%, oral cavity 32.7% 16.9% 11.0% 4.8%, stomach 30.5% 15.8% 10.1% 3.6%

The formula used was: T% = (No. of patients transfused / No. of patients cross-matched) x 100. The transfusion index(TI) was in the descending order were for procedures like surgery of the oral cavity (19:1) in descending order. Procedures like surgery of the oral cavity (9:1), skin malignancy (9.5:1), thyroid surgeries (9.8:1) and carcinoma of the tongue (7.4:1), neck dissection (7.5:1) ,parotid surgeries (5:1) ,carcinoma breast (5.6:1), oral cavity composite resections (3.25:1) ,stomach and esophagus surgeries (3.48:1) ,colorectal cancers (3.16:1) ,oral cavity and oropharynx (3.25:1) ,soft tissue trauma (2.64:1) ,soft tissue sarcoma (2.5:1) ,colorectal cancers (2.3:1) ,oral cavity malignancy(composite resection) (2.3:1) ,stomach and esophagus surgeries (2.3:1) ,colorectal cancers (2.25:1) ,oral cavity and oropharynx (2.25:1) ,oral cavity malignancy(composite resection) (2.25:1) ,stomach and esophagus surgeries (2.25:1) ,oral cavity and oropharynx (2.25:1) ,oral cavity malignancy(composite resection) (2.25:1) ,stomach and esophagus surgeries (2.25:1) ,oral cavity and oropharynx (2.25:1) ,oral cavity malignancy(composite resection) (2.25:1) ,stomach and esophagus surgeries (2.25:1) ,oral cavity malignancy (2.25:1) ,stomach and esophagus surgeries (2.25:1) ,oral cavity malignancy (2.25:1) ,stomach and esophagus surgeries (2.25:1) .
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axillary dissection (0.25%), staging laparotomy for carcinoma endometrium (0.24%), gall bladder malignancy (0.20%), carcinoma breast (0.17%), oral cavity cancers excision +/- neck dissection and neck dissection (0.13% each), parotid surgeries (0.11%), thyroid +/- neck dissection and skin cancer malignancies (0.10% each), carcinoma tongue (5.2%) and no blood transfusions were needed for carcinoma penis and vulva and testicular malignancy surgery. (table 1) Fresh frozen plasma (FFPs) were used most frequently for hepatic surgeries, whipples procedure, stomach and esophageal malignancies surgeries, oral cavity composite resection surgery, colorectal surgeries, staging laparotomy for ovary and endometrium and urological malignancies in the descending order. CONCLUSION In our study there was a significant over ordering of blood for most of the procedures. Our transfusion requirements are less than many other similar studies. A detailed analysis of the actual crossmatching of blood and its components has to be decided by a team approach involving the operating surgeon, anesthesiologist and the haematologist concerned to derive a MSBOS, which will be specific for the institute. The MSBOS derived from this study is for breast surgery, thyroid surgery, axillary dissection, tongue surgery, oral cavity wide excision, skin malignancy surgery, parotid surgery, staging laparotomy for endometrium, composite resections, gall bladder malignancy surgery, colorectal surgery and soft tissue sarcoma surgery would be one unit of PRBCs reserved, for staging laparotomy for ovary, carcinoma bladder and renal cell carcinoma 2 units PRBCs would be reserved, for whipples surgery, stomach and esophagus surgery 2PRBCs and 2FFPs would be reserved and for liver resections 3units PRBCs and 4FFPs would be reserved and a grouping and saving shall be followed for carcinoma penis, carcinoma vulva and testicular malignancies. MSBOS will help to significantly reduce over-ordering of blood and its components and reduce wastage and also significantly reduce the costs involved. We would also like to add that slight modifications to the MSBOS shall be needed depending on the particular case scenario. MSBOS= maximum surgical blood ordering schedule, PRBC= packed red blood cells, FFPs = fresh frozen plasma.

Abstract Id: YUGP3348

Is Optimal Cytoreduction Post Neoadjuvant Chemotherapy, The Only Prognostic Factor In Advanced Ovarian Cancer? Presenter - Dr. Praveesh Dhiman Co-author - Dr P P Bapty, Dr C N Patil, Dr Poonam Maurya

ABSTRACT Background: The treatment of advanced ovarian cancer is challenging. In the last decade number of studies and published literature have highlighted the usefulness of upfront chemotherapy followed by interval cytoreduction as an important treatment modality in advanced ovarian cancer. The survival with NACT (Neo Adjuvant Chemotherapy) is non inferior to primary debulking surgery followed by chemotherapy. Objectives of this retrospective observational study was to study the impact of NACT on progression free survival (PFS) in advanced ovarian cancer patients. Methods: 50 patients of advanced ovarian cancer patients underwent surgery for progression as histopathologically diagnosed from Jan 2012 to Jan 2015, were included in the study and followed up till Jan 2017. Correlation of neoadjuvant chemotherapy with patient profile, CA125 levels, clinopathologic parameters, progression free survival and treatment response was studied using statistical analysis- LOG RANK TEST and Kaplan Meir survival plots. Results: In our study of advanced ovarian cancer patients, the stage III was observed in 36 (72%) patients and stage IV in 14 (28%). Adenocarcinoma was observed in 43(86%) patients, other histologies were noticed in the remaining 7(14%) patients. CA 125 levels at presentations were elevated in all the 50(100%), levels <=100 were observed in 3(6%) patients, levels between 101 to 1000 units/ml were observed in 22(44%) patients, 1001-5000 units/ml were seen in 19 (38%) patients and levels more than 5000 were seen in 6 (12%) patients. Median PFS was 15.1 months, 13.0 months, 13.7 and 14.9 months respectively in these groups and the difference in PFS was statistically insignificant (p=0.63). Partial response was seen in 43(86%), stable disease in 3(6%) patients and progressive disease in 4(8%) patients. The PFS in these groups was 15.1, 12.1 and 10.3 months respectively. The results were statistically non significant (p=0.17). Six patients (12%) did not undergo surgery due to various reasons, optimal CRS was feasible in 33(66%) patients and 11(22%) underwent suboptimal CRS. The PFS was maximum (19 months) in optimally cytoreduced patients followed by suboptimal CRS (10 months) and 9.8 months in patients who were not candidates for CRS. The result was statistically significant (p = 0.032).

Abstract Id: YUGP3350

Preference For Breast Prosthesis And Quality Of Life Among Breast Cancer Survivors Presenter - Ms. Sasikala Athikesavan Co-author - Dr.V. Surendran, Dr. E. Vidhubala, A. Ushrani

Background: Breast cancer is one of the most common cancers among women in India. In the recent years, the number of breast cancer survivors has increased remarkably due to the advancement in treatment, yet the cancer survivors are at an increased risk of physical and psychological short-term and long-term effects. Body image is one such significant issue among post mastectomy patients, for which the preferences and effectiveness of the breast prosthesis is yet to be studied. The present study assessed the QOL of breast cancer survivors, their preferences for prosthesis and their effectiveness. Methods. A total of 44 breast cancer survivors of more than one year (Mean age = 50.9 years; SD = 9.7) were assessed for their quality of life using CIQOL and their preferences and effectiveness of the breast prosthesis, using semi-structured questionnaire consisting of 10 items. The data obtained was analyzed using descriptive statistics, t-test. Results. More than half (61.4%) of the survivors reported to have moderate to very high QOL. Of the participants, 31.8% of them were using prosthesis and majority (n=9) were using prosthesis made of cloth. Almost 71.4% of the survivors using prosthesis reported that they were comfortable and using it all the time. Around 50% of the survivors were not informed about the prosthesis at all. The major reasons reported by the survivors for not using the prosthesis were not interested (56.6%), uncomfortable (16.6%) and unaware of prosthesis (13.3%). However, the quality of life of the patients did not differ significantly, between patients using and not using prosthesis. Conclusion. Increasing the awareness on the availability of breast prosthesis, an effective mode of intervention, might help in addressing the body image issues and improving the quality of life of the breast cancer survivors.

Abstract Id: YUGP3352

Pattern Of Care And Outcome Of Patients Of Small Cell Carcinoma Of Lung - Experience From A Tertiary Care Center Of Eastern India. Presenter - Dr. ABHISHEK BASU Co-author - Dr. Anish Bandypadhyay, Dr.Bidyut Mandal, Prof.Dr. Swapan Kr Sikdar

Introduction - In India, 63,000 new cases are diagnosed every year, with approximately 35% of them being locally advanced at presentation. Though lung cancer is one of the most common cancers in the Indian Subcontinent, majority of them are the Non small cell cancer variants and small-cell lung cancer (SCLC) accounts for about 10% of all lung cancer cases diagnosed in this region. Despite numerous advances in recent years in terms of diagnostic methods, molecular changes, and therapeutic interventions, the outcomes of the small cell lung cancer patients remain poor. Moreover concurrent chemo radiation with thoracic radiation and platinum based chemo therapy is at times difficult to administer for localised stage small cell lung cancer. There is a dearth in our current understanding of the changing epidemiological trends of small cell lung cancer among Indian
patients. The current study is an audit of all the small cell lung cancer presenting to our institution in the given period of time and that were treated with chemotherapy and radiation to understand the toxicity, response, and compliance to these and finally their effect on survival. AIM & OBJECTIVE The aim of this study is to evaluate the safety and efficacy of standard chemotherapy or chemoradiotherapy in elderly patients with SCLC and their outcome. MATERIAL & METHOD Between January 2013 to December 2016, about 47 cases of small cell lung cancers were registered in our department, of which 5 did not receive any therapy, and six patients were started on treatment but defaulted before treatment completion. Rest 36 cases of SCLC diagnosed either by histopathology or cytology were accrued for the retrospective audit and were analysed. Patients with extensive stage disease are planned for six cycles of platinum doublet based for chemotherapy and those with limited stage disease are planned for concomitant or sequential chemo radiation depending on various patient related factors. Patients received 4-6 cycles of chemotherapy (cisplatin 80mg/m2 D1, etoposide 120mg/m2 D1-3), following which based on their initial stage & response after CT, thoracic RT and PCI were given to the suitable candidates. Records of the above cohort were tabulated using a structured checklist and data regarding patientâ€™s demographic characteristics, clinical information, disease status, radiological information, treatment details, toxicity, response and follow up details were entered. Follow up time is Date of treatment completion to date of last contact, local recurrence, distant metastasis or death. Statistical analysis was done by bivariate analysis, Chi square test, Kaplan Meier survival analysis using IBM SPSS software v.23. RESULTS â€“ Mean age of presentation was 63 yr with a male preponderance (M:F â€“ 2:1). Most common presenting symptoms were cough followed by respiratory distress & chest pain. There was a median diagnostic delay of 3 months, about 60% patients presented with extensive stage disease, among which 25% were brain metastasis & 8.2% were having bone mets. Response rate of patients above or below 60yrs were not statistically significant, ( 66% vs 69%). Median Survival were 14 months & 7 months for limited & extensive stage. There was a correlation between diagnostic delay & stage of presentation. Patients who were unable to complete 6 cycles of chemotherapy and started PCI more than 2 weeks after Thoracic radiation showed poor control of disease (P = 0.45). Concurrent chemo radiation was associated with slightly greater Hematological & GI toxicity. Grade 3,4 Haematological toxicity was greater in elderly people (>60yrs) (P = 0.04). CONCLUSION: In spite of having more grade 2 and 3 Hematological & GI toxicity, elderly SCLC patients 60 years or older can benefit from the EP regimen with or without thoracic RT. Stage at presentation, PS, and treatment type were related to median survival. Limitation of Our study was non randomisation, retrospective and single Institutional study. Further investigations are needed to focus on ways of decrease toxicity, especially in the elderly.

Abstract Id: YUGP3358
Neuropsychological Functioning, Quality Of Life And Fear Of Cancer Recurrence Among Bmt Survivors
Presenter- "Mr. Rajkumar A"
Co-author - Dr. V.Surendran, Dr. Prashanth Ganesan,

Background: Bone Marrow Transplantation (BMT) is considered to be one of the life saving treatments for a variety of diseases including Blood Cancers like Leukaemia, Lymphoma and Myeloma. More than 10,000 patients have taken BMT in India from 1983-2015. Although studies have established the medical efficacy of BMT, its related neuropsychological effects and psychological issues have not been explored much in the Indian context. Thus the aim of the study is to assess quality of life, neuropsychological functioning and fear of cancer recurrence among BMT survivors. Methods and Materials: BMT survivors (n=10) between the age group of 18- 60 years who have completed Autologous BMT and are on regular follow up of 1-2 years, were included using purposive sampling. Neuropsychological functioning (psychomotor speed, sustained attention, auditory and visual learning & memory) and Quality of life was assessed using the NIMHANS Neuropsychological Battery and EORTC QLQ C-30 tool respectively. Fear of cancer recurrence was assessed by an author- constructed tool consisting of 3 items. Descriptive statistics, cross tabulation analysis was used to analyse the data using SPSS.

Results: 10% of the BMT survivors were found to have cognitive dysfunction in psychomotor speed. 20% of the patients reported to have deficits in visual memory. 10% of BMT survivors further revealed to have a borderline level of neurocognitive impairment. Fatigue, pain and financial issues were found to be the majorly affected domains in QOL. Functional outcome was found to be good in most of the BMT survivors. In addition, no significant impairment was seen in areas of sustained attention and auditory memory. Although most of the BMT survivors reported that they remembered previous episodes of being unwell, 40% of BMT survivors revealed to have a high fear of cancer recurrence. Conclusions: Though BMT survivors were found to have cognitive deficits in various domains, visual memory was the most affected. Subsequently, majority of the patients reported financial issues, problems associated with pain and fatigue. Although majority of patients were reminded of past episodes of being unwell, less than half of them had high fear of cancer recurrence.

Abstract Id: YUGP3356
Intestinal Metastasis From Primary Breast Cancer Aâ€“Report Of Two Cases.
Presenter- "Dr. Suresh M"
Co-author - Dr ARULRAJ P, Dr RAJKUMAR A, Dr RADHA

INTESTINAL METASTASIS FROM PRIMARY BREAST CANCER & REPORT OF TWO CASES. Dr. Suresh M, Dr. Arulraj P, Dr.Rajkumar A, Dr. Radha. VNCC, G.Kuppusamy Naidu Memorial Hospital, Pappanickenpalayam, Coimbatore- 641037. INTRODUCTION Metastatic Cancer from malignancy outside the abdomen rarely involves the small intestine. We here report two cases of intestinal metastasis from primary breast cancer. CASE REPORT Case 1: 50 years old post menopausal lady presented with lump right breast of 4 months duration with stage T4b N1 M0. This patient discussed in tumor board and in view of fungation patient planned for mastectomy followed by adjuvant therapy. She defaulted from adjuvant treatment and presented 4 months later to emergency department with features of acute intestinal obstruction. evaluation showed hypodense lesion of size 4x3 cm in the proximal small bowel with obstruction. she underwent resection anastomosis of the proximal small bowel and histopathology reported as metastatic deposit from breast primary. CASE 2: 41 years old lady treated for carcinoma right breast ( stage T2N1MO ;triple negative ) 5 months back. She underwent right modified radical mastectomy followed by adjuvant chemotherapy ( 4AC , 4D). 5 months later she presented with abdominal pain and headache ,evaluation showed circumferential thickening of caecum with liver ,lung and brain secondaries.in view of obstructed growth in caecum she underwent extended right hemicolecotomy with ileotransverse anastomosis. Histopathology reported as poorly differentiated tumor deposits with metastatic spread from a tumor originating from primary cancer outside the abdomen is relatively uncommon, these cases reinforced the fact that it is necessary to consider the possibility of metastasis when diagnosing gastrointestinal diseases, and that there is potential for gastrointestinal tract metastasis in cases of invasive breast lobular carcinoma. Clinicians need to be vigilant on unusual or unexplained abdominal symptoms arising from patients with malignancy outside the abdomen.

Abstract Id: YUGP3368
Abstract Id: YUGP3370

Intraoperative Ultra Sound In Determining Margins In Breast Conservation Surgery
Presenter - Dr. Ishita Laroiya
Co-author - Dr D. Kadambani, Dr A. Ramesh,

Objective: To assess the role of intraoperative ultrasound in assessing margin status during breast conservation surgery especially in lumps made impalpable by neoadjuvant chemotherapy Study design: Descriptive study Population: 26 cases of breast conservation surgery performed in the department of general surgery during the study period (November 2012 to May 2014) Methods: Breast conservation surgery with intraoperative ultrasound guidance was performed in 26 patients operated in the department of general surgery during the study period. Ultrasound was performed at three different levels-At the skin level, after raising the flaps and ex-vivo. The margins as measured by intraoperative ultrasound after raising the flaps were compared to margins as determined by histopathology. The margin positivity rate was compared to previous studies in literature and to a similar study done by the same group of surgeons where palpation guided breast conservation was done. Results: Out of 26 patients included in the study, 61.5% underwent upfront surgery while 38.5% underwent breast conservation surgery after neoadjuvant chemotherapy. 69.2% had palpable tumours while the remaining 30.8% had tumours made impalpable by neoadjuvant chemotherapy. 6.92% had marginal tumours while the remaining 93.08% had tumours made impalpable by neoadjuvant chemotherapy. 7.7% (2/26) patients had positive margins in our study with a margin being defined as tumour at the cut edge as per American Association of surgical Oncology guidelines. Although the mean medial, lateral and deep margins were significantly different as measured by ultrasound and histopathology, use of intraoperative ultrasound helped in decreasing the margin positivity rate from 31% when palpation alone was used as guided in a similar study done by the same group of surgeons in 2010 to 7.7% in the present study. Conclusions: Intraoperative ultrasound is a good guide to breast conservation surgery as it decreases the margin positivity rate both in the setting of primary breast conservation surgery and post neoadjuvant chemotherapy.

Abstract Id: YUGP3374

Presenter - Dr. Beena Kunheri
Co-author - Beena kunheri, Shilpa, Vijaykumar.D.K

Introduction Triple negative breast cancer is a distinct biological entity and recent data shows it as a heterogeneous group with at least 6 subtypes with difference in clinical outcome. TNBC is found in approximately 15% of newly diagnosed breast cancer patients and is more prevalent in younger patients.

Abstract Id: YUGP3376

Prevalence Of Distress In An Oncology Setup- A Cross Sectional Study
Presenter - Mr. Dhayanandan Shanmugam
Co-author - Dr E. Vidhubala, Dr. Sunder.

Background: Distress, the sixth vital sign in cancer patients, is a multi-factorial unpleasant emotional experience which extends along a continuum ranging from normal feelings of vulnerability, sadness, and fear, to problems that can become disabling such as depression, anxiety, panic, social isolation, and existential and spiritual crisis. Distress becomes clinically significant when it interferes with the patientsâ€™ general functioning. Considering the significance of the distress in a cancer setup, the present study was carried out to assess the distress among newly diagnosed cancer patients. Method: Newly diagnosed cancer patients (n= 1042), admitted in the hospital for the treatment, have been assessed for distress using NCCN distress thermometer and the demographics were using with the help of case record form. The data obtained was analysed using descriptive statistics and t-test. Results: The age of the patients ranged from 30-59 years, with higher number of women patients (65.3%). Around 50% of the patients had reported moderate to severe distress, pertaining to various significant reasons. The most commonly reported reason for distress being the treatment (36.7%), financial issues (19.2%), child...
Abstract Id: YUGP3378

Radiotherapy in the Management of Orbital NHL: Dosimetric Comparison of VMAT Vs. IMRT (Conventional/Unconventional) in the Treatment of Primary Extraocular Muscles Non- Hodgkin’s Lymphoma: A Rare Case Report and Literature Review:

Presenter: Dr. BRAHMANANDA SATAPATHY
Co-author: DR. BRAHMANANDA SATAPATHY, Asst Prof - Rad Onco, A. David Perianayagm, Chief Medical Physicist, Dr. Shruti Gohel

Introduction: Orbital lymphoma is a rare presentation of extra nodal Non-Hodgkin’s lymphoma, accounting for less than 1% of the total. The management of Orbital lymphoma include surgical excision, chemotherapy with Rituximab (CD 20 +ve), radiotherapy (RT), surgery, coryotherapy, laser therapy etc. Primary chemotherapy has minimal efficacy in localised low-grade orbital lymphoma. The purpose of this study was to investigate the dosimetric advantages of IMRT (Unconventional) compared to VMAT/IMRT (conventional) in the treatment of Orbital lymphoma. Materials and methods: We report here a case report of a patient presenting with extraocular muscle infiltration due to Non-Hodgkin’s Lymphoma (B cell type marginal zone type) with CD 20 +ve, On CT Scan/MRI/PET CT scan showed pseudotumor in the all rectus muscle on the right eye and proptosis and he received 6 cycles of R-CHOP by famous medical oncologist and on follow up, CT Scan/MRI/PET - CT Scan showed there is marked regression of the size but still there was residual in lateral and superior rectus of right side orbit, size approx 5.5x4.5 x 3.5 cm. The patient was planned for radiotherapy. The patients had thermoplastic mask immobilisation and patients were instructed to look straight forward and close their eyelids when the images were obtained with CT, MRI / PET â€“ CT images and were acquired and fused for treatment planning. Gross target volume (GTV) was defined as the gross extent of tumour demonstrated by CT and MRI/PET CT imaging studies. Planning target volume (PTV) was delineated with approx. 3 mm margin from GTV. Normal tissue structures were also contoured by experienced radiation oncologist and IMRT (Unconventional) and VMAT plans were generated by our expert physicist, using Elekta Monaco treatment planning system (Clinical version 5.00.04, Elekta) optimised using Monte Carlo algorithm. For dosimetric comparison and evaluation Homogeneity and conformity indices were calculated. The goal of treatment planning was to get a good coverage of PTV while sparing normal OARs. The 6 MV X rays were used to deliver daily fractions of 1.8 Gy, 5 times/week, with total doses (41.40 Gy) in 23 fractions by ELEKTRA Synergy Linear accelerator. Results: The dosimetric advantages of VMAT in the treatment of primary orbital lymphoma were investigated by comparing it directly with IMRT (Conventional) i.e. 7 beams i.e. Gantry 0-300 degree and IMRT (Unconventional) i.e. 8 beams AP ( Gan _ 0 & Coll 0 _ 90 & 0) , Lat ( Gan 270 & Coll 0 _ 0 & 90 ) and Oblique ( Gan _ 315 & Coll _ 0 ). In this study, VMAT and IMRT (unconventional) increased the homogeneity and TCP for PTV coverage i.e. HI (Heterogeneity Index) * 1.38 in V M AT and 1.25 in IMRT unconventional compared with IMRT(conventional) i.e.1.13, although no other target coverage difference was observed. VMAT and Unconventional IMRT decreased the dose to ipsilateral right optic nerve i.e.(Max dose 41.0 in both plans) compared with conventional IMRT(Max dose approx. 44) as well as Right Lens dose was low approx.10.5 in VMAT and IMRT (unconventional ) where as in IMRT (conventional ) it was 15.2. However, they also increased the low dose volume to the contra lateral OARs. In this study, although there was no significant difference on target coverage (V95) i.e. in VMAT D 95: 38.8 , IMRT (unconventional) D 95: 39.6 compared with IMRT( conventional ) D 95: 40.8. There was no significant difference on target coverage observed between IMRT( unconventional ) and VMAT. The MUâ€™s in VMAT i.e. 484 and IMRT (unconventional) 460 whereas the MUâ€™s in IMRT (conventional) 7 beams i.e. 568. The results showed, VMAT and IMRT (unconventional) achieved better homogeneity and conformity for target volume, and delivered less dose to ipsilateral optic nerve, lens and eyeballs compared with IMRT (conventional) in the treatment of extraocular muscle NHL. Conclusions : It had been reported that the increased MUs and leakage radiation in IMRT lead to an increase of radiation induced secondary malignancies. The decreased delivery time and decreased MUâ€™s achieved by VMAT and IMRT (unconventional) could have a better clinical impact on patients with better PTV dose coverage and it will help to decrease the interfraction errors for patients with intrinsic movement. Therefore in our experience, IMRT (unconventional) achieved a promising and feasible alternative and equally effective like V MAT planning and treatment delivery in extraocular muscle NHL.

Abstract Id: YUGP3382

A Prospective Comparative Study of Preoperative Imaging Techniques And Dual Mode Sentinel Lymph Node Biopsy In The Detection Of Axillary Lymph Nodal Metastasis In Patients With Early Breast Cancer

Presenter: Dr. Ajesh Raj Saksena
Co-author: Dr. Mohania Vamsy, Dr. Sanjay Yadagiri, Dr. Susheela Narayan

Introduction: The status of axillary lymph nodes is one of the most important prognostic factors in women with early breast cancer. Aims: To identify the best imaging modality to accurately stage the axilla in early breast cancer. Materials and Methods: Prospectively, between August 2014 and March 2016, 50 newly diagnosed patients with early breast cancer with clinically negative axilla, were evaluated pre-operatively with 3D mammography, AUS and cMRI and nodal status co-related pathologically following sentinel lymph node biopsy and results analysed. Results: Mean tumor size was 2.09 ± 0.72 cms. In total, 11/50 patients (22%) had metastatic axillary lymph nodes. The sensitivity, specificity, positive predictive values, negative predictive values and accuracy for: AUS were 72.73%, 97.44%, 88.89%, 92.68% and 92%; cMRI were 45.45%, 100%, 100%, 86.67% and 88% while the same for 3D mammography were 18.18%, 97.44%, 88%, 80.85% and 89% respectively. With regard to similarity between tests, there was a significant difference between the results of 3D mammography and AUS (p = 0.031). Conclusions: There are no definitive modalities to replace SLNB. We recommend a combination of 3D mammography with AUS as a useful adjunct to clinical examination prior to SLNB in patients with EBC.

Abstract Id: YUGP3390

Primary Apocrine Carcinoma Of The Axilla: A Case Report

Presenter: Dr. HEMANT PANDEY
Co-author: Dr Sapna Nangia, Dr Vikas Kashyap, Dr Robin Khosa

Apocrine carcinoma is a rare form of sweat gland carcinoma with a typical histologic appearance. The most commonly affected sites include apocrine dense areas i.e axilla and anogenital region; nevertheless this lesion can also occur in the eyelid, ear, chest, wrist, lip, foot, toe, and finger. Apocrine carcinomas typically present as slow growing, painless, colours or reddish, firm or cystic nodules. Approximately 50% of the patients with apocrine carcinoma have lymph node metastases at the time of diagnosis. There is a paucity of reported literature and consequentially, no established treatment consensus exists, but wide local excision with lymph node dissection
Abstract Id: YUGP3392

**Intra-Tracheal Delivery Of Low Dose Bacterial Lipopolysaccharides Protects Against Tumor Formation In The Kp Lung Adenocarcinoma Model**

**Presenter: Dr. Ganapathy Sriram**
**Co-author: Lauren Milling, Darrell J. Irvine, Michael B. Yaffe**

While genetically engineered mouse models (GEMM) of lung adenocarcinoma (LUAD) recapitulate some aspects of the histopathology of human LUAD, they poorly reflect the inflammatory components of human LUAD. In this study, we performed repeated weekly intra-tracheal dosing with bacterial lipopolysaccharides (LPS) after adenoviral-Cre (AdCre) delivery into K-RasLSL-G12D+/−; p53fl/fl mice to examine the effect of inflammation on lung adenocarcinoma progression. LPS has been historically used to study the acute inflammatory response both locally and systemically in animal models. The typical response involves recruitment and activation of innate immune cells, mainly neutrophils and macrophages, to the site of delivery and/or production of pro-inflammatory cytokines including TNF-alpha, IL-6 and IL-1. Repeated long-term conditioning with low dose LPS results in alveolar wall thickening as observed by uCT and the accumulation of lymphoid aggregates in the lung. However, surprisingly, LPS conditioning drastically reduced tumor incidence from 75% in the control group to 25%. Furthermore, starting LPS delivery four weeks after AdCre instillation, to eliminate any possible LPS effects on adenoviral delivery and K-Ras induction/p53 loss, still resulted in drastically reduced lung tumor formation suggesting that the effect results from an LPS-induced immune response. Two LPS instillations were sufficient to elicit this effect. Short-term antibody-mediated depletion of neutrophils or CD8+ T cells also did not abrogate the effect of LPS on tumor formation. In vitro re-stimulation of CD8+T cells (from blood or spleen) from tumor-free animals with AK tumour cells did not elicit interferon-gamma production, as assayed by intra-cellular cytokine staining and ELISPOT, suggesting that a cell type other than CD8+ T-cells or neutrophils mediates the effect. Interestingly and consistent with the inhibitory effect of LPS on tumor formation, multiple pneumonia diagnoses in COPD patients/smokers has been associated with a lower odds ratio of developing lung cancer in humans. Identifying the cell-type(s) and mechanisms mediating the anti-tumor effect of LPS will help in defining the aspects of immune response that inhibit LUAD progression.

Abstract Id: YUGP3407

**A Rare Case Of B Lymphoblastic Lymphoma/ Leukemia**

**Presenter: Dr. SUKANYA S K**
**Co-author: Dr Renu Ethirajan, Sharihna naganna,**

Introduction: B lymphoblastic leukemia/lymphoma is a neoplasm of precursor cells (lymphoblasts) committed to the B cell lineage, typically composed of small to medium sized blast cells with scant cytoplasm, moderately condensed to dispersed chromatin, inconspicuous nucleoli, involving bone marrow and blood (B acute lymphoblastic leukemia/ALL) and occasionally presenting with primary involvement of nodal or extranodal sites (B lymphoblastic lymphoma/LBL). It constitutes 10% of lymphoid leukemia/lymphoma. Case: A 19 year old male presented with complaints of pain in abdomen, loss of weight, appetite and drenching night sweats since 2 months. On examination patient had massive hepatosplenomegaly with bilateral cervical, axillary and inguinal lymphadenopathy. PET imaging demonstrated multiple enlarged posterior mediastinal, retroperitoneal, retrocrural, periportal and peripancreatic lymph nodes. His complete blood counts revealed pancytopenia. Bone marrow aspiration and biopsy was performed to evaluate the cause of pancytopenia and to establish a probable correlation with the widespread lymphadenopathy. Bone marrow aspiration revealed atypical cells with finely vacuolated cytoplasm. Bone marrow biopsy revealed multiple lymphoid aggregates. Immunohistochemistry on the bone marrow biopsy sections showed CD10 positivity, dim scattered positivity for LCA, CD20 and CD79a and were negative for CD5, CD23 and cyclin D1. Flow cytometry performed on the aspirate showed 20% blasts with CD34 and TdT positivity, CD19 and CD10 positivity was noted in 20% and 30% cells respectively. Immunohistochemistry on axillary lymph node biopsy was done. The neoplastic lymphoid cells expressed CD10, PAX-5,CD99 (focal), CD79a (weak), CD20 (focal), CD34 and TdT (weak). These cells were negative for CD3 and CD5. Ki67 index was ~90%. Correlating with the morphology, immunohistochemistry, immunohistochemistry on bone marrow and lymph node features favour a B cell lymphoblastic lymphoma. Keywords: B lymphoblastic leukemia/lymphoma, immunohistochemistry, flow cytometry.

Abstract Id: YUGP3405

**Mucoepidermoid Carcinoma Of The Salivary Gland À¢ Long Term Outcomes From A Tertiary Cancer Center In India**

**Presenter: Dr. Harjot Kaur Bajwa**
**Co-author: Rohith Singareddy, Krishnam Raju Alluri, Mahendra M Reddy**

Aim: To analyze the patterns of failure and factors affecting recurrence and overall survival in mucoepidermoid carcinoma of the salivary gland Materials and methods: The hospital records were retrospectively analyzed from October 2010 to January 2016. Patients diagnosed as mucoepidermoid carcinoma of the salivary gland were eligible for analysis. All patients received surgery as the primary treatment modality with or without post operative radiotherapy. Statistical analysis for factors affecting recurrence was done by cox regression analysis and p value of less than 0.05 was considered significant. Results: A total of 116 patients were diagnosed to have malignant salivary gland tumors of which 69 were mucoepidermoid carcinomas (69.5%). The median age was 43 years (8-75years). Majority of the tumors occurred in major salivary glands gland (77%). 51% patients were females. Most common stage at presentation was stage II (36%) followed by stage I (27.5%), stage IV (20.3%) and stage III (16%). High grade carcinomas comprised 34.8%, intermediate grade 30.4% and low grade 34.8%. 36 patients (52.2%) received adjuvant radiotherapy (60 Gy in 30 fractions). At a median follow up of 42 Months (8-70 months), 8(11.6%) patients died (7 cancer related and 1 non cancer related). The locoregional recurrence rate was 4.3% whereas the distant metastasis rate was 11.6%. Most common site of distant metastasis was lung. The mean disease free survival time was 61.4 months and the mean overall survival was 62 months. On univariate analysis, age < 0.05). On multivariate analysis , high grade, presence of LVI and local recurrence were significant factors for distant metastasis (p < 0.05). Conclusion: Mucoepidermoid carcinomas of the salivary gland had good long term local control and overall survival. Majority of the recurrences were distant metastasis. High grade, LVI and local recurrence were significant risk factors for distant relapse.

Abstract Id: YUGP3409

**Limb Conservation Surgery For Bone Tumors**

**Presenter: Dr. Sivender Alapati**
**Co-author: Dr Sivender alapati, Dr. M.Srinivvasulu,**

Introduction: Malignant tumors that arise from the skeletal system are rare, representing 1% of all cancer cases. Amputation had
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been the standard method of treatment for most bone sarcomas until Kenneth C. Francis and Ralph C. Marace performed original limb sparing surgery in USA in 1980. Limb sparing surgery is now considered safe and routine, but demanding in many patients with extremity bone tumors. Aim of the study: This is a prospective analysis of limb salvage surgery with endoprosthetic reconstruction for bone tumors at M.N.J INSTITUTE OF ONCOLOGY & REGIONAL CANCER CENTER aimed at assessing the feasibility, complications and short term outcome of limb salvage surgery in bone tumors. Methodology: This is a prospective series of 21 patients with bone tumors treated with Limb conserving surgery and endoprosthetic reconstruction at MNJU&GCC, followed up for a mean period of 24 months. Two types of prosthesis are used: 1. Custom made prosthesis â€“ Midhani Ltd 2. Modular prosthesis â€“Adler Results: In our series 21 patients successfully undergone limb conservation surgery with endoprosthetic reconstruction. Majority of complications in our series were minor wound infections seen in 4 out of 21 patients. One patient in 21 developed mechanical problem in the form of loosening and extraction of prosthesis. Stability and function of the prosthesis in rest was acceptable and were able to walk with the support. 2 local recurrences were found & 2 distal recurrences. 1 local recurrence patient had undergone amputation and 1 local recurrence patient lost to follow up. 2 patients developed distant metastasis, out of whom one succumbed to the disease and the other was lost on follow up. The average functional score according to the Revised Musculoskeletal Tumor Society Rating scale for lower extremity is 24.6(82%). Conclusion: Limb conservation surgery is available option of the patient. As compared to other conventional imaging modalities than CT in 3/14 (21.5%) cases. CONCLUSION: 18F-FDG PET/CT is a poigniant imaging modality for initial staging, restaging and follow up of the patient. As compared to other conventional imaging modalities which evaluate the loco-regional extent of disease, whole body imaging with combined PET/CT approach is more preferable, which gives additional information about distant spread as well. However, more prospective studies would be required to elucidate the utility of 18F-FDG PET/CT in prognostication of paediatric sarcomas.

Abstract Id: YUGP3419
Neuroendocrine Carcinoma Of Sinonasal Tract - A Rare Presentation
Presenter- Dr. Manin Chaudhary
Co-author - Dr. Shirish Alurkar, Dr. Akash Shah, Dr. Jignesh Rajvanshi

Small cell neuroendocrine carcinoma (SNEC) is a rare tumor. It usually occurs in the lungs, the extra-pulmonary site accounts for only about 4% of all cases. Primary SNEC of the sinonasal tract is extremely rare, and primary sinonasal tract tumor showing infra-cranial extension is even rarer. Unfortunately, due to rarity of this tumor, there are no specific recommendations for management. Here we present a case of 25 years old female, who had complaints of insidious onset swelling, pain and proptosis of left eye, headache, giddiness and vomiting. On examination, there was chemosis, swelling of both eyelids and proptosis on left side. The left eyeball was deviated downwards and outwards. The vision and eyeball movements of left eye were normal. MRI-brain showed large extra-axial space occupying lesion in left frontal region with destruction of frontal bone/ left orbital roof and extending into left frontal/ inferior ethmoidal sinus and extracranial compartment of left orbit with midline shift towards right side and descending transtentorial herniation. Emergency left frontal craniotomy with total microsurgical excision of left frontal space-occupying lesion; and left orbitotomy was done. Histopathological report showed high grade malignant round cell tumor with focally nested architecture. Immunohistochemical profile showed tumor cell positivity for CD-99, cytokeratin(CK), Epithelial Membrane Antigen (EMA), Synaptophysin, Chromogranin and p63. The tumor cells were negative for CD56, Desmin and Vimentin. Ki 67 was 55-60%. So the final histopathology on immunohistochemistry correlation favoured a diagnosis of neuroendocrine carcinoma (NEC) of sinonasal tract origin, with intracranial extension. PET-CT scan with DOTANOC was negative for distant metastases. Patient was given Etoposide and Cisplatin as adjuvant chemotherapy. Patient showed excellent clinical response to chemotherapy and after three cycles, the left orbital swelling, proptosis and chemosis resolved. Repeat PET-CT scan after three cycles also showed near-total resolution of the primary lesion. SNECs are aggressive tumors with high potential to local invasion as well as distant metastasis. As most patients present in advanced stages, the prognosis is extremely poor. However, our patient responded well to the treatment. It is not clear if such an extrapulmonary site of neuroendocrine carcinoma is the primary site of origin or it arises from metastases from a pulmonary primary. A genetic mutation analysis of such tumors would give better insights into the biology of such tumors. Keywords: extrapulmonary neuroendocrine carcinomas, sinonasal neuroendocrine carcinomas

Abstract Id: YUGP3421
Human Papillomavirus Positivity In Oropharyngeal And Oral Cavity Squamous Cell Carcinoma
Presenter- Dr. Ravi Shankar
Co-author - Dr Sudarsan De, Dr Sweety Gupta, Dr Sandeep Agarwal

BACKGROUND: Tobacco and alcohol have traditionally been responsible for majority of head and neck squamous cell carcinoma.

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Abstract Id: YUGP3426
An Audit Of Histopathological Reports Of Ovarian Tumors In A Rural Tertiary Care Centre Of Northern India: A Retrospective Analysis
Presenter- *Dr. Naina Kumar  
Co-author - , ,

Background: Ovarian malignancy is seventh most commonly diagnosed and most lethal of all gynecological cancers among women worldwide. Aims: The main objectives of present study were to assess the demographic features (age, parity, etc) of patient, stage of disease at time of presentation, pre-operative CA-125 levels and their correlation with the histological type of ovarian cancer. Material and Methods: A retrospective analysis of ovarian tumor cases that underwent primary surgery at a rural tertiary care centre during a period of two years between July 2015 and June 2017 was done. Information about demographic features of patients, CA-125 levels before surgery, stage of disease, histological type, details of adjuvant or neo-adjuvant chemotherapy were analyzed by reviewing case records of these patients. Statistical analysis was done by Chi square and T test. Results: Of total 70 cases; 32 were benign and 38 were malignant ovarian tumors. Majority of women with benign tumors (53.12%) were of 31-40 years of age while malignant tumors were most prevalent among age group 51-60 (47.37%). Of benign tumors most common histological type was mature teratomas (62.5%) followed by serous cystadenoma (18.75%) and mucinous cystadenoma (12.5%). Major proportion of malignant ovarian tumors was contributed by surface epithelial tumors (76.31%), followed by Germ cell tumors (15.79%) and borderline tumors (7.9%). Serous cystadenocarcinoma was the predominant malignant tumor (55.17%), followed by Mucinous cystadenocarcinoma (44.83%). Metastatic tumors were found to involve bilateral ovaries in 72%. Most of the malignant tumors presented as stage III (65%) or stage II (20%) disease. CA-125 levels were grossly elevated in women with malignant tumors. Conclusion: Serous cystadenocarcinoma was most common malignancy followed by mucinous cystadenocarcinoma, whereas dermoid cysts were most common benign tumors of ovaries. Most of the women with malignant tumors presented at advanced stage (Stage II or III). Also increasing age was associated with increasing stage of disease.

Abstract Id: YUGP3428
Metastasis Pattern From Squamous Cell Carcinoma Of Tongue: A Prospective Study.
Presenter- *Dr. Namit Kant Singh  
Co-author - , ,

Introduction: Tongue has a rich vascular and a rich lymphatic network, it has been documented that the tip drains to the submental nodes, the anterior two-thirds drains to the submental and submandibular nodes and thence to the lower nodes of the deep cervical chain along the carotid sheath, the posterior one-third drains to the upper nodes of the deep cervical chain, but in cases of malignancy because of the tumor involving more than one site this pattern is not reliable. Hence to understand the pattern of metastasis from Carcinoma tongue, this study was undertaken. Materials and Methods: The study was undertaken as a short term Project under which the patients coming to the Outpatient Department of E.N.T with lesions over the tongue were considered in the study. The patients were subjected to Contrast Enhanced CT Scan followed by Punch Biopsy and in the end Fine Needle Aspiration Cytology from the nodes as per their location on CT Scan. Results: A total of 35 cases were taken into consideration which showed features of Squamous Cell Carcinoma on Histopathology and following results showed Male to female ratio to be 3.35:1, All Cervical lymph node metastasis was found in 29.14% of T1 and T2 tumours (8.57% from Tip, 14.28% from Lateral Border and 5.71% from Posterior 1/3) and 65.71% of T3 and T4 tumours (2.8% from Tip,5.71% from Lateral Border and 37.14% from Posterior 1/3), Level II was the most commonly involved (63.6%) followed by Level III Conclusion: From this study we conclude that the size and muscular involvement determine the site of Lymph node metastasis, because of the profound lymphatic drainage the lymphatics do appear in Stage T1 and T2 even with mucosal involvement.

Abstract Id: YUGP3432
To Study Palliation Of Symptoms By A Hypofractionated Radiotherapy Schedule In Inoperable Squamous Cell Cancers Of The Oral Cavity
Presenter- *Dr. ARUN KRISHNAN  
Co-author - , ,

Department of Radiation Oncology, Christian Medical College, Vellore, India ABSTRACT Background: It is widely recognized that Palliative Radiotherapy provides effective palliation and an improvement in â€œQuality Of Lifeâ€ (QOL) in advanced, inoperable head and neck malignancies. Various palliative radiation therapy regimens are described in the literature, This prospective study tried to assess and quantify symptom relief and duration of symptom relief in patients with inoperable squamous cell carcinoma of oral cavity who underwent a hypofractionated radiotherapy with 50Gy in 20 fractions with daily 2.5Gy per fraction daily for four weeks. Methods: Between January 2015 and August 2016, seventeen consecutive biopsy proven locally advanced inoperable Squamous Cell Carcinoma of the oral cavity patients were recruited into the study after getting an informed consent. All of them were planned for 50 Gy in 20 fractions, 2.5Gy per fraction daily with five fractions per week for a total duration of 4 weeks. Patientâ€™s symptoms and quality of life assessment was done before starting treatment, after radiation therapy and on first followup with the EORTC QLQ-C30 & EORTC QLQ - H&N35&EuroQol. Median scores of the individual domains of quality of life before treatment, after radiation and in the first follow up with this radiation schedule were documented. Statistical Analysis was done using SPSS 17.0 software. Results: Majority of the patients were men (82%) with a median age of 54 years. About 71% of patients were stage IVA disease. Out of 17 Patients 13 completed 50Gy in 20 fractions. Two of them discontinued due to personal reasons. In two patients number of fractions were cut short due to radiation induced mucositis and poor tolerance. Median RT duration was 27days. During the first follow up at 6 weeks, eight patients (57%) had partial response and three patients (21.5%) had stable disease while three (21.5%) had progressive disease. At the end of the study period, ten patients were alive and symptomatically improved and two patients had survival...
more than 12 months. Assessment of change in quality of life over time showed functional scales like emotional functioning, cognitive functioning and social functioning were found significant improvement at 1% or 5% alpha level (p=0.009, 0.017, 0.016 respectively) and change in Physical and Role functioning scores were significant at 10% alpha level (p=0.150, 0.050 respectively). There was significant reduction in pain score. Conclusions: Results of our study shows that palliative radiotherapy with 50 Gy in 20 fractions over 4 weeks is an effective, well tolerated and safe regimen which could achieve reasonable palliation with good symptom control and acceptable toxicity profile. Statistically significant Quality of life improvement lasting for a minimum six weeks was attained after completion of treatment with this regimen.

Abstract Id: YUGP3434
A Study On The Effect Of Neo-Adjuvant Chemotherapy On Hormone Receptor Status, Her2/Neu In Breast Cancer
Presenter- Mr. PHANINDRAKUMAR NAGISETTY
Co-author - ,
AIMS To compare the immunohistochemical expression of estrogen, progesterone and Her-2 receptor status inbreast cancer before and after neoadjuvant chemotherapy. METHODS MATERIALS cases of À Carcinoma breast requiring Neo adjuvant chemotherapy Â between January 2015 to January 2017 will be recruited in to the study after informed consent. INCLUSION CRITERIA All patients with biopsy proven carcinoma breast who are eligible for Neo adjuvant chemotherapy EXCLUSION CRITERIA Age above 70 years Age below 18 years Not giving informed consent. Patientsâ€™s consent is taken. Those patients who are subjected to neo adjuvant chemotherapy (with 4cycles of doxorubicin À and cyclophosphamide and 4 cycles of paclitaxel) are assessed for hormonal receptor status in core needle biopsy sample by immunohistochemistry. ER(1:100, 1D5; Dako, Glostrup, Denmark), PR (1:200, PgR636; Dako), HER2 DAKO Herceptest). After completion of neo adjuvant chemotherapy and surgery hormonal receptor status again evaluated in resected specimen with the same immunohistochemistry. The data is analysed for any change in the receptor status CONCLUSION This study revealed that breast cancer subtypes are associated with the response to NACT. The response rates for the HER 2 positive and TN (triple negative) subtypes were significantly higher than for the luminal subtypes. Pathological complete response seen in 12% cases all are triple negative. So it is mandatory for a patient with breast cancer who is scheduled for NACT should be assessed for the subtype of breast cancer before NACT, by using IHC, for planning treatment. Patients with LA subtype breast cancer have a poor response to NACT, and they should instead undergo surgery or neo-adjuvant hormone therapy, whereas NACT will be helpful for patients with HER 2 positive or TN subtype breast cancer. This study also revealed that change in receptor status do occur after neo-adjuvant chemotherapy A change of 57% in ER, 62% PR and about 36% IN HER 2 neu status occurred after neo-adjuvant chemotherapy So, ER,PR expression and the HER 2neu status in the resection specimen after NACT should be interpreted carefully because NACT tends to cause a decrease in the expression of these molecules and Until more comparable studies are being published, retesting the receptor status of the residual tumour after NACT should be considered in order to improve future tailored adjuvant therapies, and further research should be done in order to understand the clinical significance of this change in receptor status.

Abstract Id: YUGP3436
Neoadjuvant Chemoradiation In Resectable Carcinoma Esophagus: Indian Data
Presenter- Dr. MOHANARAJ NATARAJAN
Co-author - PROF ARVIND KRISHNAMURTHY, DR VENKATRAMAN RADHAKRISHNAN, PROF SELVALUXMY GANESHARAJAH
BACKGROUND: Esophageal cancer is emerging as a common cancer in India. The management of locally advanced cancer of the esophagus and esophagogastric junction has undergone a major evolution over the past two decades. Clinical trials have been conducted for more than two decades to improve the survival of patients with esophageal cancer amidst a remarkable change in histology and epidemiology. The majority of patients now undergo some form of combined modality therapy rather than local therapy alone. OBJECTIVES: To study the safety and efficacy of neoadjuvant chemoradiation (five courses of carboplatin and paclitaxel with 41.4 Gray of concurrent radiotherapy) in terms of pathological complete response in patients (n=50) with resectable carcinoma esophagus. (Excluding cervical esophagus) STUDY DESIGN: Prospective non randomised study over 3 years (2014-2016) RESULTS:50 consecutive patients of carcinoma esophagus, who were accrued to the protocol were analysed. The median age of the study cohort was 51 years, which constituted 30 males and 20 females. (M: F= 3: 2), 90% of our study population had squamous cell carcinoma as histological type, unlike in the CROSS study wherein the vast majority were of the adenocarcinoma histology. All the accrued patients completed the intended dose of radiation; however about 20% had a treatment delay, which was duly gap corrected. Barring one patient, all other patients completed at least 3 cycles of the planned chemotherapy, nearly 80% completed four cycles, while 50 % completed all the five cycles. Importantly, there were no deaths during the treatment with neoadjuvant chemoradiation. Four patients defaulted/refused surgery following neoadjuvant chemoradiation. Of the 46 remaining patients, 7 (14%) patients were found to have progressive disease and were kept on supportive care. 39 (78%) patients were planned for definitive surgery, however a further 7 (14%) were deemed inoperable intra-operatively. Among the 32 patients who successfully completed their definitive procedure (R0 resections), 25 underwent a VATS transthoracic esophagectomy with two field lymphadenectomy and 7 patients underwent a transhiatal esophagectomy. There was no post-operative mortality in our study cohort. 19 patients (38% ) had a pathological complete response (pCR) in our study compared to 29% of patients in the CROSS study. All patients are being actively followed up; there have been six deaths during the course of follow up at the time of the analysis (Survival data not yet matured) CONCLUSION: Neoadjuvant chemoradiation appears to be a safe and a reasonably well tolerated option in patients with resectable esophageal cancers with no treatment related deaths in our study cohort. The pCR rate which is often taken as surrogate marker of patientâ€™s survival is higher (38%)in our study population. Although our data is not matured to analyse the survival outcomes, our study does demonstrate that neoadjuvant chemoradiation appears to be a promising option for resectable esophageal cancers in patients from the Indian subcontinent as well.

Abstract Id: YUGP3438
A Randomized Controlled Trial Comparing Ultrasonic Dissection With Electrocautery For Axillary Dissection In Breast Cancer
Presenter- Dr. Siva Ranjith
Co-author - Dr. Arun Peter Mathew, Dr. Madhu Muralee, Dr. Kurian Cherian
Introduction Axillary lymphnode dissection (ALND) for breast cancer is one of the most common surgeries performed in oncology. Electrocautery is commonly used for ALND as it significantly reduces blood loss compared to conventional scalpel. Inadequate sealing of lymphatics with electrocautery is one of the reasons for increased postoperative drain volume and prolonged hospital stay. Ultrasonic dissection, in animal studies, has shown to produce sealing of blood vessels and lymphatics, thus reducing blood loss, post operative drain and seroma. Aims and Objectives To compare the outcomes of ALND in breast cancer patients using Ultrasonic Dissection (UD) with standard Electrocautery (EC). Primary objective was to analyze Total Post Operative Drainage Volume and Total Number of Days

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with Drain. Secondary objectives were Operative time; Drain on first postoperative day; Hematoma and Wound complications. Materials and Methods All female patients undergoing ALND for carcinoma of breast, from March 2014 to November 2015 in the Division of Surgical Oncology, Regional Cancer Centre Trivandrum, fulfilling the inclusion and exclusion criteria was recruited. 113 patients were randomized (n=113) to two arms, of which 77 were eligible for the final analysis. 36 patients in the control arm (EC) underwent ALND by EC. 41 patients in the experimental arm (UD) underwent UD from the point of opening of clavpectoral fascia to the completion of ALND. Results Of the 36 patients in the control arm (EC), 28 patients underwent modified radical mastectomy (MRM) and 8 patients had breast conservation surgery (BCS). Of the 41 patients in the experimental arm, 35 patients underwent MRM and 6 patients had BCS. Results were analyzed with two tailed t test. The total post operative drain volume was significantly reduced in the UD arm (mean 1311 vs 1697 ml; p=0.015). Total number of days with drain, was also significantly lower in UD arm (mean 14.5 vs 17.8 days; p=0.01). Operative time was significantly higher in the UD arm compared to EC arm (mean 24.2 vs 16.5 mins; p=0.0001). Drain volume on postoperative day one was not significantly different in the two arms (mean 139.8 in UD arm vs. 143.1 ml in EC arm; p=0.796). Subset analysis of the patients who underwent BCS, however, did not show any statistically significant difference in total drain volume or the total number of days between the two arms. Hematoma and wound infection were not significantly different. Conclusion Ultrasonic dissection of axilla significantly reduced the total drain output and total number of days with drain in situ, thus suggesting its possible effect in sealing lymphatics. Lesser drain amount and lesser days with drain will aid us in early hospital discharge, thereby decreasing the overall treatment cost, and also in early initiation of adjuvant therapy.

Abstract Id: YUGP3442
Breast Conservation Oncoplastic Surgery And Lipomuscular Latissimus Dorsi Flap For A Multi Focal Tumour In The Upper Outer Quadrant Of Breast
Presenter- 'Dr. Ansar Pullampara pookunju
Co-author - MANI C S.,

Breast surgeries have evolved from the initial radical procedures by Halsted involving removal of the entire breast, underlying muscles and related structures to a more localized approach addressing the tumour and its immediate surroundings. In an era where breast conservation wherever possible is the norm, it is mandatory to have the best possible cosmesis for the patient. Oncoplasty with respect to breast cancers has emerged as the way to ensure complete tumour removal along with adequate margin and providing a natural contour and shape to the breast mound. In the past breast conservation surgeries were associated with poorer cosmesis, but now with time and planning, it has been ensured that BCS provides the most natural appearance to the patient which is acceptable by them while maintaining oncological clearances with survival comparable with mastectomy. The planning of the incision is based on the location of the tumour, without compromising the oncological principles and providing clean scars is of utmost importance. Multifocal tumours are a challenge to the surgeon where large volumes of breast tissue needs to be removed and the need for adopting volume replacement techniques to regain the breast mount. Here I am discussing such a scenario where a lipomuscular lattismus dorsi flap is used to reconstruct the breast after a wide excision of upper outer quadrant tumour.

Abstract Id: YUGP3455
Age Adjusted Charlson Comorbidity Index And 30-Day Morbidity In Pelvic Surgeries
Presenter- 'Dr. Sampada Dessai
Co-author - Dr Satheesan B, Dr Adarsh D,

Introducing Charlson comorbidity index (CCI) is a validated tool enabling clinicians for prediction of adverse events post therapy. The tool is validated in Western world and data regarding its validation from India is missing. In this study we planned to estimate the predictive value of age adjusted charlson comorbidity index (ACCI) in assessing the perioperative complication in oncoplastic patients undergoing major pelvic surgeries. Methods This was a single arm, prospective, observational study, in which adult patients with pelvic malignancies undergoing pelvic surgeries were selected. Age adjusted charlson comorbidity index was calculated. Patients underwent pelvic surgery in accordance with the institutional standard. Adverse events were documented intraoperatively and postoperatively till day 30. The relationship between the ACCI and grade 3-5 adverse events was tested using fischer’s test. Results The rate of grade 3-5 adverse event rate was 16.7% (11 patients, n=66). Among the whole cohort, 11 patients (16.7%) had high score on ACCI. The rate of grade 3-5 adverse events was higher in the cohort of patients with high ACCI score (45.5% versus 10.9%, p-0.014). The sensitivity, specificity, negative and positive predictive value were 45.5%, 89.1%, 89.1% and 45.5% respectively. The mean length of postoperative stay in cohort of patients with low ACCI score was 7.7 days (SD-4.5 days) while that in patients with high ACCI score was 9.4 days (SD-4.8 days) (p-0.319). Conclusion ACCI can predict for post surgical adverse events. It has a high negative predictive value for non occurrence of adverse events.

Abstract Id: YUGP3463
Does Radiation Dose To The Anal Sphincter Complex Affect Quality Of Life And Function Preservation?
Presenter- 'Dr. GANESARAJAH SELVALUXMY
Co-author - Dr Selvaluxmy, Dr Alexander,

DOES RADIATION DOSE TO THE ANAL SPHINCTER COMPLEX AFFECT QUALITY OF LIFE AND FUNCTION PRESERVATION?

Dr.KRITHIKA, Dr. Selvaluxmy, Dr.Alexander Cancer Institute (WIA), Adyar, Chennai BACKGROUND: Low anterior resection (LAR) following neo adjuvant therapy in mid and low rectal carcinoma is sphincter preserving. However not all patients have similar functional outcome. The impact of radiation dose to the sphincter is less studied. This observational study analyses the same. AIM: To assess the relation between the radiation dose to the anal sphincter complex and the rate of fecal incontinence in patients treated with sphincter sparing surgery for locally advanced rectal cancer. MATERIALS AND METHOD: 94 patients with locally advanced mid and low rectal carcinomas who underwent neo adjuvant therapy and LAR from 2011 to 2015 were analyzed. The radiation technique used the dose to the anal sphincter and other factors associated with incontinence were studied. The quality of life and fecal incontinence were also assessed using appropriate questionnaires. RESULT: Nocturnal incontinence was present in 33% in 3D conformal and 45% in conventional Box technique where it was difficult to avoid the complex due to advanced nature of disease. The patients with frequency of stools more than 5 times a day was 35% in conformal therapy and 83% in conventional therapy. The patients without any incontinence was 25% in conformal therapy. Patients with V30

Abstract Id: YUGP3473
Prognostic Value Of Her 2 / Neu Gene Amplification In Epithelial Ovarian Carcinoma
Presenter- 'Dr. Jaya Kumari
Co-author - Sangeeta Pankaj, Anita Kumari, Anjili Kumari

Abstract Background â€“ Despite of all effort in surgery and good response to first â€” line combination chemotherapy, the prognosis for patients of advanced ovarian cancer is poor due to acquired chemo resistance. Use of targeted therapies may potentially improve outcome of patients of ovarian cancer. In recent years, with the
development of the molecular biology and immunologic methods, molecules such as the human epidermal growth factor receptor type 2 (HER2), and the steroid receptors, estrogen (ER) and progesterone (PR) have been tested as the important bio markers ovarian cancer. HER 2 over expression / amplification has been reported in ovarian cancer, but the exact percentage varies widely in the literature. In this study HER 2 status was evaluated in all the patients undergoing debulking laparotomy. 12 out of 76 ovarian cancer patient had HER 2 positive, 2 of them had focally positivity for HER 2 gene status. Method â€¢ HER 2 status of ovarian cancer was evaluated by both immunohistochemistry (IHC) and fluorescence in situ hybridization (FISH) analysis of paraffin â€¢ embedded tissue on conventional immunohistochemistry (IHC) and fluorescence in situ hybridization (FISH) analysis of paraffin-embedded tissue. 2 positive, 2 of them had focally positivity for HER 2 gene status. The prognostic value of HER2 expression was analyzed. HER2 gene was over expressed in 6.33% of ovarian cancer patients. Conclusion- Our result showed that the decision algorithm for HER2 status usually used in breast cancer is appropriate in ovarian cancer also. Key words- HER2 gene, ovarian cancer, Immunohistochemistry (IHC), fluorescence in situ hybridization (FIS) .

Abstract Id: YUGP3475
The Effect Of Long Waiting Time On Local Control, Survival And Mental Health Of Cancer Patients- A Retrospective Analysis.
Presenter- Dr. RUMELI ROY
Co-author - NIBEDITA BISWAS, BODHISATTWA DUTTA, BARNINI GHOSH

THE EFFECT OF LONG WAITING TIME ON LOCAL CONTROL, SURVIVAL AND MENTAL HEALTH OF CANCER PATIENTS- A RETROSPECTIVE ANALYSIS. PURPOSE- To assess the effect of treatment waiting time on clinical outcome and mental health of patients of carcinoma of head and neck and carcinoma cervix. Except for overall survival, whether or not waiting time for treatment could influence other domains of cancer patientsâ€™ overall well-being is to a large extent unknown. Therefore, we performed this study to determine the effect of waiting time for cancer treatment on the mental health of patients as well as on the treatment outcome. MATERIALS AND METHODS- A retrospective analysis was conducted on all patients of carcinoma head and neck and carcinoma cervix of different stages attending RTD OPD of Medical College and Hospital, Kolkata and treated with radical RT between 2012- 2016 with a minimum follow up of 1 year. The total waiting period from histopathologically proven diagnosis to start of definitive RT was divided into two parts; T1 being the interval between diagnosis to referral to radiotherapy/ date of first attendance in RTD OPD and T2 being the interval between date of registration of the patient in RTD to start of definitive RT. Local recurrence and survival were analyzed in function of the waiting time and the status of mental health of the patients were noted in terms of stress related signs and symptoms. A univariate and multivariate analysis was carried out. RESULTS- The median waiting time between diagnosis and initiation of radical treatment increased from 17.5 days in 2012 to 52.5 days in 2016. The median delay period between diagnosis to referral/ first attendance in RTD OPD decreased from 30.5 days in 2012 to 23 days in 2016. Local recurrence occurred in 22 patients of carcinoma cervix and 16 patients of head and neck cancers. In multivariate analysis, the significant predictors of relapse were stage of tumor and longer treatment duration. The waiting time was not significantly associated with local relapse. 66% of patients with waiting time >30 days had documented stress related signs and symptoms needing anxiolytic medication. CONCLUSION- Within the range of the waiting time observed in our study, delay in initiation of radiotherapy did not significantly effect local control or survival in the selected patients. The increasing delay in start of treatment could be accounted to the increasing cancer incidence over the past few years with more number of patients opting for definitive treatment. Although longer waiting time was associated with increased incidence of stress induced signs and symptoms.
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with above mentioned regimen until July 2017 (9th Cycle). Patient is maintaining good cognitive functions and is on regular followup. Patient presented in Nov 2016 and presented no sign of progression or deterioration in the past 8 months. Case 2A, 63 year old gentleman, was evaluated for complaints of cough and haemoptysis in August 2016. Evaluation He was evaluated with a PET CT scan in August 2016 which revealed 3.7 x 2.6 cm speculated metabolically active mass lesion in the apical segment of right lower lobe of lung infiltrating the costal pleura with satellite nodule and also cortical hyper dense lesions in the left parieto-occipital and right occipital regions suggestive of neuroparenchymal metastases. He was evaluated with MRI of brain which revealed multiple (at least 7) nodular and peripherally enhancing neuroparenchymal lesions in the bilateral cerebral hemispheres with mild perilesional edema, suggestive of metastases Biopsy Patient was evaluated with a CT guided biopsy of lung lesion which was suggestive of Moderately differentiated pulmonary adenocarcinoma. Management Patient was treated with WBRT with hippocampal sparing using IMRT technique to a dose of 30Gy/10F (03/09/16 -15/09/16). He received 6 cycles of chemotherapy with Inj Pemetrexed, Inj Bevacizumab, Inj Zoledronic acid and Inj Bicarbonate with peg filgastrim support (30/06/16 â€“ 17/12/16). Re evaluation He was re evaluated with MRI of the brain post chemotherapy which revealed interval regression of the neuro parenchymal lesion in the bilateral cerebral hemispheres with resolution of peri lesional edema. FDG PET done on 21/12/16 revealed marginal regression in the size of mass lesion in the apical segment of the right lower lobe of lung. Radiation Therapy In view of stable disease in right lung and good response to whole brain radiotherapy he was planned and treated with EBRT to lesion in right lung with IGRT technique (Tomotherapy). He received Radiation therapy to the lesion in the right lung with IGRT technique to a dose of 50.4Gy/28# from 10.11.16 to 23.12.16. It was followed by Cyberknife boost to a dose of 18Gy/3# to the metastatic regions in brain on alternate days from 26.12.16 to 30.12.16 and 15Gy/3# to lesion in right lung on alternate days from 26.12.16 to 31.12.16. Patient was on Tab Levipil 500 mg twice a day and Tab. Encrone Chrono 200 mg once a day. Maintenance Therapy Patient was then started on maintenance chemotherapy (7th cycle) with Inj Pemetrexed, Inj Bevacizumab, Inj Zoledronic acid and Inj Bicarbonate with peg filgastrim support from 09.01.2016. Patient was on regular followup Follow up He was re evaluated with PET CT scan on 20.02.17 for the purpose of assessment of disease status. It revealed marginal regression in the size of mass lesion (now measuring 2.8 x 2.1 cm, previously 3.2 x 2.1 cm) in the apical segment of the right lower lobe of lung. He was on follow up and maintenance chemotherapy (11 cycles) when he was re evaluated with MRI brain on 15.04.17 which revealed relatively stable residual small cystic neuro parenchymal lesions in the bilateral cerebral hemispheres with minimal peripheral enhancement. His PET scan was repeated on 17.04.17 which revealed further regression in the size of mass lesion now measuring 2.1 x 2.1 cm (previously 2.8 x 2.1 cm) in the apical segment of the right lower lobe of lung. Patient is on regular followup, and completed 13 cycles of maintenance chemotherapy until 17.05.2017. Patient followed up at the clinic complained of mild weakness with no other symptoms for the past 11 months since the diagnosis. Case 3 Presentation A 70 year old gentleman presented in Nov 2016 and presented no sign of progression or deterioration in the past 8 months since the diagnosis. Case 3 Presentation A 70 year old gentleman presented in Nov 2016 and presented no sign of progression or deterioration in the past 8 months. Case 3 Presentation A 70 year old gentleman presented in Nov 2016 and presented no sign of progression or deterioration in the past 8 months. Case 3 Presentation A 70 year old gentleman. Patient was on followup with no specific complaints He was evaluated with PET scan on 26.06.14 regression of metastatic anterior mediastinal and left hilar lymph nodes and regression of peripheral soft tissue nodule in the left lung. Patient exhibited good response 1 year post treatment. Case 4 Presentation A 47 year old lady, presented with history of seizures and left sided weakness in September 2010. Evaluation She was evaluated with MRI of brain which revealed Right parietal space occupying lesion measuring about 33x26mm in size. Surgical Management She underwent Craniotomy and excision of Right parietal lobe and 48 Gy/3# to the bilateral lung lesions and 24Gy/3# to lesion in right lung with IGRT technique to a dose of 24Gy/3# to the tumor bed in the right parietal lobe and 48 Gy/3# to the bilateral lung lesions and 24Gy/3# to the lesion near the left bronchus of the left lung lesion from 26.11.2011 to 28.07.2011. Patient received Tablett erlotinib for 3 months from Oct-Dec 2011. Follow up Patient was asymptomatic on follow up and her follow up PET CT revealed stable disease in bilateral lung and MRI brain done in February 2012 showed no evidence of residual or recurrent lesion of the disease. She was evaluated with MRI of brain April 2013, which revealed no interval change in the right parietal lobe and no new intracerebral lesion Conclusion These patients were treated with Stereotactic Radiosurgery to the brain lesions secondary to Primary to the lung cancer, showed good response to the treatment and are on regular follow up. All these patients exhibit disease free survival for more than 6-7 months post treatment. Thus Stereotactic radiosurgery offers better survival and disease free outcomes in patients with Oligometas in Brain with or without WBRT.

Abstract Id: YUGP3483

Neutrophil To Lymphocyte Ratio ÅE* A Novel Preoperative Prognostic Indicator In Resectable Lung Cancer

Presenter - Dr PRASHANT CHANDRA DAS
Co-author - Dr K V Veerendra Kumar, Dr S Krishna Murthy,

BACKGROUND Systemic inflammation has been postulated to promote tumor invasion, progression, angiogenesis, and metastasis. Neutrophil-to-lymphocyte ratio (NLR); an emerging biomarker has been reported to be a poor prognostic indicator in several malignancies. Similarly increased mean platelet volume (MPV), an early marker of platelet activation has also been shown to...
be associated with the pathophysiology of various cancers. Studies have demonstrated a significant association of MPV with overall survival(OS) in patients with advanced non small-cell lung cancer (NSCLC). AIM To determine the prognostic value of preoperatively determined Neutrophil-to-lymphocyte ratio (NLR) and mean platelet volume (MPV) in resectable NSCLC. MATERIALS AND METHODS In the present study, consecutive 96 non-small cell lung cancer patients who underwent surgical resection from 2010 - 2016 were reviewed retrospectively, and were investigated for the disease free survival (DFS) impact of preoperative NLR and MPV. The cut-off of MPV was taken as 7. The median survival in the group with MPV > 7 was 11 months (95% Confidence Interval (CI) : 9.07 &e; 12.93) and that in the group with MPV < 7 was 13 months (95% Confidence Interval (CI) : 8 &e; 17.99). However on statistical analysis using the long rank test it did not achieve statistical significance (p = 0.124). The cutoff for NLR was 2.5. Our results indicated that a preoperative high NLR (> 2.5) was associated with a statistically significant lower DFS (9 months vs 14 months; p = 0.002). CONCLUSION High preoperative NLR confers a poorer prognosis with a shorter relapse free survival in resectable lung cancer patients. Peripheral blood smear is an inexpensive and convenient tool that can be readily used to predict NLR and subsequently identify those patients who might be at a higher risk of early relapse.

Abstract Id: YUGP3485
Advance Neuroblastoma (Stage Iii/Iv): Our Experience.
Presenter - Dr. Basant Kumar
Co-author - Vijai D Upadhyaya, Nijagol Mutt, Manish K Gupta

BACKGROUND: Neuroblastoma is the most common extra cranial childhood tumor; characterized by spectrum of clinical presentations and diverse prognosis. Here, we present our experience with advance neuroblastoma (Stage III/IV; INSS) and mortality/morbidity associated with management of this tumor. MATERIAL AND METHOD: We retrospectively evaluated the all patients with advance neuroblastoma (stage III/IV) from July, 2010 to June, 2017; managed at our center from electronic hospital records. Details of patients were reviewed including demography, clinical presentations, investigations, perioperative problems, pathology, management, final outcome and follow-up. RESULT: From July, 2010 to June, 2017, 10 patients with neuroblastic origin tumor (1 ganglioneuroma, 2 ganglioneuroblastoma, 7 neuroblastoma) were managed and included in the study. 4 patients were female and age ranged from 9 months to 16 years (median 6 years). Only 3 patients had age less than one year. By location, one had mediastinal tumor while rest had abdominal tumor (1 pelvis, 4 paraspinal and 4 adrenal). 5 patients detected bony or lung metastasis at time of diagnosis. Chemotherapy was tried in 9 patients and surgery was performed in 6 patients while 3 patients received local radiotherapy. 3 patients were referred to higher center due to partial response, disease progression or recurrence within one year. 2 patients were died while one is on palliative chemotherapy because of recurrence. Only 4 patients are alive (including patient with ganglioneuroma) and follow-up ranged from 8 months to 6 years. CONCLUSION: The management of advance neuroblastoma is challenge and has high recurrence rate and mortality. Various surgical difficulties and morbidity/mortality associated with management; depends on clinical presentation, stage, size and site of tumor, age of patient and response to chemotherapy. KEY-WORDS: Advanced; Neuroblastoma; Chemotherapy; Stage III/IV; Management.

Abstract Id: YUGP3487
Comparison Of Concomitant Boost Using Conformal Therapy And Conventional Fractionated Radiotherapy In The Management Of Locally Advanced Stage Iii.B Cervical Cancer &e; Analysis Of Acute Toxicity
Presenter - Dr. GANESARAJAH SELVALUXMY
Co-author - Dr G Selvaluxmy, 

COMPARISON OF CONCOMITANT BOOST USING CONFORMAL THERAPY AND CONVENTIONAL FRACTIONATED RADIOThERAPY IN THE MANAGEMENT OF LOCALLY ADVANCED STAGE III.B CERVICAL CANCER &e; ANALYSIS OF ACUTE TOXICITY Dr.Vasanthish Christopher Jayapaul, Dr. Selvaluxmy. Cancer Institute (WIA), Adyar, Chennai BACKGROUND: This is a prospective study to assess the toxicity profile of concomitant boost using conformal therapy. IMRT SIB in cervical cancer has shown encouraging results with acceptable acute morbidity. This study is to assess if the acute toxicity is comparable to conventional fractionated radiotherapy and if concomitant boost can replace IMRT - SIB in a limited resource setting. AIM: To compare the acute toxicity profile of patients treated with concomitant boost and conventional fractionated radiotherapy. MATERIALS AND METHODS: 29 patients with locally advanced FIGO stage III.B received concomitant boost using conformal therapy between Sept 2015 and June 2016 of whom 18 patients received chemotherapy. In the same period, a control group of 49 patients were managed with conventional fractionated radiotherapy of whom 15 patients received chemotherapy. Acute toxicity was assessed based on CTCAE 4.0 and RTOG grading of Acute toxicities. RESULTS: Patients who tolerated treatment well without acute radiation induced morbidity were more in the concomitant boost group (62.06% vs 53.06%). Tolerance to chemotherapy was better in the conventional group (46.6% vs 27.7%). Grade III or IV proctitis was more frequent in the conventional group (20.4% vs 17.2%). Diarrhea requiring medication (Grade II) was seen only in the conventional group (4.08%). None of the patients in the concomitant boost group had Genitourinary morbidity while 4.08% patients developed GU morbidity in the conventional group. Development of Grade I skin reaction was comparable in both groups. CONCLUSION: The use of concomitant boost in the management of locally advanced cervical cancers is not widely practiced due to the general perception that the toxicity profile may be more due to dose escalation. This study shows that the acute toxicity profile of concomitant boost using conformal therapy is comparable to that of conventional fractionated radiotherapy with comparable local control rates. Further randomized studies need to be carried out to assess the outcome of concomitant boost in locally advanced cervical cancer.

Abstract Id: YUGP3495
Management Of Breast Cancer Patients - Experience From A Comprehensive Cancer Center In Odisha
Presenter - Dr. Manjunath N M L
Co-author - Manjunath N M L, 

Background Breast cancer is the most common cancer among Indian women. Western statistics reveal far more number of breast cancer patients compared to our women. As per the GLOBOCAN 2012 data, estimated incidence of breast cancer among women in India was 1,45,000 and in USA the same was 2,33,000. Mortality statistics are contrasting to this; Seventy thousand deaths in India compared to 43000 in USA. The discrepancy is obvious and reasons are complex including patient factors, disease factors, and variability in health care and supporting system. Most of the statistics representing the Indian data comes from metropolitan cities. Hence in this report we have studied a cohort of patients with a mixed population of rural and urban background who were diagnosed to have carcinoma breast. Methods Data of all the female patients diagnosed to have carcinoma breast and managed between Jan 2014 to Dec 2018 was collected from the surgical database. Patients with incomplete clinical details were excluded. Epidemiological data tabulated and analyzed. Results Total of 633 patients included for the study. Mean age of the present cohort was 47 years. Three hundred and forty one patients (54%) had carcinoma of left breast and 46% had on the right side. Sixty eight percent Patients had locally advanced disease at presentation. All the patients were operable with easy skin closure, hence underwent modified radical mastectomy. Total of 62 (10%) patients underwent upfront breast conservation surgery followed by adjuvant treatment. All
Background Oral cavity reconstruction after cancer ablation is the most challenging endeavor for a reconstructive surgeon. It has all the scope to test a reconstructive surgeon's capabilities, as it comprises the important facets of an ideal reconstruction. The goals of an ideal reconstruction are the best functional, anatomical and cosmetic outcomes. Pedicled flaps are time tested and well established modalities of oral reconstruction, exemplified by Pectoralis major Myocutaneous flap. Inferior cosmetic outcomes, technical inability due to lack of reach to the desired defect, donor site morbidity are few facts which called for a better reconstructive modalities. Free tissue transfers achieve the goals far more superiorly in experienced hands. Here we have done a retrospective analysis of all the patients who underwent major reconstruction of oral cavity after cancer ablation. Methods The data was collected from a prospectively maintained case details. All the patients who were managed between 2004 and 2016 were included for the study. Total of 1825 patients were included. All the patients were diagnosed to have oral cavity squamous cell carcinoma. Patients with incomplete clinical details were excluded. Results 1825 Patients underwent oral cavity reconstruction following oral cavity cancer resections. Mean age of patients was 50 years and male to female ratio was 4:1. Over a period of time, there was a gradual increase in the number of micro vascular flaps and a corresponding reduction in pedicled and other locoregional flaps. Among the micro vascular flaps, radial free flap was the most common procedure and common indications included carcinoma buccal mucosa, tongue and upper alveolus. Next common procedure was free fibula flap, which was done most frequently for lower alveolar tumors. The complications included bleeding, surgical site infection and hematoma and overall a 30-day flap loss rate for the reconstructive surgeries was less than 1%. Conclusion Micro vascular reconstruction is the method of choice in oral cancer patients. Good functional, minimal chances of complications and flap failure.

Abstract Id: YUGP3501
Surgery For Recurrent And New Primary In Oral Cancer ‡ A Study Of 64 Patients
Presenter- ‡Prof. Krupasindhu Panda
Co-author - D Sanjoy Panda, Dr B B Nayak, Dr Krupasindhu Panda

Background Field Cancerization is an established biological phenomenon. Various clinical and molecular studies have tried to answer the questions related to field Cancerization of upper aerodigestive tract mucosa secondary to tobacco and alcohol exposure. Often it is difficult to differentiate between second primary and recurrent cancer. If the second cancer is well away (Eg; Opposite axis on FDG Brain PET scan using cortex ID. PD = Parkinson’s disease: decreased metabolic activity in the contralateral to the most affected body side parieto-occipital and frontal regions; MSA = multiple system atrophy: decreased metabolic activity in bilateral margins were close then it is high likely that it is a local recurrence. In the present study author has tried to look in to the details of a selected cohort of oral cancer patients who had recurrent or second primary cancers. Methods It’s a retrospective study of patients who underwent curative treatment for oral squamous cell cancer at our institute and were followed up with us. Cases were searched for recurrent and second primary cancers. Cases with incomplete details were removed. Results and conclusion Total of 64 patients were included in the study. Mean age was 58 years. Twenty-two patients had local recurrence, 34 patients had one or more second primary cancer. Mean time gap between the primary treatment and recurrence was 4 months, whereas for second primary tumor, mean period was 22 months. Eight patients had nodal recurrence. Highest recorded number (n=5) of second primary cancer was in a 55-year-old male patient. Among 64 patients, 56 patients could be offered curative resection and reirradiation when last radiotherapy was given more than 3 years back. Four patients had distant lung metastases and received only palliative treatment. Second primary and recurrent oral cancers are quite common in centers with large volume of oral cancers with long follow up. Timely identification and management can lead to cure in majority of patients.

Abstract Id: YUGP3503
Prevalence Of Neurodegenerative Diseases Using 18F Fdg Brain Pet Scan: An Overview And Single Institutional Experience From Mumbai, India.
Presenter- ‡Dr. DINESH KUMAR GAUTHAMAN
Co-author - Dr. Hemant Rathore, Dr. Prasenjit Chaudhuri, Dr. Karuna Luthra

Aim : To know the prevalence and to classify the patients in various forms of Parkinsonism and other neurodegenerative diseases among the Indian population. Methods and Materials : In this study we have included patients came to Jaslok Hospital and Research Centre, a tertiary care hospital in Mumbai, for evaluation of Parkinsonism and various other neurodegenerative diseases by 18F Fdg Brain PET scan with cortex ID software. From a period of 3 years (June 2014 to May 2017), total 371 patients with suspicious of Parkinsonism and or other neurodegenerative diseases were included in the study. All participants were examined, and those who either had at least one possible cardinal sign of Parkinsonism or neurodegenerative disease at the neurologic screening, reported that they had or suspicious of Parkinsonism, dementia or other neurodegenerative disease, were invited for further evaluation. The goal of study was to examine the specialized pattern of hypometabolism in the diseased part and relative sparing of normal part of brain to classify the patients in various forms of neurodegenerative diseases together with their clinical signs and symptoms using 18F FDG Brain PET scan with cortex ID software. Increases and decreases of synaptic activity in the brain are accompanied by proportional changes in capillary perfusion and local glucose consumption. The PET tracer [18F]fluorodeoxyglucose (FDG) allows the measurement of glucose metabolism. FDG is glucose analog with physiological aspects almost identical to glucose. It is transported from the blood to the brain by a carrier-mediated diffusion mechanism. Patients with typical history of resting tremors, slowness of generalized body movements, speech change and gait disturbance, who were diagnosed as idiopathic Parkinson disease on 99mTc - Technetium TRODAT Brain SPECT scan together with FDG Brain PET scan have not considered for the study. Finally a total of 371 patients were included with sign and symptoms suggestive of Parkinsonism and or other neurodegenerative diseases. The results have made as disease-specific metabolic brain patterns or typical cerebral metabolic patterns in neurodegenerative brain diseases. Patient groups are indicated on the vertical axis and on the horizontal axis on FDG Brain PET scan using cortex ID. PD = Parkinsonâ€™s disease: decreased metabolic activity in the contralateral to the most affected body side parieto-occipital and frontal regions; MSA = multiple system atrophy: decreased metabolic activity in bilateral
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putamen and cerebellum; PSP = progressive supranuclear palsy; decreased metabolic activity in the prefrontal cortex, caudate nucleus, thalamus and mesencephalon; CBD = corticobasal degeneration; decreased metabolic activity in the occipital and parieto-temporal regions. AD = Alzheimer’s Disease; decreased metabolic activity in the angular gyrus and other parieto-temporal regions including precuneus extending to the posterior- and middle cingulate gyrus. FTD = frontotemporal dementia; decreased metabolic activity in the superior and inferior frontal gyrus, anterior cingulate gyrus, SMA, sensorimotor area and middle temporal gyrus. RESULT : The population of the developing countries is aging, and an ever-increasing number of Indians are afflicted with neurodegenerative diseases. Neurodegenerative diseases result from the gradual and progressive loss of neural cells, leading to nervous system dysfunction. Due to recent available Nuclear Medicine imaging facilities we have an increase number of population diagnosed to specialized form of neurodegenerative disease and or Parkinsonism. The prevalence of individual neurodegenerative diseases over a period of time shows dominance of AD followed by FTD, LBD and other neurodegenerative diseases. AD in this population was 34.23 % (23.45 % for men, 10.78 % for women). FTD in this population was 10.78 % (5.92 % for men, 4.85 % for women). CBD in this population was 7.00 % (4.04 % for men, 2.96 % for women). PD in this population was 5.66 % (4.04 % for men, 1.61 % for women). PSP in this population was 5.39 % (3.23 % for men, 2.15 % for women). Vascular dementia in this population was 5.12 % (3.50 % for men, 1.61 % for women). MSA in this population was 4.31 % (3.77 % for men, 0.53 % for women). Vascular dementia in this population was 4.04 % (3.23 % for men, 0.80 % for women). Depression in the population was 2.42 % (1.07 % for men, 1.34 % for women). Normal scan in this population was 2.42 % (1.61 % for men, 0.80 % for women). NPH in this population was 1.34 % (1.07 % for men, 0.26 % for women). Others in this population was 1.06 % (0.53 % for men, 0.53 % for women). Other category included Benson’s syndrome (variable variant of Alzheimer’s disease) and Prion disease, rasmussen encephalitis, motor neuron disease/amyotrophic lateral sclerosis. Patients with abnormal scan but not typical of any disease were 16.17 % (12.12 % for men, 4.04 % for women). CONCLUSION : Developing countries, including India are passing through a phase of epidemiological transition with increasing burden of non-communicable diseases (NCD) consequent to transformation of scenario with improvement of health care services in preventive and promotive domains. Among the NCDs, neurological disorders form a significant proportion of global burden of disease. Hence considering 18% FDG Brain PET scan using cortex ID software is an important tool for early diagnosis and classification of Parkinsonism and other neurodegenerative disease, and thereby helping in appropriate treatment.

Abstract Id: YUGP3509

Retrospective Review Of Operated Carcinoma Esophagus - Our Institutional Experience

Presenter - Dr. Ashok Kumar Singh
Co-author - Dr Shashank J Pandya, Dr Ketul S Puj, Dr Rohit kumar Jha

Retrospective review of operated carcinoma esophagus at our institutional experience Aim:- To assess the outcome of carcinoma esophagus operated in our institute. Materials and methods:- A retrospective analysis of 210 patients of carcinoma esophagus operated between 2010-2016 in our institute. Patients were evaluated in terms of neo-adjuvant treatment, surgery, post surgical results and follow-up. Patients of carcinoma esophagus clinical stage T2 were considered. Advanced cases, cases with other histology (Leiomyoma, NET and Sarcomatoid Carcinoma), and patients taken other regimen of treatment before surgery like (curative CTRT, palliative RT) etc) are excluded from the study Results:- Mean age of presentation was 51.7 year. 56.4% are Male and 43.6% female. 30.5% (64 patient mid 1/3rd ; 36% (76) patient lower 1/3rd and 33.5% (70) patient have GE Junction tumor. 74.8% were Squamous cell carcinoma and 25.2% adenocarcinoma in all three regions SCC was main histological type. 56.7% (119) patients were Upfront operated, 25.3% (53) received NACT(neo-adjuvant chemotherapy) and 18% (38) received NACT+ RT(neo-adjuvant chemo-radiation) Most common drug used in NACT was combination of PACLITAXEL+ CARBOPLATIN, and most common NACTRT regimen was 45GY/25# radiation in combination with weekly single agent carboplatin for a duration of 5 weeks. Dose of radiation was adjusted in some patients according to their BMI and performance status. Status of disease after completion of NACT in Upfront surgery group. 11.3% (6) in NACT group, and 18.4% (7) in NACTRT group. Most common cause of inoperability was disease adherent to trachea, bronchus and celiac axis. 48.5% (47) patient were node positive in Upfront surgery group,42.5% in NACT and NACTRT had the lowest 29% node positivity rate on final Histopathology. • PCR(Primary complete response) was highest 29% in NACTRT group. Average blood loss during surgery was highest in NACTRT group (295 ml in Upfront surgery,332 ml in NACT,436 ml in NACTRT) Average Hospital stay and ICU stay was comparable in each group. Most common complication in post operative period was pulmonary followed by anastomotic leak. Recurrence was highest in NACT (42.5%) and lowest in NACTRT group (16%). The most common site of recurrence was systemic liver, Lung and bone being commonest. 76 patients included in the study are still alive Discussion:- Thus NACT+RT has shown the best outcome in terms of survivalship at 71%(27) patients are still alive, Lowest recurrence rate and highest 29% PCR rate among the group . The only drawback is that NACTRT has higher intraoperative blood loss. CONCLUSION:- our study favours NACT+RT followed by surgery to be the best treatment modality for carcinoma esophagus patients with the least recurrence and better survival. DATA TABLE (UPFRONT)

Total Patients ---- 119 Gender Ratio (M:F) ---- 67:52 Mean Age in years ---- 55(M), 50.5(F) Operable patients ---- 97 Histopathology ---- Adeno CA â€“ 31, SCC - 88 Surgery: (THE, LAP THE, 3Stage, Ivor Lewis, Thoracolaparoscopic) THE = 37 LAP THE = 4 Thoraco-Lap-Eso= 25 Open Three stage E= 21 Ivor Lewis = 10 INOPERABLE = 22 Anastomasis (Hand Sewn: Stapler) : 82:15 No. Of Nodes retrieved ---- 10 Adverse Prognostic Factors (PNE/PNI/LVI) ---- PNE = 14, PNI = 20, LVI = 22 Early Complications ---- Pulmonary: 40 (26%), Leak: 14 (10%), Other: 5 (4.2%), Hoarseness : 10 Recurrence ---- Local = 3, Regional : 11, Systemic : 21 Stage ---- PCR â€“ 0, â€œ 0, I â€“ 10, II â€“ 42, III â€“ 45 Site ---- Mid â€“ 31, Lower â€“ 50, GEJ - 38 Average Blood Loss ---- 295 ml Average hospital stay ---- 14 days Average ICU stay ---- 5 days Patients still alive ---- 33(27.7%) ( NACT ) Total Patients ---- 53 Gender Ratio (M:F) ---- 32:21 Mean Age in years ---- 51(M), 48(F) Operable patients ---- 47 Histopathology ---- Adeno CA â€“ 18, SCC - 35 Surgery: (THE, LAP THE, 3Stage, Ivor Lewis, Thoracolaparoscopic) THE = 23 LAP THE = 3 Thoraco-Lap-Eso= 8 Open Three stage E= 12 Ivor Lewis = 1 INOPERABLE = 6 Anastomasis (Hand Sewn: Stapler) : 39:9 No. Of Nodes retrieved ---- 10 Adverse Prognostic Factors (PNE/PNI/LVI) ---- PNE = 9, PNI = 2, LVI = 15 Early Complications ---- Pulmonary: 14 (26%), Leak: 5 (10.6%), Other: 3 (5.6%), Hoarseness : 12 Recurrence ---- Local = 0, Regional : 8, Systemic : 12 Stage ---- PCR â€“ 2, 0 â€“ 0, I â€“ 9, II â€“ 20, III â€“ 16 Site ---- Mid â€“ 18, Lower â€“ 15, GEJ - 20 Average Blood Loss ---- 332 ml Average hospital stay ---- 13 days Average ICU stay ---- 4 days Patients still alive ---- 16(30%) ( NA CTRT ) Total Patients ---- 38 Gender Ratio (M:F) ---- 22:16 Mean Age in years ---- 49.3(M), 48.6(F) Operable patients ---- 31 Histopathology ---- Adeno CA â€“ 4, SCC - 34 Surgery: (THE, LAP THE, 3Stage, Ivor Lewis, Thoracolaparoscopic) THE = 8 LAP THE = 1 Thoraco-Lap-Eso= 4 Open Three stage E= 17 Ivor Lewis = 1 INOPERABLE = 6 Anastomasis (Hand Sewn: Stapler) : 23:8 No. Of Nodes retrieved ---- 10 Adverse Prognostic Factors (PNE/PNI/LVI) ---- PNE = 4, PNI = 1, LVI = 0 Early Complications ---- Pulmonary: 8 (21%), Leak: 2 (6.4%), Other: 5 (13%), Hoarseness : 10 Recurrence ---- Local = 0, Regional : 1, Systemic : 4 Stage ---- PCR â€“ 8, 0 â€“ 1, I â€“ 8, II â€“ 10, III â€“ 4 Site ---- Mid â€“ 15, Lower â€“ 11, GEJ -12 Average
Abstract Id: YUGP3512
Study Of Depression And Anxiety In Patients After Surgery For Head And Neck Cancer In Indian Population
Presenter - Dr. Sagar Mortha
Co-author - Dr. Jonathan Gondi, Dr. Bhargaw Ilapakurty, Dr. Hemanth Kumar Nemade

Background: Patients with head and neck squamous cell cancer (HNSCC) suffer variable degrees of functional impairment that are related to speaking, swallowing, breathing, taste, and smell, as well as facial distortion and in the illness course they are at higher risk of having emotional distress than any other form of cancer amid the loss of these functions. The treatment of HN Cancer involves not just cure and survival but rehabilitation as well. To identify the problem and find at risk population for intervention. Material and Method: A cross-sectional study with 200 patients conducted using a self-administered questionnaire. Instruments for the proposed study include the Hospital Anxiety and Depression Scale (HADS), RTOG Performance status scale Head Neck cancer (PSS HN) along with clinical notes. Association of the subsite, Duration, clinical stage, adjuvant treatment with the quality of life is studied with logistic regression. Results: 13.6% patients were having moderate to severe depression. 14.3% patients had mild depression. Female sex is the only significant risk factor for depression. Conclusion: Anxiety and depression are common in patients after surgery for head and neck cancer and is more in women.

Abstract Id: YUGP3514
A Retrospective Analysis Of An Institutional Experience With Hypofractionated Radiotherapy In Breast Cancer
Presenter - Dr. Narvada Narain
Co-author - DR SUNIL CHOUDHARY

A Retrospective Analysis of an Institutional Experience with Hypofractionated Radiotherapy in Breast Cancer Narain Narvada*, Choudhary Sunil* "Junior Resident, Department of Radiotherapy and Radiation Medicine, IMS, BHU *Associate Professor, Department of Radiotherapy and Radiation Medicine, IMS, BHU ABSTRACT INTRODUCTION The efficacy of hypofractionated radiotherapy schedules in breast cancer has been elucidated in the light of long-term results of randomized clinical trials. Although it is now the standard of care in countries like the UK and Canada, its implementation in India has been rather reluctant. This study aimed at assessing the treatment outcome of breast cancer patients treated with hypofractionated radiotherapy. METHODS We conducted a retrospective analysis of breast cancer patients registered in the Radiotherapy department of Sir Sunderlal Hospital, BHU, between January 2012 and December 2014. A total sample of 62 patients having received a hypofractionated post-operative radiotherapy schedule of 40 Gy in 15 fractions over 3 weeks were included in the study. The demographic profile of the patients, tumor characteristics and treatment details were reviewed. The primary endpoints were OS and DFS at 4 years. RESULTS Out of 62 patients who were assessed (61 female and 1 male), 12 (19.4%) had undergone BCS and 50 (80.6%) had undergone radical mastectomy. 44 (71%) patients presented with early pathological stage (IA â€“ IIIA), whereas 18 (29%) had locally advanced disease (IIIB). All the patients had received chemotherapy, either neo-adjuvant or adjuvant, or both. Local RT was given to 14 (22.5%) patients, and 48 (77.5%) patients received loco-regional RT. The median follow-up period was 27.3 months. Loco-regional relapse was seen in 3 (6.8%) patients with early disease and in 3 (11.8%) patients with locally advanced disease. Overall survival at 4 years was 50% in the BCS group and 40% in the mastectomy group (p=0.694). The DFS at 4 years was 46% post â€“ BCS and 42% post â€“ MRM (p=0.795). CONCLUSION A radiation schedule of 40 Gy in 15 fractions warrants further evaluation before being routinely implemented in the Indian subset of breast cancer patients.

Abstract Id: YUGP3516
NI Flap For Lip Reconstruction
Presenter - Dr. Akash Vaghani
Co-author - Dr Aditya Joshipura, Dr Himanshu Koyani, Dr Amol Singhal

NASOLABIAL FLAP FOR RECONSTRUCTION OF THE MODERATE TO LARGE DEFECTS OF LIPS FOLLOWING CANCER RESECTION

Abstract Id: YUGP3520
Total Glossectomy Rehabilitation Group Our Experience
Presenter - Dr. Sagar Mortha
Co-author - Dr. Bhargaw Ilapakurty, Dr. Jonathan Gondi, Dr. Hemanth Kumar Onkar Nemade

Introduction In our society treatment of cancer prevails the other aspects of loss. Support groups are organizations of people who share common disorder, it is a place of open communication, mutual respect, and safety. It is a place where people are free to ask questions, vent frustrations or fears, explore answers for themselves and solace. Since head and neck cancer involves multiple subsites and malignancies of each subsite pose different challenges, all over the world there are rehabilitation groups for the laryngectomy patients. Looking at the morbidity of total glossectomy we initiated a group for these patients. Objective 1. To provide a relaxed social atmosphere where patients, in the company of their relatives and friends and interested professionals can meet regularly to give and receive encouragement. 2. For new patients and family members: information, guidance, and encouragement. 3. Interaction with the professionals about rehabilitative measures (speech therapy, occupational therapy, psychotherapy). 4. Updating the new technologies and innovations. 5. To create new leadership among the patients to take care of the support group with it’s motto. Results. Patients shared their experiences. 27 patients and 52 attendants who completed their treatment and 2 pre operative patients 6 relatives attended the group meeting. Conclusion It helps to motivate them and encourage to lead a positive life.

Abstract Id: YUGP3522
Carotid Body Tumour
Presenter - Dr. Akash Vaghani
Co-author - Dr. Abhishek Jain

PARAGANGLIOMA OF CAROTID BODY : MANAGEMENT BY CAROTID ARTERY EXCISION AND PTFE GRAFTING

Abstract Id: YUGP3524
Feasibility Of Minimally Invasive Approaches For Total Pelvic Exenteration In Locally Advanced Rectal Adenocarcinoma: Short Term Perioperative Outcomes
Presenter - Dr. ASHISH POKHARKAR
Co-author - Dr. Anish Saklani, Dr. Abhishek Mitra, Pavan Sugor

Background: since last two decades minimally invasive techniques have revolutionized surgical field. In 2003 Pomel first described laparoscopic pelvic exenteration, since then very few reports have described minimally invasive approaches for total pelvic exenteration Methods: We report the five cases of locally advanced rectal adenocarcinoma which were operated between the periods of 1.3.2017 to 20.7.2017 at Tata memorial hospital, Mumbai. Out of five, 4 patients were operated with laparoscopic approach and
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one patient was operated with robotic approach (Da Vinci Xi). We present short term perioperative outcomes of these cases. Results: Five male patients with diagnosis of non metastatic locally advanced rectal adenocarcinoma were selected. All patients had locally advanced disease with involvement of prostate on MRI scan. Four patients underwent laparoscopic TPE and one patient underwent robotic TPE with any conversion to open. All patients underwent abdominoperineal resection with permanent sigmoid stoma. Ileal conduit was constructed with Bricker’s procedure. All five patients received neoadjuvant chemo radiotherapy while two patients received additional neoadjuvant chemotherapy. Mean BMI was 22 (range 19.5-26.3); mean blood loss was 960 ml (range 500–2000ml). Mean duration of surgery was 8.1 hours (range 7-10 hrs). One patients developed paralytic ileus which was managed conservatively while one patient developed intestinal obstruction due to herniation of small intestine behind left ureter and ileal conduit for which exploratory laparotomy was done. Same patient developed acute pylephelitits which was managed with antibiotics. Mean postoperative stay was 15 days (range 9-25) Conclusion: minimally invasive approaches can be used safely for total pelvic exenteration in selected patients. Patients has fast recovery, less blood loss But oncological outcomes are uncertain and will require long term follow up.

Abstract Id: YUGP3526
Feasibility And Outcome Analysis After Adjuvant Brachytherapy In Soft Tissue Sarcomas â€“ Our Experience
Presenter - Dr. Arul Murugan
Co-author - Prof Subbiah Shanmugam MCh, Prof Gopu Govindasamy MCh, Dr Senthil Kumar MCh

ABSTRACT : INTRODUCTION : To discuss the technical aspect of interstitial brachytherapy in soft tissue sarcomas including method of implant, total radiation dose, and wound morbidity and short follow up of these patients. We reviewed our patients who were treated by conservative surgery (wide excision), interstitial implant and external beam radiation therapy. MATERIALS AND METHODS: Nine patients with primary, recurrent or post excision residual soft tissue sarcomas of trunk and extremities underwent surgical resection (wide excision) and received adjuvant radiotherapy including interstitial brachytherapy as a sole treatment (35 Gy at 10 fractions ) or as a boost (6 or 7 fractions) before EBRT. Catheters were placed with regular intervals of 1 cm immediately after wide excision (with adequate margins) or post operatively as a separate procedure. Brachytherapy consisted of high dose rate, Iridium-192 implant which delivered at 3.5 Gy/fraction, twice a day, starting from 5th post operative day. Average size of the tumors were 6.5cms and consisted of 7 different histological types. RESULTS: All patients completed planned interstitial brachytherapy without acute side effects directly related with catheter implantation such as infection or bleeding. Wound morbidity was seen in 2 patients (wound dehiscence, marginal skin discoloration, serous discharge). With median follow up duration of 10 months (range 3-24 months), no recurrences were observed. CONCLUSION: The high dose rate interstitial brachytherapy is easy and safe way to minimize the radiation dose delivered to the adjacent normal tissue and to decrease radiation induced chronic morbidity such as fibrosis by reducing the total dose of external radiotherapy in the management of soft tissue sarcoma with conservative surgery. Key words: Soft tissue sarcoma, Brachytherapy.

Abstract Id: YUGP3528
Retrospective Analysis Of Hypofractionated Radiotherapy (RT) In The Cases Of Breast Cancer Who Underwent Either MRM Or Breast Conserving Surgery (BCs) And Comparison Of Locoregional Control, Acute And Chronic Toxicities Between Both The Groups.
Presenter - Dr. Dinesh Kumar Singh
Co-author - Dr. Nidhi Patni, Dr. Rajeev Yadav, Dr. Tej Prakash Soni

Background: Adjuvant radiotherapy (RT) is an important part of breast cancer management but the dose and fractionation schedules used are variable. A total of 50 Gy in 25 daily fractions delivered over 5 weeks is often considered the “standard” adjuvant RT prescription. Hypofractionated regimes such as 42.5 Gy in 16 daily fractions or 40 Gy in 15 daily fractions following BCS have proven to be equally effective and achieve similar or better cosmetic and normal tissue outcomes for both invasive and in situ diseases and when treating the regional nodes. There no data for patients who underwent MRM and received hypofractionated RT, but due to the promising results in BCS a number of Radiation Oncologist prefer hypofractionated RT in the cases of MRM also. So, we have retrospectively analysed the feasibility of hypofractionated RT in the Cases of MRM treated at our centre. The purposes of the study are: 1. Comparison of Acute and Chronic toxicity in both the groups. 2. Estimate the Locoregional control in both the groups. Methods: It is retrospective analysis of 99 patients with breast cancer treated in Bhagwan Mahaveer Cancer Hospital & Research Centre, Jaipur from 1st January 2015 to 31st December 2015. All the patients treated by hypo-fraction RT (40.05 Gy in 15 fractions) either BCS or MRM were included in this study. Acute and Chronic toxicities were compared at the end of Radiation, after 1 week (Day 7-10), 6 month and at 1year or at last follow up after 1 year. Radiation dermatitis, heat sensation, Breast/Chest wall pain were the parameter to be compared in acute toxicities while Breast/ Chest wall pain, telangiectasia, arm edema, Hyperpigmentation were the parameter which were compared as chronic toxicities. Locoregional control was also compared between both the groups. Chi-square test and Fisher Exact test were used for the statistical analysis. Results: Out of 99 patients included in this study, 31 patients were of BCS group and 68 patients were of MRM group. MRM group had more advanced disease which is statistically significant with p value of <0.001. Radiation dermatitis, heat sensation, Breast pain were more in BCS group and were statistically significant at 7-10 days after completion of RT (P <0.001) as compared to MRM group. But they didn’t lead to break in RT schedule as there severities were not significant at the end of RT. All the chronic toxicities were more at 6 months and at 1 year/ at last follow up in BCS case with statistically significant p value except telangiectasia and hyperpigmentation. None of the patient had rib fracture. Out of 99 patients, 72 (72.73%) patients are on regular follow up (RUFU), 26 patients were lost to follow up while 1 patient died in between. All the live patients with BCS at the last follow are free of locoregional recurrence while 4 out of 58 live patients who underwent MRM had locoregional recurrence at 1 year or at last follow up. Conclusion: By this retrospective analysis we conclude that acute and chronic toxicities were more in BCS cases as compared to MRM, but both the groups tolerated the treatment well without any significant break even after the acute toxicities. The Locoregional recurrence rates were same without any statistically significant difference between both the groups.

Abstract Id: YUGP3530
Adjuvant Chemoradiotherapy Versus Neoadjuvant/Perioperative Chemotherapy In Resectable Gastro-Esophageal Junction Adenocarcinomas - A Retrospective Analysis.
Presenter - Dr. Rahul Sharma
Co-author - Rahul Sharma, Gagan Deep Singh, Shabab L. Angurana

Background: Curative resection (R0) is the gold standard for Gastro-esophageal junction adenocarcinomas(GECs) with expected cure rates of 20-25% with surgery alone. Adjuvant chemoradiotherapy is a valid option in USA whereas neoadjuvant/perioperative chemotherapy is widely practiced in Europe. There is no randomized controlled trial comparing the two options. We aimed to conduct the retrospective analysis of resectable Gastro-esophageal adenocarcinomas treated at our facility with either adjuvant chemoradiotherapy (ACT) or neoadjuvant/perioperative chemotherapy (NACT) and investigate their impact on the clinical outcome. Methods: A total of 79 patients of Gastro anesophageal junction adenocarcinomas completed
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Treatment with curative intent between January, 2010 and December 2016 and were included in the analysis. 33 patients received adjuvant chemoradiotherapy after curative surgery as per Intergroup (INT0116) protocol. 46 patients underwent curative surgery after 3 cycles of neo-adjuvant /perioperative chemotherapy as per UK MAGIC trial regimen. Statistical analysis was done with SPSS version 16 software. Results: The patients included 68 males and 11 females with age ranging from 22-81 years (median 60 years). The follow up ranged from 6-71 months (median 14 months). The number of lymph nodes removed at surgery was 5-25. The number of positive lymph nodes ranged from 0-9. In the adjuvant chemoradiotherapy group, out of 33 patients, 7 were dead of disease and 12 were alive with disease last follow up. In the neo-adjuvant/perioperative cohort, out of 46 patients, 13 were dead and 16 were alive with disease. Median disease free survival in the adjuvant chemoradiotherapy group was 22 months versus 14 months in the neo-adjuvant/perioperative cohort. The difference was significant on Breslow analysis (Generalized Wilcoxon, p=0.014) and on Tarone Ware (p=0.272). Hazard ratio for ACT vs. NACT was 0.703(95% CI 0.376-1.317, p=0.372). Hazard ratio for positive nodes was 1.125 (95% CI 0.96-1.318, p=0.145).Median DFS for the whole group was 18months(SE 2.912,CI 12.292-23.708) and mean DFS was 23.725 months (SE 2.432, CI 18.919-28.532). Conclusion: The optimal management of resectable Gastro-esophageal junction adenocarcinomas remains a clinical dilemma and both the options of upfront surgery followed by adjuvant chemoradiotherapy and neo-adjuvant /perioperative chemotherapy appear to be equivalent in terms of clinical outcome and survival.

Abstract Id: YUGP3534

Review Of Head And Neck Sarcomas À© Institutional Experience Presented By Dr. Arul Murugan Co-author - Prof Subhah Shamugam MCh, Prof Gopu Govindasamy, Dr Syed Afroze Hussain MCh

Abstract: Background: Sarcomas of the head and neck are rare tumors, representing only 1% of all malignant tumors of the head and neck, and 5% of all sarcomas. These lesions present a therapeutic challenge in view of their anatomical location. The treatment has to be tailored depending on various factors. We have reviewed our patients since 2003 with a aim of comprehensive evaluation of various factors in the disease evaluation and management and compare it with the available international data. Materials and methods: A retrospective study of prospectively maintained data was conducted in 31 Head and Neck sarcoma patients treated at Government Royapettah Oncology Centre (Chennai) from January 2003 to December 2016. Results: There were 31 cases of head and neck sarcoma patients with 15 male and 16 female with age ranging between 7-79 years (mean age 41). Mean follow up was 2 years (range between 6 months to 6yrs). There were fourteen histological types with most common being Dermatofibrosarcoma protuberans. Most common bone sarcoma was osteosarcoma of mandible. Most common sites were subcutaneous tissues of the neck and scalp. Common histological type in men was DFSP, and in women were fibromatosis , osteosarcoma, and DFSP. Rare historical type was Extraskeletal chondrosarcoma. Most cases were treated with wide excision with some form of reconstruction ( Deltopectoral flap , PMMC flap, Scalp rotation , SSG). Of these 31 cases 6 cases were recurrent. Adjuvant RT were given for margin positive resections, high grade sarcomas and recurrent lesions with close margins. Pre operative Chemotherapy was given for 3 cases ( synovial sarcoma of tonsil, PNET, rhabdomyosarcoma). On follow up 5 patients developed lung metastasis and were treated with chemotherapy. Conclusion: Head and neck sarcomas are locally aggressive tumors with regional recurrence requiring multimodality treatment and also have the propensity for distant metastasis. Surgery with adequate margins remain the mainstay of treatment, with close margins and positive margins increase the risk of local recurrence. Adjuvant RT and chemotherapy are indicated in these cases and pre operative chemorad isation is indicated for initial unresectable cases. Key words: Head and neck sarcomas, soft tissue sarcoma, osteosarcoma .

Abstract Id: YUGP3540

Clinical Suspicion & Dpd/Dypd Mutation Positivity In Patients Receiving Chemotherapy With Capecitabine / 5 Fluorouracil (5 Fu) Presenter - Dr. VININ N V Co-author - Dr.VININ N V, Dr.JONEETHA JONES, Dr.GEETHA M

Introduction 5FU and capecitabine based chemotherapeutic regimens form the backbone of chemotherapy in multiple GI malignancies, both in the adjuvant and metastatic settings. 5FU and capecitabine form the results Tumor component of treatment in colorectal malignancies as well as GEJ and stomach tumours. Numerous serious adverse side effects have been reported with fluoropyrimidine treatment, including myelosuppression, cardiac toxicity, mucositis, hand-foot syndrome (HFS), and diarrhoea. DPD is the rate-limiting enzyme responsible for 80-85% of 5-fluorouracil (5-FU) catabolism while 5& ten% of the 5-FU is being excreted virtually intact in the urine. Complete DPD deficiency is extremely rare in the general population whereas 3& ten% of cancer patients are considered partially DPD deficient DPD deficiency has been reported at a frequency of 3-5% in the Caucasian population, the frequency of this deficiency in the Indian population is not well studied. Homozygous or compound DYPD mutations are associated with severe DPD deficiency and hence avoidance of 5-FU is recommended. Heterozygous DYPD mutations are associated with 30-70% decrease in DPD activity and hence a dose reduction of 5-FU is indicated. The DPD deficiency syndrome, which is a familial syndrome as a result of the allelic mutations within the DPDY gene Materials & Methods Retrospective analysis To analyse the details of DPD/DYPD mutation analysis report of clinically suspicious cases from the period 01/01/2016 to 31/12/2016 To note the proportion of patients who had positive mutations To note the frequencies of different mutations Total number of patients in whom DPD mutation analysis was done during this period was 40. Among that 26 were males and 14 were females. 24 patients had positive DPD mutation that is 60% of patients. 16 out of 26 males had positive mutation and 8 out of 14 females had positive mutation. 11 patients had multiple mutation. 13 patients had single mutation. Total of 37 mutations were observed. Among that 3 were homozygous mutation and 34 were heterozygous mutation Different mutations observed were 1. Heterozygous 85 T>C in 16 patients 2. Homozygous 85 T>C in 3 patients, 3. Exon 6 Heterozygous 496 A>G, 4. Exon 13 Heterozygous 1627 A>G, 5. Exon 18 Heterozygous 2194G>A, 6. Exon 14 Heterozygous 1905+1 G>A. Toxicities which evoked clinical suspicion were 1. Diarrhoea Grade III in 10 patients & Grade IV in 4 patients, 2. Hematological Grade IV (neutropenia + thrombocytopenia) in 2 patients, Grade III neutropenia in 4 patients, Grade II neutropenia in 1 patient, 3. Hand foot syndrome Grade III in 1 patient , Grade II in 1 patient, 4. Grade III fatigue in 2 patients, 5. Grade III mucositis in 2 patients, 6. Grade IV electrolyte imbalance (Hypernatremia,Hypokalemia) in 1 patient. Among patients in whom DPD mutation was observed 18 patients had Colorectal malignancies, 4 patients had Carcinoma Stomach, 2 patients had Head & Neck malignancies. Conclusion From this retrospective data analysis it is evident that in around 60% of cases clinical suspicion had correlated with DPD/DYPD mutation positivity. At present there is no standard guidelines for ordering DPD/DYPD mutation analysis. From this analysis we would suggest to order for DPD/DYPD mutation analysis in patients with Grade III & IV toxicities ( diarrhoea, hematological, hand foot syndrome, mucositis), who are receiving chemotherapy with Capecitabine/ 5FU. Incidence of DPD deficiency in Indian population is not well studied. Based on the result of this retrospective study we are planning for future prospective study in patients undergoing chemotherapy with 5FU & Capecitabine to find out the incidence of DPD deficiency or DPD/DYPD mutation positivity in Indian population.
Abstract Id: YUGP3542
Multiple Primary Malignant Tumor- Still In Penury
Presenter- *Dr. Shalley Sehgal
Co-author - Anil K Dhull, Vipul bansal, Rajeev Atri

Background: As such multiple primary malignant tumors (MPMTs) is a rare entity but on an increasing trend as result of better investigative work up and treatment modalities leading to prolonged survival. We are hereby reporting a case series to add to the limited literature available. In the present era they are still in the need of defined guidelines. Material and methods: We have evaluated the records of patients presented in our institute from year 2012 to 16 and studied the various parameters pertaining to their clinical presentation, work up, management and outcome. Results: Out of 15922 patients, 15 were found to have multiple malignancies. Out of these 12 patients had synchronous primary malignancies and 3 patients have single primary malignancies at presentation and developed subsequent second malignancies after a median follow up of 4 years. Most common primary with subsequent second malignancies in our set of patients was carcinoma breast. Conclusions: Long term prognosis should not be considered poor in such patients per se but early and meticulous work up and diagnosis is must for radical treatment. Behavior of such tumor is a matter of debate. This case series is going to help in providing in site into the management of such patients.

Abstract Id: YUGP3544
Paediatric And Adolescent Bone Sarcomas - Single Institutional Experience Over A Decade.
Presenter- *Dr. Prinith Siga Fells
Co-author - Prof Dr Subbiah Shanmugam, Prof Gopu Govindasamy, Dr Syed Afroz Hussein

Context: Paediatric and adolescent bone sarcomas are rare entities with low incidence of around 2.5 to 6 per million population in India. Management of this condition is well standardized and global survival data are available, but there is paucity of data in the Indian perspective. Aim of the study: To analyse various prognostic factors and their role in enhancing survival. To assess the role of surgery, chemotherapy and radiotherapy in the management of these tumors and to analyse survival outcome. Settings and Design: Retrospective analysis of patients aged 18 and less, diagnosed as bone sarcomas and treated in a tertiary cancer centre. All the patients received at least one form of therapy depending on stage and site of primary lesion. Results: Twenty three patients of Ewing sarcoma and 22 patients of osteosarcomas were eligible and were included in the study. In Ewing sarcoma completing full course of standard chemotherapy and radiotherapy to the local site were associated with favourable survival outcomes. In osteosarcoma, Limb salvage surgery had significant difference in overall survival compared to amputation. Induction chemotherapy in osteosarcoma was associated with better percentage of necrosis and showed improved survival. The percentage of necrosis correlated positively with survival which was statistically significant (P = 0.015). Conclusion: The median survival of both these bone sarcomas is inferior to global trends. The reason for lower survival is lack of compliance to treatment protocols due to age factors and late presentation. Completion of multi agent chemotherapy in both the tumors adds to better survival. Radiotherapy rather than surgery in Ewing sarcoma improves survival. Limb Salvage Surgery is a safer alternative to amputation. Percentage of necrosis following chemotherapy in osteosarcoma is a reliable predictor of prognosis.

Abstract Id: YUGP3545
Chyle Leak After Esophagectomy - À€Œà€œCaptainà€™s Torment With A Sinking Shipà€
Presenter- *Dr. Karthik K S
Co-author - Dr Madhu Muralee, Dr Chandramohan, Dr Paul Augustine

Introduction: Anatomical relation of oesophagus to Chyle duct is tricky. Oesophagus is in close proximity to Thoracic duct. Thoracic duct is thin fragile and uncanny with its variations. It is tough to identify thoracic duct during surgery, it is tougher to notice its injury during surgery. Chyle flows at a rate of 2-3 litres/day. Chyle is rich with electrolytes, immunoglobulins and fat. Chyle leak leads to fluid and electrolyte loss further leading to cardiac morbidity and immune suppression. The complexities lead to mortality and morbidity. Methods and Materials: We audited the patients who underwent curative oesophageal resection for Oesophageal cancer. The time frame was 2 years including 1st August 2015 to 30th July 2017. Total number of 48 patients have undergone curative resection. 5 patients were found to have significant Chyle leak. Result: Of the total five patients with Chyle Leak, three had mortality and two had morbidity with extended hospital stay. Four patients had undergone Mc Keown procedure and one Ivor Levis. Four patients had undergone prophylactic duct ligation. All leaks were identified within a week and most were detected 2-3 days after surgery. All 5 patients had a high output leak. Four patients needed surgery, one patient deteriorated before planned intervention. Conclusion: Our experience and most studies suggest a high mortality associated with Chyle leak after Oesophagectomy. Prophylactic thoracic duct ligation doesnâ€™t seem to be useful. Avoiding duct injury and hence preventing Chyle leak must be a priority in Oesophageal surgery.

Abstract Id: YUGP3547
The Incidence Of Pulmonary Toxicity In Patients Of Carcinoma Breast Treated By Radiation Therapy
Presenter- *Dr. Jayashree N P
Co-author - NABIZA BEGUM L, NIVEDITA SARKAR, SATHISH A

INTRODUCTION: Many studies have shown that conventional fractionation schedule causes significant pulmonary toxicity in patients with carcinoma breast. This study is taken up to compare the effect of conventional and hypo fractionation on PFT in such patients. MATERIALS AND METHODS: A total of 60 patients, who are all candidates for radiation therapy from August 2015 to July 2016 were taken up for this prospective study. Spirometry based PFT was done before radiation therapy as baseline, at 1 month and once in every 3 months for a year. 30 patients were treated with 50Gy in 25 fractions and 30 patients with 40Gy in 16 fractions to chest wall +/- SCF by 3DCRT. The change in lung functions were compared with the base line values and correlated with lung doses taken from DVH. RESULT: Before radiation therapy, 12(20%) patients had normal PFT, 18 (30%) had mild PFT, 25 (41.66%) moderate and 5 (8.33%) severe PFT. The mean FVC , FEV1 and FEF maximum at baseline were 2.09 , 1.87 and 3.61 respectively. At one month after radiation therapy , the mean FVC, FEV1 and FEF were 2.08 , 1.65 and 3.30 respectively. 10 (16.6%) patients had normal , 8 (13.3%) mild , 35 (58.3%) moderate and 7 (11.6%) severe PFT. At three months after radiation therapy , the mean FVC, FEV1 and FEF were 1.81 , 1.36 and 2.6 respectively. 7 (11.66%) patients had normal , 8 (13.3%) mild, 33 (55%) moderate and 12 (20%) severe PFT. CONCLUSION: Post radiation therapy PFT values were found to decrease due to underlying radiation induced pneumonitis and fibrosis which was more in hypo fractionation schedule. * Our study supports conventional fractionation as it resulted in lesser pulmonary toxicity when monitored strictly with pulmonary function test. * Hypo fractionation lead to significant pulmonary toxicity (>20%) with increasing time after radiation even when V20 was kept below 30%. *Although hypo fractionation completes treatment in lesser time and costs lesser for patients, it could have a negative impact on normal lung tissue when compared to conventional fractionation in the long run.

Abstract Id: YUGP3549
Clinicopathological And Survival Analysis In Young Breast Cancer
INTRODUCTION The incidence of breast cancer among young Indian women in on an increase. The biology of the disease in this age group is poorly understood and the prognosis is generally considered to be unfavorable. Literature suggests that breast cancer in young patients may be different from those in older women. In this study, we aim to study the features of disease presentation in this age group along with the survival outcomes. METHODS We analysed the prospectively maintained database at our institution between 2010 and 2014. All women under the age of 35 years presenting with breast cancer were included in the analysis. Clinicopathological features and outcomes were documented. RESULTS Of the 4021 patients operated for breast lesions between 2010 and 2014, 350 women were younger than 35 years. Of these, 48 had benign breast lesions and 8 presented with phyllodes tumors. Of the remaining women, 250 had available receptor status and survival data and were included in the analysis. 30% of them presented as locally advanced breast cancer. 64% were hormone receptor positive. Of the 70% who presented with early breast cancer and underwent upfront surgery, 50% were node positive. Only 10% of the women opted for a breast conservation surgery and another 12% chose to undergo an modified radical mastectomy with reconstruction. The mean follow up was 4 years. The overall survival (OS) at 4 years was 44%. CONCLUSIONS Women under the age of 35 years form 10% of all the breast cancer patients being treated in our institute. They present at a more advanced stage and tend to follow an aggressive course with a 4 year OS of 44%. Despite counselling, very few of these women opted for a conservation surgery. These women represent a very specific group and further research targeting personalized therapy for these women is warranted.

Abstract Id: YUGP3553

Psychiatric Morbidity, Quality Of Life And Coping Among The Patients Diagnosed With Leukemia: A Clinical Epidemiological Study In A Tertiary Hospital
Presenter- Dr. Kirthishree SS
Co-author - Dr Galgali R, Dr Cecil Ross, Dr Vidya Sathyanarayanan

Background and objectives: Disturbances of mental functions are common among patients with cancer. Depression and Anxiety are more commonly reported in the scientific literature. With disease progression there will be a gradual deterioration in the quality of life and coping skills. The current study attempts to study the prevalence of psychiatric co morbidities in Adult patients with Leukemia with normal cognitive abilities, using standard scales and structured psychiatric interview schedule. We have also attempted to study the quality of life and coping skills in the study subjects. Methodology: The sample consists of 75 adult patients with Leukemia, aware of their diagnosis for more than three months duration. All the patients were medically stable, cognitively intact and were co-operative. Subjects were assessed using Mini International Neuropsychiatric Interview Plus (MINI plus) for psychiatric diagnosis, Hospital Anxiety and Depression rating Scale (HADS) for Anxiety and Depressive symptoms. They were also administered the European organization for research and treatment of cancer quality of life questionnaires (EORTC QLQ-C30), Coping Checklist (CCL) and Global Assessment of Functioning (GAF). Descriptive Statistics, Chi square, Mann-Whitney U, Kruskal Wallis test and Spearmanâ€™s correlation tests were used for data analysis. Results: Symptoms and disorders related to Depression and Anxiety were common. On HADS, 14.7% had severe symptoms of depression and 14.7% with severe symptoms of anxiety. Common anxiety symptoms were worrying thoughts, inability to relax, and feeling tense or wound up. Common depressive symptoms were feeling of being slowed down, loss of interest in appearance, and unable to enjoy things which were previously pleasurable. On MINI Plus majority of the patients were diagnosed with Adjustment disorder (30.66%) followed by Major depressive disorder (12%). About 22.66% were found to have suicidal risk, in them 6.6% reported to have moderate suicidal risk and 16% reported low suicidal risk. Concurrent diagnosis of depression with panic disorder; RDD with PTSD; and depression with Pain disorder were present. On EORTC QLC-C30 scale, the quality of life score of 66.7 indicated moderate rating with poor social and emotional functioning. Among the patients with psychiatric disorder, poorer quality of life scores were noted in all specific sub-domains. Almost all the patients reported financial difficulties. They also reported increased fatigue, reduced appetite and disturbed sleep. Overall the sample used an average of 32 coping behaviours in their coping repertoire and adaptive coping styles were observed, while maladaptive styles of coping were observed among the patients with psychiatric co morbidities. About 34.7% of patients with Leukemia had moderate to severe impairment on global assessment of functioning (GAF). Conclusions: Adult Leukemia patients often report anxiety and depressive symptoms. On commonly used screening instrument for psychological symptoms like anxiety and depression around 45% patients reported to have moderate to severe symptoms. Current, clinical diagnosis of Adjustment disorder followed by Major depressive disorder was common. Recurrent Depressive Disorder (RDD) and Obsessive Compulsive Disorder (OCD) were the life time diagnosis on MINI. Our findings were similar to the existing literature. Our study sample did not have subjects who had substance abuse, psychosis or bipolar affective disorder. Screening instruments are useful but a structured diagnostic clinical interview is essential to confirm the diagnosis before treatment intervention. Leukemia patients with co-morbid psychiatric illness were found to have significant impairment in all the domains of quality of life and were also associated with maladaptive coping skills. There is also moderate to severe impairment in global functioning in patients with Leukemia. Hence there is a need for proper recognition and treatment of psychiatric symptoms and disorders.

Abstract Id: YUGP3555

A Rare Case Of Metastatic Extra Hepatic Cholangio Carcinoma, 18 Years After Excision Of Choledochal Cyst And Biliary Enteric Anastomosis.
Presenter- Dr. Prinithi Siga Fells
Co-author - Prof Dr Subbiah Shamugam, Prof Dr Gopu Govindasamy, Dr Senthil Kumar

Introduction Most of the cholangiocarcinoma (CCA) occurs sporadically. Choledochal cyst is one of the risk factor associated with development of CCA. Approximately 10 to 20 % of unresected choledochal cyst may develop CCA. But the incidence of CCA in resected case of choledochal cyst is much less. Background We report one such case of choledochal cyst type IV, extra hepatic bile duct excision and hepaticojunostomy done 18 years back. Now patient presented with obstructive jaundice and Cholangitis. Imaging revealed a heterogeneously enhancing lesion at hepaticojunostomy anastomotic site with multiple hypodense lesion in both the lobes of liver suspicious of metastasis. Image guided biopsy from the liver lesion was adenocarcinoma. Immuno histochemistry confirmed Cholangiocarcinoma. Conclusion High index of suspicion is necessary in the follow-up of such cases. Non metastatic resectable cases can be managed by wide excision and revision of biliary enteric anastomosis. Metastatic disease should be managed by percutaneous biliary drainage followed by palliative chemotherapy.

Abstract Id: YUGP3559

Primary Intra Osseous Synovial Sarcoma: A Series Of 6 Cases With Review Of Literature
Presenter- Dr. SRIKANTH SOMA
Co-author - Dr.Vishnu Ramanujan, Dr.Anand Raja,

ABSTRACT Introduction: Primary synovial sarcoma of the bone is a very rare entity with only a few cases reported in literature. We
Abstract Id: YUGP3562

Prevalence Of Helicobacter Pylori Infection In Patients With Adenocarcinoma Of Upper Gastrointestinal Tract, And Association Of H Pylori Status With Response To Neoadjuvant Chemotherapy

Presenter - Dr. Karthik K S
Co-author - Dr Arun Peter Mathew, Dr Paul Augustine, Dr Chandramohan

Introduction:
H. Pylori is a Gram Negative Spiral bacteria having a prevalence of 50% world over. The prevalence is even higher in patients with upper GI adenocarcinoma. H Pylori is IARC group 1 Carcinogen responsible for Upper GI Adenocarcinoma. There is evidence to suggest that Anti H. Pylori therapy in premalignant lesions decrease incidence of cancer. Also H. Pylori associated gastric cancer patients have better prognosis. Aim and Objective: To assess the prevalence of H pylori infection in patients with adenocarcinoma of lower oesophagus and stomach. To assess how the presence or absence of H pylori infection affects tumour response to neoadjuvant chemotherapy for adenocarcinoma of lower oesophagus and stomach Methodology: It is an observational single center study to include patients undergoing upper GI endoscopy for suspected or biopsy proven Adenocarcinoma and undergoing neoadjuvant Chemotherapy at our center. Patients are recruited for a period of 1 year. Prevalence of H pylori infection would be studied. Biopsy from healthy antral mucosa was subjected to urease test. Patients serum sample would be analysed, to study the raised titre if IgG for H Pylori infection. CT scans of the patient, before and after the neoadjuvant therapy would be studied and compared. Results: 29.4 % of our patient harbored H Pylori infection, as detected by Urease reagent. 70.5 % of Patients were infected with H Pylori infection, at some point of their life as suggested from the higher IgG titre. The response to neoadjuvant therapy in the two groups were comparable, as seen from the CT scan response in two groups.

Abstract Id: YUGP3564

Primary Non-Hodgkinâ€™s Lymphoma Of The Breast

Presenter - Dr. VIPUL BANSAL
Co-author - Anil K Dhull, Vivek Kaushal, Rajeev Atri

Primary Non-Hodgkinâ€™s Lymphoma of the Breast Vipul Bansal, Anil K Dhull, Vivek Kaushal, Rajeev Atri, Rakesh Dhanekar, Shailley Sehgal, Manas Dubey Background: Primary Non-Hodgkinâ€™s lymphoma of the breast is rare, accounting for 0.04-0.6% of the malignancies of breast. It presents commonly as a large mass clinically with no specific mammographic findings, consistent with breast cancer thus creating a lot of confusion in diagnosis. Material and methods: Out of 690 cases of breast cancer registered in our department during 2015-16, only one case of primary breast lymphoma was diagnosed. A 53-years married female was diagnosed as a case of primary breast lymphoma on basis of histopathological and immunohistochemistry profile. Investigations were done to rule out other sites of lymphoma, rendering diagnosis as Primary diffuse large B-cell lymphoma (DLBCL) of breast. Results: Patient received 8-cycles of CHOP based chemotherapy and is disease free after 6-months follow up. Conclusion: Treatment and outcome of Primary breast lymphoma are hugely different from carcinoma. Unnecessary mastectomies should be avoided. Chemotherapeutic regimens with or without radiotherapy yield excellent outcome without any surgical intervention.

Abstract Id: YUGP3572

Oxaliplatin Induced Multiple Focal Nodular Hyperplasia Masquerading As Colorectal Liver Metastasis

Presenter - Dr. Chirag Jain
Co-author - Dr. SHIVENDRA SINGH, DR NIKHIL GUPTA, DR ASIF

Focal nodular hyperplasia (FNH) is a benign condition that affects normal liver with the prevalence of around 2.6% in autopsy studies [1/1,2]. Pathophysiology of FNH is poorly understood with intrahepatic blood flow distortion being one of the most plausible theory [1/5]. Oxaliplatin which is routinely used for the treatment of stage III and above colorectal cancers in the adjuvant setting has been implicated to cause hepatotoxicity in the form of either blue liver syndrome (sinusoidal obstruction) or steatosis and steatohepatitis [3]. Rarely, it may lead to focal liver lesions which might cause diagnostic dilemma in colorectal cancer patients. We present our case of multiple liver lesions being misdiagnosed as colorectal liver metastasis and treated with liver resection. Recently, the extensive use of oxaliplatin to treat patients with colorectal cancer has been reported to be associated with the development of different liver injuries, as well as focal liver lesions. The present report describes one patient with multiple bilateral focal liver lesions misdiagnosed as colorectal liver metastases, and treated with liver resection. The patient had 6 small bilateral focal liver lesions, with magnetic resonance imaging consistent with colorectal liver metastases (CLM), and fluorodeoxyglucose (FDG)-positron emission tomography (PET) negative. He had parenchyma sparing liver surgery, with uneventful postoperative course. At the histology the diagnosis was multiple FNHs. This further adds to the theory that oxaliplatin based chemotherapy is a risk factor for development of FNH.

Abstract Id: YUGP3574

Does Serum Thyroglobulin Correlates With Residual Thyroid Tissue As Assessed By Whole Body Radio Iodine (I-131) Scan In Post Total Thyroidectomy Patients ?

Presenter - Dr. Rachana Prasad
Co-author - Dr. Vishal Rao ,

INTRODUCTION Residual thyroid tissue after total thyroidectomy in differentiated thyroid cancers can harbour a 38.61 % chance of malignancy and is considered an independent risk factor for recurrence. This needs to be correlated with the serum thyroglobulin. However, the specific cut-off levels of serum thyroglobulin that optimally distinguish local disease, loco-regional disease and distant metastasis are unknown. Since thyroglobulin is a precursor protein of thyroid hormone synthesis produced exclusively by the follicular cells of the thyroid gland, an elevated level of serum thyroglobulin is a good indicator of the disease status. The present study was
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undertaken to determine the levels of stimulated thyroglobulin to complement the finding of residual thyroid tissue in radioactive whole body scan so as to distinguish local disease, loco-regional and distant metastasis. AIMS AND OBJECTIVE • Primary objective was to analyze the presence of residual thyroid tissue in RAI WBSs in well-differentiated thyroid cancer patients who underwent total thyroidectomy. • Secondary objective was to analyze corresponding serum stimulated thyroglobulin level at the time of the scan and to detect cut off value of serum thyroglobulin which will correlate with the finding of residual thyroid tissue in scan MATERIALS AND METHODS All the patients have undergone radio iodine (131I) whole body scan following administration of 74 MBq of I-131 orally. The thyroglobulin level (measured by CLIA method) were recorded at the time of these scans and were analyzed. The presence or absence of residual thyroid tissue (local disease), cervical lymph node metastasis (+/- regional disease) and distant metastasis in the low dose scan reports were analyzed. The data was analyzed to determine the level of serum stimulated thyroglobulin correlating with local, regional and distant metastasis as assessed by whole body radioactive iodine scan. RESULTS The serum thyroglobulin level cut-offs were found to be 97.1183 ng/dl for loco-regional and 1436.0546 ng/dl for distant metastasis CONCLUSION The serum thyroglobulin levels can be used to predict the presence of local disease, loco- regional and distant metastasis. It is a useful test along with radioactive whole body scans to distinguish local disease, loco-regional disease and distant metastasis

Abstract Id: YUGP3576

Huge Postchemotherapy Residual Mediastinal Nsgct With Lung Metastases À€¬ A Surgical Challenge
Presenter - Dr. Neelosh Jain
Co-author - Durgatosh Pandey, Itisha Chaudhary, Mediawalesh Chhibi

Primary mediastinal GCT accounts for less than 5% of GCT and 10–15% of mediastinal tumor, they have different clinical characteristics from Gonadal GCT despite sharing similar histological and serological features. With the introduction of platinum based chemotherapy along with aggressive post chemotherapy surgery is now treatment of choice for gonadal GCT but data are limited for treatment guidelines for extra gonadal GCT. We here present the case report of 21 years old young male with large 19x19x10 cms. primary mediastinal GCT (yolk sac tumor) with multiple lung metastasis involving pericardium, adherent to SVC, thoracic aorta and its branches encasing left brachiocephalic vein (with collateral formation) and multiple bilateral lung metastasis. He received two lines of chemotherapy (3 x BEP followed by 2 x gemcitabine- taxol) responded serologically but progression in primary. Patient was deferred by many specialist surgeon due to its large size and vicinity to many vital structures. With proper consenting and pre operative planning and with the co-ordination with cardiothoracic surgeon as he might need intraoperative heart-lung bypass for optimal cytoreduction. We did resection of mediastinal tumor preserving all vital structures through full median sternotomy with liberal pericardectomy and lung metastectomy (8 nodules on each side). Histopathology was suggestive of Mixed GCT (immature teratoma with yolk sac component) with bilateral pulmonary metastasis. Intraoperative and postoperative period went uneventful,and discharged on 7th postoperative day and now receiving adjuvant chemotherapy and on regular follow up. Keywords: primary mediastinal GCT

Abstract Id: YUGP3585

Title: Development And Validation Of A Broad-Based Second Generation Multi Marker À€¬morphometric IHCÀ€¬ Test For Optimal Treatment Planning Of Stage 1 And 2 Idc Breast Patients: Beyond Er, Pr, Her2 And Ki67
Presenter - Dr. Charusheila Ramkumar

Aims: Assessment of â€œrisk of recurrenceâ€è™ in ER+ breast cancer patients based on clinical parameters and existing biomarkers is insufficient, leading to treatment of majority of patients with chemotherapy. First generation risk identification tests like OncotypeDx and Mammaprint were developed using traditional statistical methods in limited sets of node negative patients, and validated thereafter in node positive patients. However, they are largely prognostic with limited chemo-predictivity and are prohibitively expensive in India and SE Asia. A cost-effective â€œpredictiveâ€è™ test which will: i) accurately estimate the â€œrisk of recurrenceâ€è™ for ii) â€œbroadâ€è™ (node - & +) set of patients is urgently required. Materials and Methods: Using a retrospective training cohort of 300 nodeâ€è™ and node+ patients, we developed â€œCanAssist-Breastâ€è™, a Morphometric Immunohistochemistry based test comprising 5 biomarkers plus three clinical parameters (Tumor size, node status and grade) to arrive at â€œCanAssist-Breast Scoreâ€è™. The risk stratification model was developed using cutting edge SVM based machine learning technology. CanAssist-Breast Score stratifies patients into an all actionable â€œlow or highâ€è™ risk for recurrence, with no intermediate zone. CanAssist-Breast biomarkers include cancer stem cell markers, Cadherins, and ATP transporter proteins - all critical players in the various steps of chemotherapy resistance leading to metastasis. Results: We validated CanAssist-Breast in accordance with EGAPP recommendations which require that prognostic tests be validated both analytically and performance prior to being utilized in patients. Analytical validation experiments were performed to assess â€œvariationâ€è™ in the outcome prediction due to critical IHC variables. We tested inter-pathologists, sample, operator and laboratory site variation and found high concordance in the outcome predictions across all variables, confirming the robustness and reproducibility of the test. Extended clinical validation on 726 pre and post-menopausal cases shows NPV of 95% and accuracy of 85%. The majority of patients in â€œlow riskâ€è™ had Stage 2, Grade 2/3 disease over Stage 1, Grade 1 disease, demonstrating that CanAssist-Breast reclassifies patients who would be considered high risk clinically. In a head-to-head pilot study with Oncotype Dx, CanAssist-Breast test had superior accuracy. Importantly, CanAssist-Breast correctly stratified few recurrent cases as â€œhigh riskâ€è™ which were called â€œlow riskâ€è™ by Oncotype Dx and thus were not treated with chemotherapy. Conclusion: In conclusion, we have developed a highly specific, low-cost prognostic and chemopredictive test to predict risk of recurrence and enable optimal treatment planning in patients with early stage Breast Cancer. Importantly, the biomarkers comprising our test were chosen for their potential of efficacy, which we are currently validating in preliminary testing in our lab. We envision that CanAssist-Breast could be a companion diagnostic to new personalized therapy developed by targeting our biomarkers in the future.

Abstract Id: YUGP3587

Vulvar Cancer: Single Institution Experience In Northern India
Presenter - Dr. Kavitha Jain
Co-author - Vijay Kumar, Arun Chaturvedi, Sanjeev Misra

Introduction Vulvar cancer represents 0.6% of all malignancies affecting women with an annual incidence of less than 3.3/100000. In this case series, this rare group of patients were studied with respect to demographics, presentation and management, recurrences and morbidity. Material and Methods We analysed a retrospective cohort of 16 patients with vulvar cancer treated in the Department of Surgical Oncology, KGMI between 2011 and 2015. Results A total of 16 patients were studied. The median age was 51 years (range, 25 to 71). Four patients gave history suggestive of premalignant disease. History of multiple partners was noted in three patients. Thirteen patients underwent surgery. Positive lymph nodes were detected in three. Median follow up was 24 months (6 to 60 months). Ten patients...
Abstract Id: YUGP3592

Margin Status And Duration Of Surgery In Resection Of Carcinoma With Ultrasonic Coagulation Device: A Comparative Study

Presenter - Dr. Karthik Rao

Aim: We retrospectively reviewed the records of patients who received single session radiotherapy in the Department of Radiation Oncology PGIMS Rohtak from the year 2014-16 and who received single session radiotherapy was done to analyze patient characteristics and their clinical presentation. Material and Methods: Retrospective analysis of patients who presented in Department of Radiation Oncology PGIMS Rohtak from the year 2014-16 and who received single session radiotherapy was done to analyze patient characteristics and their clinical presentation. Results: Out of 4,935 cancer patients registered from 2014-16, 265 patients who received single session palliative radiotherapy were analyzed, which constituted 5.4% of total cancer patients. The median age of presentation was 56-years (Range was 14-90 years). Sixth decade of life was the most common presenting year. Male to female ratio was 2:1. Majority of patients were from rural background (80%). 63% of patients had a history of tobacco intake, while 32% patients were alcoholic. Mean duration of symptoms was 5-months at the time of initial presentation. 58% patients were having fair to good general condition, while 42% were having poor general condition (KPS)

Abstract Id: YUGP3606

Actionable Genomic Mutations In Head And Neck Cancers: A Pilot Study With Review Of Literature

Presenter - Dr. Rachana Prasad

Co-author - Dr. Ravi Nayar, ,

INTRODUCTION Head and neck cancers contribute to a significant portion of cancer related mortality and morbidity. This can be attributed to variation in individual tumor behavior, elucidation of the genomic basis of which may cause a major impact on determining the management of these patients. MATERIALS AND METHODS We conducted a prospective pilot study using a 48- gene mutation panel on tumor tissue samples obtained from 18 patients suffering from head and neck cancers. Clinical significance of these mutations was studied in patients in terms of treatment resistance, presence of distant metastasis, family history and disease recurrence. RESULTS Two of these samples carried germline mutations, nine carried somatic mutations and seven samples had no mutation detected on the 48 gene panel. The genomic studies detected germline mutations in BRCA and AIP, and somatic mutations in TP53, PTEN, RB1, STK11, GNA11 and HRAS. CONCLUSION Application of targeted sequencing technology has proved useful in rapid and accurate detection of somatic mutations, across many samples in a small period of time. Our study and other similar ones have demonstrated the usefulness of integrating the genomic data with clinical details to Map out a tailored treatment plan to benefit individual patients.

Abstract Id: YUGP3610

A Pilot Study To Evaluate The Feasibility And Acceptability Of Use Of Mehendi As Skin Marker In Patients Undergoing Conventional Radiotherapy In A Tertiary Medical College In India

Presenter - Dr. SUPARNA KANTI PAL

Co-author - DR SUMANA MAITI, DR PRERNA SINGH, PROF DR SIDDHARTH BASU

Introduction- The most common practice for marking the radiation field borders in conventional Radiotherapy is with marker pens. In the hot and humid environment in India these markings rapidly fade and require remarking. In some cases they require re-simulation and re-planning. Mehndi has been used in India for ceremonial marking on skin for long. Here we seek to evaluate the same for Radiotherapy. METHODS-Patients undergoing RT for a duration not less than 5 weeks were included in the study after obtaining informed consent. After simulation the field borders were marked with Mehndi (obtained as commercially available Mehendi Cone). The patients were asked to lie down in the patient observation rooms/ day care bed during this procedure. Number of re applications required, for whole duration of the Radiotherapy were collected. We also asked the patients, Oncologists about their satisfaction score with regard to the marking on a scale of 0-10. Patients were allowed to bath at their will without rubbing the area. A total of 30 patients were included in the study.

Abstract Id: YUGP3596

Single Session Radiotherapy: Is It A Real Palliation?

Presenter - Dr. Anthialisha Nongkynrih

Co-author - Karun Kamboj, Anil K Dhull, Rajeev Atri

Aim: We retrospectively reviewed the records of patients who received single session radiotherapy to analyze the palliation of symptoms. Material and Methods: Retrospective analysis was performed comprising patients undergoing wide excision for squamous cell carcinoma of the lateral tongue, with either ultrasonic coagulation device or conventional electrocautery at our Institute in Mumbai, India from October 2015 to October 2016. Statistical analysis: Single factor ANOVA with The level of significance set at 95 % and alpha value of 0.05 Results: Patients who underwent excision with harmonic scalpel had better histologically tumour free margins (except posterior margin) and Lesser operative time when compared with conventional electrocautery. Conclusions: Ultrasonic coagulation device was effective in providing adequate oncologically safe margins in carcinoma tongue. Key Message: resection of tongue tumour with ultrasonic scalpel provides better microscopic margins and reduced duration of surgery when compared to electrocautery. Further prospective randomised studies with larger sample sizes are necessary to confirm the findings.

Abstract Id: YUGP3598

Retrospective Review Of Patients Received Single Session Palliative Rt

Presenter - Dr. Karun Kamboj

Co-author - Anthialisha Nongkynrih, Anil Kumar Dhull, Rajeev Atri

Aim: We retrospectively reviewed the records of patients of single session radiotherapy to analyze patient characteristics and their clinical presentation. Material and Methods: Retrospective analysis of patients who presented in the Department of Radiation Oncology PGIMS Rohtak from the year 2014-16 and who received single session radiotherapy was done to analyze patient characteristics and their clinical presentation. Results: Out of 4,935 cancer patients registered from 2014-16, 265 patients who received single session palliative radiotherapy were analyzed, which constituted 5.4% of total cancer patients. The median age of presentation was 56-years (Range was 14-90 years). Sixth decade of life was the most common presenting year. Male to female ratio was 2:1. Majority of patients were from rural background (80%). 63% of patients had a history of tobacco intake, while 32% patients were alcoholic. Mean duration of symptoms was 5-months at the time of initial presentation. 58% patients were having fair to good general condition, while 42% were having poor general condition (KPS)
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Prospective Pneumonitis In Carcinoma Lung Patients Treated With Radiation

Abstract Id: YUGP3622
Er, Pr And Her2 Status In Breast Cancer: A Retrospective Study On 5436 Women From A Regional Cancer Centre In South India
Presenter- Dr. Dipti Panwar
Co-author- Dr. Rekha V. Kumar, Dr. UshaAmirtham, Dr. C.S. Premalatha

Introduction: Estrogen receptor (ER), progesterone receptor (PR) and human epidermal growth factor receptor-2 (HER2) status are important predictive and prognostic factors in breast cancer and determination of their status is now standard practice. This is an attempt to study the ER, PR, and HER2 status in South Indian women with breast cancer. In addition, an attempt to validate the role of preanalytical factors in the reporting of hormone receptor (HR) and HER2 status was done by comparing the immunohistochemistry (IHC) staining results of needle core biopsies with that of large specimens in a subgroup of patients. Materials and Methods: This was a retrospective study from the archives of the Department of Pathology, KidwaiCancer Institute, from January 2010 to December 2016. Patients diagnosed with invasive breast cancer and available IHC reports of ER, PR, and HER2 status were analyzed. The cases for the year 2016 formed a subgroup and that were analyzed further to observe the impact of preanalytical factors that might influence the IHC staining patterns of ER, PR, and HER2. Result: A total of 5436 patients were included in the study with a median age of 48 years (range, 18-94 years). The majority (65%) were pre or perimenopausal (<55 years) with a median age of 44 years (range, 18-55 years). The remainder (>55 years) had a median age of 63 years (range, 56-94 years). The overall incidence of HR+ patients (ER+/PR−, ER−/PR+, ER+/PR+) was 48%; HER2 enriched, 15%; and triple negative breast cancers (TNBC), 37%. The incidence of HR−, HER2 enriched and TNBC were 45%, 16%, 39%; and 53%, 13%, 34% in patients with age ≥55 years and >55 years respectively (p<0.001). The role of preanalytical factors in IHC staining was analyzed in 930 patients for the year 2016. There was no significant difference in the staining patterns of ER, PR, and HER2 when the IHC staining results of needle core biopsies were compared with those of large specimens. The median age of patients was 44 years. Hormone positivity was higher in elderly patients whereas, the incidence of HER2 positive and TNBC cases was higher in the younger age group. There was no statistical difference in the patterns of ER, PR, and HER2 immunostaining based on IHC staining of core biopsy and large specimen. Corroborating that preanalytical factors did not account for negative HR staining.

Abstract Id: YUGP3624
A Study Of Changes In Nutritional Status In Patients Of Locally Advanced Head And Neck Cancer Treated With Radical Chemoradiation At Tertiary Care Hospital Of West Bengal
Presenter- Dr. Chanchal Mandal
Co-author- Dr. Partha Dasgupta, Dr.Krishnangshu Bhancha Choudhury, Dr. Kakali Choudhury

Background: Lung cancer has been the most common cancer in the world for several decades. In India, lung cancer is the most common cancer with an incidence of 6.9% with 70,275 new cases diagnosed in 2012 and a mortality rate of 6.3% with 63,759 deaths in 2012. Concurrent chemoradiation therapy is the standard of care in patients presenting with locally advanced non-small cell lung cancer. The patients undergoing concurrent chemoradiation have side effects like myelosuppression, acute esophagitis, pneumonitis, cardiac toxicity and radiation brachial plexopathy. Symptomatic pneumonitis is a clinically important toxicity, occurring in 15%-40% of patients receiving CCRT. At present, there is no generally accepted means to predict the individual patient’s risk of developing radiation pneumonitis. Aim: To evaluate the significance of Pulmonary Function Test, serum C-Reactive Protein levels and 6-Minute Walk Test in detecting carcinoma lung patients prone to develop Radiation pneumonitis who are treated with the definitive concurrent chemo-radiation therapy.

Material and Methods: 30 patients of locally advanced NSCLC (IIIA, IIIB and IVA) and limited stage small cell lung cancer were recruited in the study. They underwent serum C-reactive protein test, Pulmonary Function Test and 6-Minute Walk Test before the treatment and subsequently at 3 and 6 months post treatment. Radiation therapy delivery was performed using IGRT-based systems. Radiation therapy was administered using photon beams of energy 6 MV using standard radiation doses along with concurrent chemotherapy. Radiation Pneumonitis was diagnosed by clinical presentation and radiographic abnormalities including ground-glass opacity, attenuation, or consolidation changes within the radiation field, plus comparison with initial scans. Radiation Pneumonitis was graded according to the Radiation Therapy Oncology Group (RTOG) toxicity criteria. Follow up ranged from 2 months to 16 months with a median follow up of 8 months. Statistical analysis was performed using SPSS program for Windows, version 21.0. Results: Radiation Pneumonitis occurred between 9 week and 18 week (median 14 weeks) from start of treatment. 4 out of 30 patients (13.33 %) developed Grade III and above radiation pneumonitis. One of them developed grade IV toxicity (3.3%) and expired. These patients had deranged PFTs at baseline with all 4 of them having a FEV1 of

Abstract Id: YUGP3622
Significance Of C-Reactive Protein, Pulmonary Function Tests And 6-Minute Walk Test In Detecting Early Signs Of Radiation Pneumonitis In Carcinoma Lung Patients Treated With Radiation Therapy With Concurrent Chemotherapy - Single Institutional Prospective

Presenter- Dr. Govind preet Singh
Co-author- Dr. A.K. Anand., Dr. Charu Garg, Dr. Abhishek Gulia

Background: Lung cancer has been the most common cancer in the world for several decades. In India, lung cancer is the most common cancer with an incidence of 6.9% with 70,275 new cases diagnosed in 2012 and a mortality rate of 6.3% with 63,759 deaths in 2012. Concurrent chemoradiation therapy is the standard of care in patients presenting with locally advanced non-small cell lung cancer. The patients undergoing concurrent chemoradiation have side effects like myelosuppression, acute esophagitis, pneumonitis, cardiac toxicity and radiation brachial plexopathy. Symptomatic pneumonitis is a clinically important toxicity, occurring in 15%-40% of patients receiving CCRT. At present, there is no generally accepted means to predict the individual patient’s risk of developing radiation pneumonitis. Aim: To evaluate the significance of Pulmonary Function Test, serum C-Reactive Protein levels and 6-Minute Walk Test in detecting carcinoma lung patients prone to develop Radiation pneumonitis who are treated with the definitive concurrent chemo-radiation therapy.
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Assessments (PG-SGA) was used for malnutrition assessment. The data was analyzed by repeated measures test according to the SGA malnutrition at the time of recruitment, i.e A (well nourished), B (moderately malnourished), and C (severely malnourished). Results: 71 patients were started on definitive concurrent chemoradiation in the study with 30% intenintion to treat. Median age was 58 years. Most common primary site was supraglottic larynx (25.6%). 71.8% were in stage IVa. 67.6% of the recruited patients were moderately malnourished at baseline. At the first response assessment, CR rate was higher in SGA A 66.7% vs SGA C 17.6% (p value 0.064) because of lesser acute G3 adverse events (mucositis p value 0.052, skin p value 0.006). Repeated measure analysis F(2, 68)=64.986, n=68, p value 0.006, showed numerical PGA scores increased during CTRT and fell below baseline at the 6 months follow-up F(3, 132) = 2.337, n=47, p value 0.05. Total treatment time was significantly higher in SGA C patients 67.3±14.4 days against 57.5±12.1 days in SGA-A, p value 0.061 just going on to emphasize the impact of nutritional status on treatment parameters. Conclusion: Our study highlights high incidence of malnutrition in LAHNSCC obviously necessitating more active nutritional supplementation to reduce adverse events, reducing treatment delays and in turn improving treatment outcomes. KEYWORDS: LAHNSCC, Malnutrition, PG-SGA, Chemoradiation.

Abstract Id: YUGP3626

Perineural Invasion Is An Independent Predictor Of Outcome In Colo-Rectal Cancer.
Presenter- Dr. Puvvala Sriphani
Co-author - Dr. M S Ganesh, Dr. keerthi, Dr. M S Sathyanarayan

Introduction: Perineural invasion (PNI) is a clear route for cancer cells to spread however, the role of nerves in cancer progression is relatively unknown. Recent work would suggest that nerves can actively infiltrate the tumor micro-environment and stimulate cancer cell growth. PNI is associated with decrease survival in several solid malignancies but its significance in colorectal cancer remains to be clearly defined. We evaluated PNI as a potent prognostic indicator in colorectal cancer. Methods: We included 126 patients who had colorectal cancer resected at our institution. All stage IV malignancies and perforated tumors were excluded. Tumors were reviewed for PNI by a pathologist blinded to patient outcomes. Over-all survival and disease free survival were determined by Kaplan-Meir and Cox hazards ratio. Results: Overall, PNI were found positive in 26% of tumors. The 5year Disease free survival rate was four fold greater for patients with PNI negative tumors versus those with PNI positive tumors. The 5yr overall survival rate was 76% for PNI negative tumors versus 31% for PNI positive tumors. On multivariate analysis, PNI was an independent prognostic factor for both cancer-specific overall and disease-free survival. Conclusion: Perineural invasion deserves special attention for improved prognostic stratification in patients with colorectal cancer. Reliable assessment is required for investigating into mechanisms of PNI, its role in tumor spread and prognostic value. PNI should be considered when stratifying Colo-rectal cancer patients for adjuvant treatment.

Abstract Id: YUGP3636

Case Report: An Unusual Case Of Cisplatin Induced Paralytic Ileus
Presenter- Dr. Rosdiana Abd Rahim
Co-author - Rosdiana Abd Rahim, Ho Gwo Fuang.

Background: Ileus is a failure of normal intestinal motility in the absence of mechanical obstruction. Ileus is thought to result from an imbalance between sympathetic and parasympathetic motor activity, resulting in intestinal atony. Few anti-cancer therapies reported to be associated with paralytic ileus, such as vincristine, vinblastine and paclitaxel. It is thought as a consequences of autonomic neuropathy. Here we present a paralytic ileus experience during cisplatin therapy. Case Presentation; We present a case of 57 years old gentleman with diagnosis of metastatic nasopharyngeal carcinoma to lung and multiple bones who develop paralytic ileus following chemotherapy cisplatin & fluorouracil. The patient complained of abdominal discomfort with bloating & not tolerating Ryle tube feeding started 3 days after completion of cycle 2 cisplatin & fluorouracil infusion chemotherapy. No vomiting and still passing out small amount of stool everyday. Physical examination revealed abdominal distension, lower abdominal tenderness, sluggish bowel sound and empty rectum. The blood investigations for electrolyte, renal and hepatic function, and amyrase were normal. Abdominal computerized tomography showed diffuse dilatation of small and large bowels extending to the rectum, without any obstructive pathology which was consistent with paralytic ileus. He was hospitalized and treated with nasogastric decompression and partial parenteral nutrition started. The symptoms improved after few days of decompression. Conclusion; Peripheral neuropathy due to cisplatin has been well described, however paralytic ileus has not previously been reported in medical literature. From patient self-reported outcome study, however, this complication was not that uncommon, and was reported by 0.76% of patients receiving cisplatin, especially people who are male, 60 years old and above, have been taking the drug for more than 1 month, also take medication dexamethasone. The present study, after excluding other cause of paralytic ileus, was associated with cisplatin. The mechanism of how cisplatin causes paralytic ileus is poorly understood, maybe due to autonomic neuropathy. Autonomic neuropathy presented with severe postural hypotension has been reported previously in cases of germ cell tumor treated with cisplatin based chemotherapy. This report highlights the need for physicians to be aware of this potential complication when administering cisplatin for such higher-risk group.

Abstract Id: YUGP3638

Stereotactic Ablative Body Radiotherapy In Carcinoma Lung In Elderly-An Experience From A Rural Tertiary Cancer Care Centre
Presenter- Dr. JONEETHA JONES
Co-author - Dr Vinin N V, Dr Nabeel Yahiya, Dr Geetha Muthath

INTRODUCTION & ➮ The best outcomes in lung cancer have been achieved with surgery only in early stage disease, because in early stages complete tumor ablation by surgery is possible in most patients who can tolerate the appropriate resection (lobectomy). Even so, many patients with anatomically resectable early lung cancer are not treated with surgery for reasons including older age and multiple comorbidities. Conventional radiation therapy, while modestly effective, does not approach surgical cure rates because it has not been possible or practical to achieve ablative radiation dose intensities tolerably using such techniques &™ In under two decades, the development of , more appropriately stereotactic ablative radiotherapy (SABR), has revolutionized radiation therapy for early stage lung cancer. Advances in imaging and highly conformal and accurate radiation delivery have made possible the safe administration of truly ablative radiation doses, achieving tumor control rates similar to historical results from surgerySABR uses very short course of very conformal and dose intensive radiotherapy precisely delivered to limited size targets. The rationale for the use of SABR is the assumption that more localized radiation, will spares normal tissue. This allows higher radiation doses to be delivered without increasing toxicity with a potential for improved disease control and survival Ours is a rural based cancer center situated in northern kerala catering to the needs of a huge population.we have large number new cases of lung cancer patients per year.Most of them present in advanced stages.patients who present in early stages go for surgery if they are found to be operable according to the present guidelines.But quite of few number of cases are deemed inoperable due to associated comorbidities or advanced age.Also many patients refuse curative sugery in view of advanced age.Such patients are offered curative stereotactic ablative body radiotherapy if satisfying the criteria for the same. INCLUSION CRITERIA 1.Histopathologically proven Non...
small cell lung cancer patients. Primary stage T1/T2N0M0 3. Absent mediastinal lymphadenopathy in PET CT imaging 4. Those deemed medically inoperable due to comorbidities and advanced age 5. ECOG performance status 0/2 6. EXCLUSION CRITERIA 1. Tumours within 2 cm radius of main airways and proximal bronchial tree 2. Any tumour that is not clinically definable on the treatment planning CT scan e.g. surrounded by consolidation or atelectasis. 3. Metastatic tumors 4. Small cell carcinoma MATERIALS AND METHODS Patients were immobilized in supine position with wing board with knee support with or without vacuum immobilization. Patients underwent a treatment planning CT scan in the treatment position within the chosen immobilization device. The extent of the scan was sufficient to include all potential organs at risk. 1.25mm slices from the upper cervical spine to the lower edge of the liver were taken to include all lung parenchyma on the planning scan. The GTV was defined as the radiologically visible tumour in the lung, contoured using lung settings. Mediastinal windows was used for tumours proximal to the chest wall. Information from PET/CT was incorporated into delineating the GTV. The CTV is the GTV with no margin for microscopic disease extension. The dose prescription was chosen such that 95% of the target volume (PTV) receives at least the nominal fraction dose (e.g. 18 Gy per fraction = 54 Gy total), and 99% of the target volume (PTV) receives a minimum of 90% of the fraction dose. The dose homogeneity within the CTV should preferably not be less than 110% (e.g. 58.4 Gy for standard fractionation) or exceed 140% Gy. RESULTS A total of five patients were treated with SABR between 2012 and 2015 in our centre. Mean age was 70 years. All were males. 4 had adenocarcinoma histology while one had squamous cell carcinoma. All were treated with 12 Gy in 5 fractions. The mean conformity index was and the mean homogeneity index was within prescribed limits. Chest wall pain was the most common complaint. One patient died one year post treatment due to myocardial infarction. All others are alive and on follow up. CONCLUSION SABR is an acceptable modality of curative treatment in elderly lung cancer patients who are deemed medically inoperable due to age or comorbidities. Studies with larger sample size needs to be conducted in future.

Abstract Id: YUGP3640
Impact Of Radiotherapy By Imrt Technique Onâ Health Related Quality Of Life Assessment For Head And Neck Cancer Patients
Presenter: Dr. Ahmad Masroor Karimi
Co-author: Munish Gairela, Parveen Ahlawat, Sarthak Tandon

Back Ground: Progress achieved in the treatment of head and neck cancer (HNC) has made it possible to reduce the treatment related morbidity and mortality and has increased the survival. The symptoms and treatments associated with advanced HNC often have a devastating impact on Quality of Life (QOL), affecting multiple spheres of daily functioning. The aim of present study is to find the main determinants that effect HRQOL. The careful HRQOL monitoring of cancer patients may identify potentially unmet needs and generate the basis of a stepped care model. HRQOL information can thus support clinical decisions and promote health gains. Material and Methods: This was a prospective, analytical questionnaire based study. EORTC questionnaire QLQ C30 and H&N 35 were used. The scoring manual provided by EORTC was used. All the scale and single item measures range in score from 0 to 100. Total of 30 consecutive patients with locally advanced HNC patients were included in this study. Questionnaire were given to the patients at start of treatment, end of each week during radiation and at 3 months after radiation. Results: During treatment and on assessment at completion of treatment, patientâ€™s Global health status/ QOL, functional status and symptoms score declined significantly (p<0.05). Results: The study comprised of 1310 breast cancer patients, out of which 433 (33%) had early breast cancer (EBC), 484 (37%) had locally advanced breast cancer (LABC) and 199 (15%) had metastatic disease at presentation. The mean age at presentation was 47.88 years and only fourteen patients were male. The remaining 15% were non metastatic patients who underwent primary surgery or lumpectomy elsewhere. Overall survival (OS) for all stages at 5 and 10 years were 61.5% and 49.5% respectively. Disease free survivals (DFS) at 5 and 10 years were 59.5% and 47.3%. Stage wise OS at 5 years were 78.4%, 53.8% and 4.2% for EBC, LABC and Metastatic patients respectively. Stage wise DFS were 73.2% and 52.1% at 5 years for EBC and LABC patients respectively. Univariate analysis revealed parity, age at first child birth, clinical and pathological stage (size, T stage, N stage), ER status, hormone receptor status, adjuvant hormonal therapy and adjuvant chemotherapy regimen to be significant predictors of survival. Similar factors affected DFS. On multivariate analysis, only pathological nodal status and clinical stage were independent prognostic factor affecting both DFS and OS. Separate analysis for EBC revealed that tumors of the inner half of the breast also formed a significant predictor of DFS but not OS. In LABC patients, Age < 38 had adverse effect on both DFS and OS in multivariate models of survival besides T3 vs. T4 tumors and pathological nodal status. Conclusion: Pathological nodal status was the only consistent independent predictor of survival in both EBC and LABC. In EBC group, tumors of the inner half of the breast had worse disease free survival. In LABC patients, Age < 38 years and T4 tumors had poorer DFS and OS.

Abstract Id: YUGP3645
Case Report Of Angiosarcoma Breast
Presenter: Dr. Neerja Gupta
Co-author: Dr GEETA KADAYAPRATH

Introduction: Angiosarcoma is an aggressive malignant tumor with vascular origin, a rare entity in breast, accounting for 0.04% of...
malignant breast tumors. Primary tends to occur in younger patients mostly present as a palpable mass. Secondary usually occurs in older females either post radiation, post-surgery or in chronic lymphedema, mostly in 6th decade. The median latency period is of 71 months. Case Summary A 66y old lady presented with a history of left breast wide local excision with intraoperative brachytherapy (15 Gy in 6 fractions) in 2008. FNAC suggested adenocarcinoma but final HPE showed pleomorphic adenoma. 8 years later in Jan 2016, she presented with complaints of multiple small erythematous nodules over left breast. There was a 2x2cm lump in retro areolar region with ecchymosis and skin edema. Her MMG showed thickened skin with multiple cysts. Subsequent MRI and PET CT breast showed multiple small cystic areas, cutaneous deposits and diffuse thickening of the skin, spiculated lesion in retroareolar region (5x12mm) was biopsied and HPE along with IHC was suggestive of angiosarcoma. The tumor cells expressed vimentin, CD31 and negative for CK, CK7, CK5/6, SMA, Desmin, CD34, S100, Melanin A. She underwent left simple mastectomy. Final HPE was high-grade epithelioid angiosarcoma. She received hypo fractionated radiation therapy to chest wall to a dose of 50 Gy in 20 fractions by 6 & 15 MV photons followed by boost to a dose of 6 Gy in 3 fractions using 6 MeV electrons. The patient is in follow-up with no evidence of recurrence till date. Discussion Presentation is a painless, quickly enlarging, palpable non tender mass of size >4 cm. In 90% cases, skin changes are noted-breast edema, bruising, pain, hemorrhage, focal, elevated skin nodules, papules and vesicles. Sonography aids confirmation of a palpable mass while 73% are not detectable mammographically. Doppler sonography shows hyper vascularity. MRI does have a role in early detection. The diagnostic test is full thickness skin biopsy and IHC is cytokeratin negative, positive for vimentin and factor VIII, positive for CD-1 and CD-34, express von Willbrand factor, CD 34, CD 31, and vascular endothelial growth factor (VEGF) and CD117, absence of melanocytic markers. The estimated probability of disease-free survival 5 years after initial treatment is 76% for patients with grade 1 tumors, the probability is 15% for patients with grade 3 tumors. Recurrence rates approach 70%. Disease recurs locally or at distant sites-liver, lungs, and bones. The only chance of curative treatment for secondary angiosarcoma is extensive surgery, with resection of all irradiated tissue. A report from Florida suggests that hyper fractionated irradiation may decrease rates of local recurrence. There is limited data on value of chemotherapy.

Abstract Id: YUGP3649
A Feasibility Study Of Sentinel Lymph Node Biopsy In Endometrial Cancer
Presenter- Dr. Anirudhan Narasimhan
Co-author - Dr. N. Anirudhan, Dr. Latha Balasubramani, Dr. Vidhyalakshmi S.

Lymphovascular space invasion is one of the important prognostic factors for endometrial cancer. Therefore, determination of lymph node status becomes very important in deciding the management and adjuvant therapy for endometrial cancer. Majority of endometrial cancers are type I and present at an early stage. Hence these women may not require a complete lymphadenectomy for the purpose of staging. Complete lymphadenectomy is also associated with increased operating time and postoperative morbidities. Sentinel node biopsy is considered to be a bridge between no lymph node assessment and a complete lymph node dissection. Hence the focus of research is now on assessing the most reliable and efficacious method of assessing sentinel lymph nodes in endometrial cancer. However, there is a complete dearth of research from India in this area. The need of the hour is to standardize the technique and protocols for SLN mapping in endometrial cancer. Hence, we decided to do this study on the feasibility of sentinel lymph node biopsy in endometrial cancer using cervical injection of Technetium 99m nanocolloid. OBJECTIVES: To study the feasibility of sentinel node biopsy in early stage endometrial cancer and to analyse the detection rate of sentinel lymph node (SLN) using preoperative cervical injection of Tc99m nanocolloid. METHODS: 20 patients with preoperative histological diagnosis of endometrial cancer without any extra-uterine involvement on imaging were included in the study from January 2016 to June 2017. Sentinel node mapping was done by cervical injection of Tc 99m nanocolloid on the evening before surgery. Scintigraphic images were taken using gamma camera. Intraoperatively, nodes showing radioactivity were detected using hand-held gamma probe, dissected out separately and labelled as sentinel lymph nodes. Detection rate was calculated and analysed with respect to various parameters. RESULTS: Sentinel lymph node biopsy is feasible in endometrial cancer using cervical injection of Tc99m nanocolloid. SLN detection was possible in 18(90%) out of 20 patients. Bilateral detection was feasible in 11 patients (61.1%) with detection in left and right hemipelvis being 83% and 77.7% respectively. Detection rate of SLN was 88.88% in endometrioid adenocarcinoma. Sentinel node was detected in both the patients with non-endometrioid histology. CONCLUSION: SLNB using cervical injection of Tc99m nanocolloid is feasible in endometrial cancer. It is a safe and easily reproducible technique with good detection rates and high sensitivity. Stage of the tumour, grade and myometrial invasion do not seem to have an influence on sentinel node detection. Cervical involvement, enlarged lymph nodes and obstructed lymphatics can affect sentinel node mapping adversely.
Abstracts

Introduction: Carcinoma oral cavity is one of the most predominant cancers in India. Surgery followed by post-operative radiotherapy (PORT) with or without chemotherapy depending upon post-operative histopathology is the standard treatment for this tumor. We intend to evaluate the feasibility and toxicity of moderate dose escalation using IMRT-SIB in postoperative oral cavity cancer with multiple soft indications for chemo radiotherapy (RT). Material and Methods: The study was a phase II/II prospective, observational feasibility study conducted in Dr. RMLIMS, Lucknow between March 2014 and April 2017. Postoperative oral cavity squamous cell carcinoma, age >18 years, Karnofsky Performance Status of >70 with at least 3 soft indications for postoperative chemoradiotherapy was included. The soft indications considered included T3/T4, node positive without extra capsular extension, lympho vascular invasion (LVI), perineural invasion (PNI) and close margin (1-5 mm). PORT was delivered with IMRT-SIB technique with LINAC (ELEKTa infinity/synergy). A dose of 59.36 Gy in 28 # was delivered to high risk clinical target volume at 2.12 Gy/#, 56 Gy in 28# in intermediate risk CTV at 2 Gy/# and 50.4 Gy in 28# to low risk CTV at 1.8 Gy/#. Acute and late toxicity was graded as per RTOG criteria. Progression free survival (PFS) and overall survival (OS) were calculated from date of randomization. Results: Total of 30 patients were included in the study with male: female being 9:1. Median age of presentation was 58. 16 patients had T3, 12 had T4 and 2 had T2 tumor. 17 out of 30 patients had node positive tumor. LVI and PNI were positive in 10 and 16 patients respectively. The median duration of RT was 45 ± 2 days. Overall highest grade of acute RT toxicity was grade 2 (65%) followed by grade 3 (29%) and grade 1 (6%). Oral mucositis grade 1, 2 and 3 was 3%, 58% and 39% respectively. Skin reactions grade 1, 2 and 3 were 18%, 74% and 8% respectively. Grade 3+ dysphagia and odynophagia was 7% and 5% respectively. Overall, grade 2 late toxicities were 10% (subcutaneous toxicity) and 13.3% (Xerostomia). At a median follow up 25 months (8-38 months) the 2 year PFS was 90% an OS was 93.4%. Conclusion: IMRT-SIB is a safe and acceptable treatment option for patients of postoperative squamous cell carcinoma oral cavity.

Abstract Id: YUGP3654
To Understand The Factors Contributing To Svc Obstruction Secondary To Indwelling Central Venous Catheter.
Presenter - Dr. Neerja Gupta
Co-author - Dr Geeta Kadayaprath, Dr Tripti Saxena

INTRODUCTION-SVC obstruction is attributed to intraluminal and extraluminal causes. Etiology like infections and malignancies(mainly lung carcinoma in 75-80 % cases) is a major cause. With growing need for central line catheters, inaccurate insertion of the catheter tip is an important risk factor for thrombosis. Thrombosis of both IJVs. Tracheostomy was done due to respiratory distress. The patient was shifted to ICU and ventilated. Inj Enoxaparin and chemotherapy were continued with modification of the regimen. Methotrexate was completely withdrawn, dose reduction done for etoposide and steroids in any form were stopped in pre-chemo or post chemo prescription.

Abstract Id: YUGP3656
A Rare Case Of Superior Sagittal Sinus Thrombosis In A Patient With An Invasive Mole: A Case Report
Presenter - Dr. RASHMI SINGH
Co-author - Dr (Prof) Y K Saxena, Dr (Prof) Abha Singh, Dr (Prof) Rama Anand

Lady Hardinge Medical College at New Delhi receives a fairly large number of patients with Gestational trophoblastic tumours. Here we report the rare development of Superior Sagittal Sinus thrombosis (SST) in a patient of invasive mole on cancer chemotherapy. A 28 year old female P7L7 with 8 weeks of amenorrhea presented with complaint of bleeding per vagina (spotting). USG pelvis showed bulky uterus with evidence of a vesicular echogenic mass measuring 51x32 mm that was filling the endometrial cavity with innumerable uniformly distributed cystic spaces within it, suggesting a molar pregnancy. Patient was investigated. CBC, PT, Liver, kidney and thyroid functions, chest X-Ray were found to be normal. Patient's Blood group was B positive. hCG value was 2.7 lakhs mIU/mL. Patient underwent suction and evacuation (S&E). Histopathological examination (HPE) was suggestive of partial mole. Post suction-evacuation patient was followed up with 7hCG titer. During follow up patient’s B-hCG titer increased from the post S&E value of 1.59 lakhs mIU/ml to 3.05 lakhs mIU/mL. Repeat USG revealed that the uterus was enlarged and distended with heterogeneous contents measuring 8.7x6 cm. Myometrium was thinned out (>left) which was noticed by the patient’s attendant when patient woke up in the morning. Subsequently, patient also complained of extreme weakness, giddiness and headache. The Patient was reassessed. There was no history of fever, vomiting and seizure. On examination patient was fully conscious though little drowsy, cooperative and well oriented to time, place and person. Patient was afebrile and the Pulse rate was 62/min, regular, BP 110/70 mmHg. CVS and chest were normal. On CNS examination, higher mental function was normal. Sensory functions were normal and patient had grade 4 power in all limbs. There were no local rise of temperature and bilateral periorbital puffiness (right)>left) and mild conjunctival erythema were present. There was no Cranial nerves deficit. Fundus was also normal. Patient was managed with supportive treatment, and in the meanwhile a CT scan was also advised to rule out any intracranial lesion. The patient showed gradual improvement with supportive care. Non-Contrast CT head showed evidence of central filling defect with surrounding enhancing dura noted in the superior sagittal sinus (empty delta sign) which was suggestive of thrombosis. A filling defect was also noted in the right sigmoïd sinus with extension in to the right internal jugular vein. However there was no evidence of parenchymal changes. Patient was planned for MR venogram, meanwhile she was started with Inj Enoxaparin. MR venogram showed evidence of partial recanalization of superior sagittal sinus thrombosis. The superior sagittal sinus appeared attenuated than the rest of normal sinuses. Rest of the sinuses and veins were normal. Inj Enoxaparin and chemotherapy were continued with modification of the regimen. Methotrexate was completely withdrawn, dose reduction done for etoposide and steroids in any form were stopped in pre-chemo or post chemo prescription.
Patient tolerated chemotherapy well and blood parameters were normal with occasional history of nausea/vomiting (grade 1) during chemotherapy. The β-hcg level was monitored regularly and prior to 5th cycle of chemotherapy, the β-hcg value at 5.78 μl/mL was almost normal (Normal value - < 5 μl/mL). Patient was advised 2 more cycles of combination chemotherapy to consolidate the clinical gains. Patient completed 7 cycles of chemotherapy. Ultrasonography of the pelvis was normal with no evidence of residual disease. As of now, the patient is doing well and is on follow up. The medical literature mentions a number of causative factors viz. hypercoagulation conditions, head injury, malignancy, certain chemotherapy drugs (such as cisplatin, methotrexate, L-asparaginase, Tamoxifen, steroids), infections, inflammatory disease, dehydration, high altitude which often lead to cranial venous thrombosis. Cranial venous thrombosis is a rare phenomenon and warrants an urgent medical attention to avoid devastating complications such as venous infarction, subarachnoid haemorrhage, pulmonary embolism, epilepsy. An exhaustive literature and internet search was done but report of invasive mole with cranial venous thrombosis could not be found and this citation appears to be first reported case. We are publishing this case report in view of rarity of SST developing during the treatment of invasive mole.

Abstract Id: YUGP3660
Non Hodgkin Lymphoma-A Tertiary Cancer Centre Experience
Presenter- Dr. S Gandhimathi Padmanabhan
Co-author - Dr.K.Kalaicheli, Dr.SURESH KUMAR, Dr.G.RAJA

INTRODUCTION According to GLOBOCON 2012, Non Hodgkin Lymphoma constitutes 2.7% of all cancer cases worldwide. NHL is slightly more common in less developed regions. The prognosis depends upon stage, performance status and chemotherapy. In this Rituximab era, patients with CD 20 positivity who are treated with Rituximab along with chemotherapy have a better prognosis.

OBJECTIVE The objective of this study is to analyze the epidemiology and survival in patients with Non Hodgkin lymphoma(NHL).

METHODS Retrospective analysis of NHL patients treated from January 2014 to January 2016. Total of 119 patients were registered. Age group, Sex, Stage, Bulkiness, Histology, Performance status and treatment given were analyzed. All patients treated with either CHOP, CVVP, RCHOP or RCVP. RESULTS NHL constitutes 2.86% of total cancer cases seen in this center. More males than females were affected( MALE Æ 77, FEMALE È 42)(M:F 1.8:1). Thirty nine patients (32.2%) presented with Stage III, 30 (25.2%) with Stage IV, 27 (22.6%) with Stage II and 23 Stage I disease. Sixty one patients (51.2%) had Diffuse Large B Cell (DLBCL) histology. Seventeen patients (11.7%) had B cell type,13 (10.9%) had T cell NHL and nine patients (7.5%) had follicular lymphoma (FL) histologies. Thirty three patients (27.7%) presented with extranodal disease. Fifteen patients (12.6%) had bulky disease at presentation and all the bulky disease patients were consolidated with Involved Field Radiotherapy(IFRT). Thirty two patients (26.8%) did not receive any chemotherapy due to poor performance status. Eighty seven patients (73.7%) received chemotherapy. Eighteen patients (20.6%) received CHOP, 8(9%) received CVP, 47(54%) received RCHOP and 6(6.8%) received RCVP regimen. Survival is analysed in patients who received atleast 4 to 6 cycles of chemotherapy. Among patients who received RCHOP, one year relapse free survival was 48.9%(23) 2 year relapse free survival was 17%(8) and 3 year relapse free survival was 10.6%(5). Among the patients treated with CHOP 50% (9) had 1 year relapse free survival, 5.5%(1) had 2 relapse free survival and 11.1%(2) 3 year relapse free survival. Relapse free survival at two and three years is superior in patients treated with RCHOP. CONCLUSION NHL constitutes 2.86% of all cancer cases seen in this center. More males are affected than females i.e M:F ratio is 1.8:1. DLBCL is the most common histology. Relapse free survival is superior with RCHOP chemotherapy.

Abstract Id: YUGP3662

To Evaluate The Pattern Of Lymph Node Metastasis In Carcinoma Esophagus AE ¬ Our Experience
Presenter- Dr. AMOL PADEGAONKAR
Co-author - DR. AMIT PATIL, DR. KALYAN, DR. SOURABH SHARMA

The extent of lymph node dissection in carcinoma esophagus is still controversial. Many of the Japanese studies have advocated three field lymphadenectomy which is associated with improved overall survival. But in many parts of the world, complete mediastinal lymph node dissection is not performed in view of increased morbidity. The aim of this study is to evaluate the pattern of Supra- and Infra- Carinal Lymph Node metastasis in cases of carcinoma of esophagus Material and Methods: A retrospective analysis of prospectively maintained database of 123 patients who underwent esophagectomy with supra- carinal and infra-carinal lymphadenectomy at our institution from 2009 to 2015 was performed. The pattern of lymph node metastasis in supra and infra carinal lymph node regions was compared with respect to tumour location, histology and T stage. Results: In our study, the overall incidence mediastinal lymph node metastasis was 49.6%. Supra-carinal and Infra-carinal lymph node metastasis was seen in 20.3% and 44.7% respectively. Depending on tumour location, supra-carinal lymph node positivity was 42.8%, 17.2% and 22.8% in upper, middle and lower esophagus, respectively. For infra-carinal region, it was 28.5% for upper, 44.4% for middle and 48% for lower esophagus. Lower esophageal T0 and T1 lesions did not have any positive supracarinal lymph node. Conclusion : In Our study we found that a significant percentage of lower esophageal cancers had metastasis to supra-carinal lymph node. Therefore, it is recommended to perform complete mediastinal lymph node dissection in carcinoma esophagus irrespective of tumour location.

Abstract Id: YUGP3664

Single Stage Nasolabial Flap Reconstruction For Defects Following Oral Cancer Surgeries: A Case Series
Presenter- Dr. SUDEEP GARG
Co-author - Prof Arun Chaturvedi, Prof Sanjeev Misra, Prof Vijay Kumar

Aims/Objectives: To evaluate reliability of Nasolabial flap for reconstruction of small and medium size defects after resection of Oral cancer in terms of viability, complications, functional outcomes.

Methods: A retrospective analysis of 100 cases of oral cancer treated in Department of Surgical Oncology, King George’s Medical University, Lucknow, India from May 2011 to May 2017 with primary excision and nasolabial flap reconstruction, was carried out. In all cases, the excision was combined with neck dissection and facial artery ligation. We have evaluated the tumor site, size, resective and reconstructive methods, complications, and patient satisfaction in terms of cosmesis and function.

Results: The inferiorly based nasolabial flap can be raised as a random pattern flap, as evidenced by its viability in transected ipsilateral facial artery. We have evaluated the tumor site, size, resective and reconstructive methods, complications, and patient satisfaction in terms of cosmesis and function.

Abstract Id: YUGP3666

Cutaneous Toxicity Of Taxanes And Management
Presenter- Dr. Anil Kumar Dhillu
Co-author - Vivek Kaushal, Rakesh Dhanakhar, Rajeev Atri

Cutaneous Toxicity of Taxanes and Management Anil Kumar Dhillu, Vivek Kaushal, Rakesh Dhanakhar, Rajeev Atri Department of Radiation
Abstracts

Oncology, Post Graduate Institute of Medical Sciences, Rohtak Aims: Taxanes group of chemotherapeutic agent has got wide clinical use in many cancers. Its adverse effect include myelosuppression, skin toxicity, neutrotoxicity, fluid retention, alopecia, arthralgia and myalgia. Skin toxicity may vary from mild rash to life threatening complication like Steven Johnson syndrome (SJS) and Toxic Epidermal Necrosis (TEN). Through this review, with our present case series we tried to explore the available literature. Material and Methods: We reviewed our Departmental database for the cutaneous toxicity of Docetaxel in last two years and observed four patients with severe cutaneous toxicity, manifested as SJS/TEN. Results: Taxanes act by disrupting the normal microtubule network essential for mitotic and interphase cellular functions. Docetaxel induced skin reactions include hypersensitivity, edema, Palmerton plantar erythrodysesthesia (PPE), erythema multiforme, nail changes, "photo recall" phenomenon, photosensitivity, scleroderma and subacute cutaneous lupus erythematosus. Severe life threatening complicatios do occur in the form of SJS and toxic epidermal necrosis. Their classification is based on the percentage of Total Body Surface Area (TBSA) of epidermal detachment. Involvement of less than 10% of TBSA is termed SJS, while epidermal detachment greater than 30% may be characterized as TEN. They are characterized by extensive epidermal detachment associated with keratinocyte necrosis. In our patients, developed grade 3 skin toxicity (with a predominance of erythrodysesthesia on the soles, upper chest, bilateral upper and lower limbs). This significant toxicity promoted a 2-week chemotherapy delay. Blood and pus culture sensitivity, punch biopsy from the lesion were done. Symptoms were managed with anti-inflammatory drugs, plenty of IV fluids, maintenance of blood sugar level, oral steroids, topical silver nitrate ointment, benzydamine mouthwash and oral antibiotics. In our subset, three patients were having culture positive with Staphylococcus aureus while one was having positive Pseudomonas aeruginosa, and treated accordingly. Signs and symptoms improved dramatically after 7-10 days of treatment. Conclusions: Chemotherapy should be withheld till the symptoms and symptoms improved dramatically after 7-10 days of treatment. Cytopathological examination, both pre and post-treatment (3rd and 6th month of follow-up) were retrospectively evaluated for assessment of vocal cord mobility in advanced laryngeal cancer from primary surgery i.e. laryngectomy to non-surgical organ-preservation technique was majorly driven by the Radiation Therapy Oncology Group (RTOG) 91-11 trial by Forastiere et al in 2003, and primary chemoradiation became the first-line treatment for most patients with advanced laryngeal cancer. Objective To assess the return of vocal cord mobility following organ preservation protocols in advanced laryngeal carcinoma. Authors 1. Kinjal Shankar Majumdar, Clinical fellow, Dept of Head and Neck Surgical Oncology, HCG Hospital, Bangalore. 2. Vishal US Rao, Head, Dept of Head and Neck Surgical Oncology, HCG Hospital, Bangalore. 3. Rachana Prasad, Clinical Fellow, Dept of Head and Neck Surgical Oncology, HCG Hospital, Bangalore. 4. Ravi C Nayyar, Dean Academics, HCG Hospital, Bangalore. Contact detail Kinjal Shankar Majumdar MBBS, MS (ENT), Fellow (Head and Neck Surgical Oncology) HCG Hospital No 8, HCG Towers, P. Kalinga Rao Road, Sampangi Ramnagar, Bangalore - 560020 Contact No. +918585697953 Email: drkinjalmajumdar@gmail.com Introduction The incidence of laryngeal cancer has been reported to be 1.26 – 8.18 per 100,000 population in India. The shift in treatment paradigm in advanced laryngeal cancer from primary surgery i.e. laryngectomy to non-surgical organ-preservation technique was majorly driven by the Radiation Therapy Oncology Group (RTOG) 91-11 trial by Forastiere et al in 2003, and primary chemoradiation became the first-line treatment for most patients with advanced laryngeal cancer. Method This retrospective observational study was conducted in the Department of Head and Neck Oncology in a tertiary level healthcare center with 18 patients who were diagnosed with locally advanced carcinoma larynx and treated with organ preservation protocols. Patients who have distant metastasis and treatment defaulters were excluded from the present study. All patients received concurrent chemoradiation as the primary treatment. The videolaryngoscopic examination, both pre and post-treatment (3rd and 6th month of follow-up) were retrospectively evaluated for assessment of vocal cord mobility. 18-FDG positron emission tomography was done at 3

Abstract Id: YUGP3668

Yield Of Different Bronchoscopic Techniques In Diagnosis Of Lung Cancer

Presenter - Dr. VIPUL KUMAR

Co-author - Dr RITU AGGARWAL, Dr K B GUPTA,

Abstract Id: YUGP3672

Assessing Vocal Cord Mobility In Locally Advanced Laryngeal Carcinoma Patients Treated With Organ Preservation Protocol

Presenter - Dr. Kinjal Majumdar

Co-author - Vishal US Rao, Rachana Prasad, Ravi C Nayyar

Abstract Id: YUGP3676

INSTITUTIONAL EXPERIENCE Dr Abhishek Sharma, Dr H S Kumar, Dr Rahul Rai

INTER-OBSERVER AND INTRA-OBSERVER VARIATIONS ON PAROTID CONTOURING IN CT vs. CT-MRI FUSION : AN INSTITUTIONAL EXPERIENCE Dr Abhishek Sharma, Dr H.S Kumar, Dr Rahul Rai Aim: In the era of advanced radiotheraoythe techniques main focus is on the target volume along with the organs at risk. One of the important OARs for patient’s quality of life post tretment is xerostomia leading to poor quality of life due to change in taste or difficulty in swallowing and prone to oral infection. Materials & methods: Thirty patients with different primary head and neck cancers who underwent 3D conformal radiotherapy were included in this study. CT & MRI imaging in treatment position was done for all the patients. The first step i.e. image registration was done in the eclipse treatment planning system V 13.6. Bilateral parotids on CT & CT-MRI fusion were delineated by four radiotherapist , volumes measured & contour ratio was derived. Interobserver mean volume differences was measured on CT & CT-MR fusion images. Both parotid were contoured by same radiotherapist on different occasion for intraobserver study Results: Interobserver difference was statistically significant (p value =

Abstract Id: YUGP3666

Inter-Observer And Intra-Observer Variations On Parotid Contouring In Cts. Ct-Mri Fusion : An Institutional Experience

Presenter - Dr. Abhishek Sharma

Co-author - Dr.abhishek sharma, Dr. H S Kumar, Dr Rahul Rai

Background: Lung cancer is generally diagnosed during late stage of the disease so early diagnosis of lung cancer is very important to reduce lung cancer death rate. Flexible fiberoptic bronchoscopy revolutionized early diagnosis of lung cancer as it provides sufficient cytologic and histologic specimens in form of bronchial brushings, broncho-alveolar lavage and bronchial forceps biopsy. Cytologic techniques are safe, economical, and provide quick results. They not only complement tissue biopsies in the diagnosis of lung cancer but are also comparable in yield. Methods: The present study analyzes cytology of Bronchoalveolar lavage, Bronchial Brushings and histology of bronchial biopsy in forty five (45) patients diagnosed as lung cancer by Fiber-optic bronchoscopy. Age, gender, smoking habits, various histological types of malignancies, and yield of various bronchoscopic diagnostic techniques in the diagnosis of lung cancer were evaluated. Results: Of the 45 cases with confirmed diagnosis, 37 (82.22%) were males and 8 (17.17%) were females with male to female ratio of 4.6:1. The mean age in our study group was 54.71 years. Squamous cell carcinoma was the most common primary bronchogenic tumor (62.22%) followed by adenocarcinoma (26.66%). The overall diagnostic yield of fiber-optic bronchoscopy procedures was 100% (32/32 patients) in bronchoscopically visible tumors. Bronchial biopsy was most sensitive (100%) followed by Bronchial Brushings (88%) and BAL (81.25%). However, in non-visible tumors, Biopsy, Brush and BAL yielded diagnostic specimens for lung cancer in 84.61%, 76.92% and 46.15% of patients respectively. Conclusions: Lung cancer is a common malignancy with male preponderance. Bronchial biopsy has a very high diagnostic yield. Cytopathological examination of bronchial brushings and broncho-alveolar lavage not only complement tissue biopsies in the diagnosis of lung cancer but have comparable diagnostic yield.

Abstract Id: YUGP3672

Assessing Vocal Cord Mobility In Locally Advanced Laryngeal Carcinoma Patients Treated With Organ Preservation Protocol

Presenter - Dr. Kinjal Majumdar

Co-author - Vishal US Rao, Rachana Prasad, Ravi C Nayyar

Authors 1. Kinjal Shankar Majumdar, Clinical fellow, Dept of Head and Neck Surgical Oncology, HCG Hospital, Bangalore. 2. Vishal US Rao, Head, Dept of Head and Neck Surgical Oncology, HCG Hospital, Bangalore. 3. Rachana Prasad, Clinical Fellow, Dept of Head and Neck Surgical Oncology, HCG Hospital, Bangalore. 4. Ravi C Nayyar, Dean Academics, HCG Hospital, Bangalore. Contact detail Kinjal Shankar Majumdar MBBS, MS (ENT), Fellow (Head and Neck Surgical Oncology) HCG Hospital No 8, HCG Towers, P. Kalinga Rao Road, Sampangi Ramnagar, Bangalore - 560020 Contact No. +918585697953 Email: drkinjalmajumdar@gmail.com Introduction The incidence of laryngeal cancer has been reported to be 1.26 – 8.18 per 100,000 population in India. The shift in treatment paradigm in advanced laryngeal cancer from primary surgery i.e. laryngectomy to non-surgical organ-preservation technique was majorly driven by the Radiation Therapy Oncology Group (RTOG) 91-11 trial by Forastiere et al in 2003, and primary chemoradiation became the first-line treatment for most patients with advanced laryngeal cancer. Objective To assess the return of vocal cord mobility following organ preservation protocols in advanced laryngeal cancer. Materials and method This retrospective observational study was conducted in the Department of Head and Neck Oncology in a tertiary level healthcare center with 18 patients who were diagnosed with locally advanced carcinoma larynx and treated with organ preservation protocols. Patients who have distant metastasis and treatment defaulters were excluded from the present study. All patients received concurrent chemoradiation as the primary treatment. The videolaryngoscopic examination, both pre and post-treatment (3rd and 6th month of follow-up) were retrospectively evaluated for assessment of vocal cord mobility. 18-FDG positron emission tomography was done at 3
Abstract Id: YUGP3684

Incidence Of Cell Surface Receptors, Sex Hormone And Growth Factor Receptors Identifiable By Immunohistochemistry In Head And Neck Cancer

Presenter - Dr. Kinjal Majumdar

Co-author - Ravi C Nayar, Naveen Krishnamoorthy, Vishal US Rao

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Introduction One of the most common types of neoplasms is head and neck cancers, especially in India. There is need to improve survival rates in advanced head and neck cancer patients by proper use of Chemotherapy in conjunction with conventional treatments like surgery and Radiation. There is a need for proper identification of cell surface receptors to better understand underlying mechanisms of carcinogenesis, which may be potentially targetable with medication. The potential of use of these receptors as candidates to plan intervention strategies in future will be established in a pilot manner by correlating their presence with Tumour responsiveness to radiation and chemotherapy, and presence of markers of epithelial mesenchymal transition (EMT), and actual occurrence of distant metastasis at time of initial presentation. Aim of the study To clarify the incidence of cell surface receptors in head and neck squamous cell carcinomas at various sites, so as to evaluate their potential for therapeutic targeting. Materials and method The study was carried out in the Head Neck Services of HCG Hospitals Bangalore. After prior consent, the Patient clinical data was compiled as per a computerised format, will clinical images. Radiological images, including CT scan, PET scan were archived. TNM staging at initial presentation was done. Biopsy specimens were studied as per routine format with HPE initially, and then IHC staining for a panel of cell surface receptors. EGFR, ER, PR, AR, Herceptin, E Cadherin were studied. Treatment decision was based on tumour board recommendation, and initial response evaluation by PERSIT criterion was analysed. Result A pilot study on 20 cases of Head and Neck Cancer was carried out. 5 patients were in each group such as buccal mucosa, larynx, tongue & retromolar trigone. ER status was negative in all patients, but PR Status was positive in 1 patient of RMT cancer. Her 2 Neu status was positive in 2 out of 20 patients (10%). E cadherin status was noted as being above 3+ in 12/20 cases suggestive of high EM Transition status. Conclusion These findings suggested a need for a prospective study with larger numbers to look systematically at the incidences of cell surface receptors in Head and Neck Cancer. As the absence of ER, PR is at variance with world literature, and the presence of HER2 Neu suggests a therapeutic approach which has a potential for benefit.

Abstract Id: YUGP3686

Prognostic Significance Of Lymph Node Density As Predictor Of 2 Year Disease Free Survival In Laryngeal Carcinoma

Presenter - Dr. AMOL PADEGAONKAR

Co-author - DR. RISHI KHOSA, DR. MANDAR DESHPANDE,


LYMPH NODE DENSITY (LND) IS THE RATIO OF POSITIVE LYMPH NODE TO THE TOTAL NUMBER OF LYMPH NODES DISSECTED.

LYMPH NODE DENSITY HELPS IN COMPENSATING FOR THE POSSIBLE BIAS IN THE SAMPLING METHOD. THE AIM OF THIS STUDY IS TO EVALUATE THE PROGNOSTIC SIGNIFICANCE OF LYMPH NODE DENSITY AS A PREDICTOR OF 2 YEAR DISEASE FREE SURVIVAL IN LARYNGEAL SQUAREM CELL CARCINOMA. MATERIAL AND METHODS: A RETROSPECTIVE ANALYSIS OF PROSPECTIVELY MAINTAINED DATABASE OF 38 PATIENTS WHO UNDERWENT TOTAL LARYNGECTOMY WITH BILATERAL NECK DISSECTION AT OUR INSTITUTION FROM 2009 TO 2015 WAS PERFORMED. THE PATTERN OF LYMPH NODE METASTASIS IN BILATERAL NECK ANALYSED, LYMPH NODE DENSITY CALCULATED AND DATA ANALYSED. RESULTS IN OUR STUDY, THE OVERALL INCIDENCE OF LYMPH NODE METASTASIS IS 57.9%. THE VALUE OF LYMPH NODE DENSITY VARIES FROM 0 TO 0.750. MEAN LYMPH NODE DENSITY IS 0.094. 69.6% OF PATIENTS WITH LYMPH NODE DENSITY > 0.03 COULD ACHIEVE DISEASE FREE SURVIVAL OF 2 YEARS WITH RESPECT TO 26.7% PATIENTS WITH LYMPH NODE DENSITY < 0.03. THE VALUE OF LYMPH NODE DENSITY IS IRRESPECTIVE OF THE STAGE OF THE DISEASE. CONCLUSION: IN OUR STUDY, WE FOUND THAT LYMPH NODE DENSITY CAN BE CONSIDERED AS AN IMPORTANT PROGNOSTIC FACTOR IN ADDITION TO OTHER KNOWN PROGNOSTIC FACTORS IN IDENTIFYING PATIENTS WITH INCREASED RISK.

Abstract Id: YUGP3692

Depression And Anxiety In Malignancy Patients On Radiation Treatment.

Presenter - Dr. Aparna Suryadevara

Co-author - Aftab Ali Khan, DPM, Krishnam Raju Alluri, MD,

INTRODUCTION: The incidence of psychiatric illness-depression and anxiety in Oncology patients is quite high. But the incidence and factors affecting the mood disorders is not very well studied among Oncology patients on radiation treatment. The literature on this topic in Indian patients is sparse. The aim of this study is to know the incidence and factors affecting mood disorders in patients with malignancy receiving radiotherapy. MATERIAL & METHODS: All patients with history proven malignancy who were undergoing radiation treatment from June to July 2017 were prospectively included in the study. This is a single institute prospective study. All patients were screened for depression and anxiety by using Hospital Anxiety Depression score (HAD score). Patientsâ€™ demographic factors and details of malignancy and treatment were recorded. Patients with positive score on screening were referred to Psychiatrist.
Abstract Id: YUGP3694
Review Of Renal Cell Carcinoma: Retrospective Analysis Of Five Years
Presenter - Dr. TARUN KUMAR
Co-author - Anil Kumar Dhull, Rajeev Atri, Rakesh Dhankhar

Aims: We retrospectively reviewed the records of patients of Renal Cell Carcinoma to analyse their clinical presentation, various treatment protocols and their response. Material and Methods: Retrospective analysis of patients of Renal Cell Carcinoma presented in Department of Radiation Oncology-I, PGIMS Rohtak from year 2011-15 was done to analyze their clinical presentation and outcome of different treatment protocols. Results: Out of 7,800 total cancer patients registered from 2011-15, 23 patients of Renal Cell Carcinoma were identified which constituted approximately 0.3% of total cancer patients. The median age of presentation was 53 years (range 30-74 years). Fifth decade of life was the commonest presentation. Male to Female ratio was 3:1. 70% patients had a history of tobacco intake, while 22% were alcoholic. Mean duration of symptoms were 4 months at the time of initial presentation. 48% patients were having fair to good general condition while 52% were having poor general condition (KPS < 50). The most common presentation was pain abdomen (57%), lymphadenopathy (22%), hematuria (22%). 65%% patients presented as locally advanced stage IV while only 17% patients presented in stage I. 22% patients presented with metastatic disease while 57% patients were having distant metastasis. The most common site of distant metastasis was bones (22%), liver (17%) & lung (13%). Histopathologically clear cell carcinoma (52%) was the most common presentation. Intent of treatment was radical in 52% and Palliative in 48%. 74% of the patients underwent radical nephrectomy while 35% patients received palliative radiotherapy. Out of the total patients, 9 patients i.e. 39% received sunitinib based targeted therapy. Overall, the clinical response was CR-35%, PR-43%, NR-4%, PD-9% and death in 9% patients. Conclusion: Based on the limited parameters and heterogeneous data, we concluded that most of the patients (65%) presented in advanced stage with more than half of the patients were having distant metastasis. Complete response was observed in 35% patients with radical nephrectomy and sunitinib therapy.

Abstract Id: YUGP3698
Completely Linear Stapled Versus Handsewn Cervical Esophagogastric Anastomosis After Esophagectomy.
Presenter - Dr. TARUN BATRA
Co-author - Tarun Kumar, Ravi Krishnappa, Esha Pai

Background: Very limited data is present which compares completely linear stapled to handsewn cervical esophagogastric anastomosis. Primary objective was to determine whether linearly stapled (LS) anastomosis has lower clinically apparent leaks, when compared to handsewn anastomosis (HS). Secondary objectives were morbidity, mortality, overall leak and stricture rates, and presence of a symptomatic cervical stricture. Methods: This is a comparative study of 77 patients who underwent LS (n=29) and HS (n=48) cervical anastomosis. Results: Anastomotic leak was found to be 19.4 % (15/77). In the HS group, 27.08% (13/48) and in the LS group, 6.89% (2/29), respectively, leaked (p= 0.03). 32.5% (23/77) patients remained admitted for more than 14 days. 52.1% (25/48) patients in the HS group were discharged within 14 days of surgery whereas 93.1% (27/29) were discharged in LS group (p= 0.001). Overall, 90-day mortality was 7.8% (6/77). In the HS group, 8.3% (4/48) patients died while in the LS group, 6.8% (2/29) patients died (p=0.82). In the HS group, 6.25%(3/48) patients were diagnosed with stricture compared to 6.8% (2/29) patients in the LS group (p=0.9). Overall stricture rate was 6.4% (5/77). Conclusion: Cervical anastomosis done with linear staplers has less leak rates compared to handsewn anastomosis.

Abstract Id: YUGP3699
Concurrent Chemoradiation Versus Accelerated Radiation In Egfr Positive Locally Advanced Squamous Cell Carcinoma Of The Head And Neck: A Randomized Open Label Clinical Trial
Presenter - Dr. Nibedita Biswas
Co-author - Dr Bodhisattwa Dutta, Dr Rumeli Roy, Dr Barmini Ghosh

BACKGROUND: Head and neck squamous cell carcinoma (HNSCC) is the 6th most common cancer worldwide and most of the patients present with locally advanced stage. Eighty to 85% of HNSCC have EGFR mutation. EGFR is a key regulator of cellular proliferation and correlated with tumor size, metastasis and poor response to radiotherapy. OBJECTIVE: Radiotherapy leads to accelerated cellular proliferation in HNSCC during treatment and EGFR mutation plays an important role here. Therefore, reduction of overall treatment time (OTT) with same total dose results in better local control. The purpose of this study is to find out whether accelerated radiotherapy, using six fractions per week instead of conventional fractionation improve the tumor response in EGFR positive locally advanced HNSCC. MATERIALS AND METHODS: A single institution prospective study was carried out between July 2015 to January 2017, comprising of 53 patients of locally advanced HNSCC with positive EGFR mutation status. The patients were randomized to two arms, arm A (control) and arm B (study). The patients in arm A were treated with concurrent chemo radiotherapy with conventional fractionation and the arm B patients were treated with accelerated radiotherapy, using six fractions per week. The outcomes were assessed in terms of overall response rate (the sum of complete response, partial response and stable disease), disease free survival (DFS) and associated toxicities. Response evaluation was done 6 weeks after completion of treatment using RECIST criteria version 1.1. RESULT: After a median follow up of 9 months, the study arm was found to have better rates of complete response, partial response and overall response and a lower rate of progressive disease. The DFS was almost equal in both arms. Although the acute toxicities were higher in arm B, were managed without any significant treatment delay than the control arm. CONCLUSION: Accelerated radiotherapy is a good alternative to concomitant chemoradiation in locally advanced HNSCC with positive EGFR mutation in terms of overall response and disease free survival.

Abstract Id: YUGP3706
Locally Advanced Gastro-Esophageal Junction Carcinoma- Evaluation Of Two Modalities Of Treatment At A Tertiary Care Center.
Presenter - Dr. Kiran Bagul
Co-author - Dr. SUDHEER OV ,

Introduction- The incidence of Gastroesophageal junction (GEJ) adenocarcinoma is increasing rapidly. Data separately on GEJ tumors management is rare. Objectives- to evaluate the clinicopathological characteristics of GEJ tumors, to compare two modalities of treatment- Neoadjuvant treatment followed by surgery(group-N) and upfront surgery(group-S) in GEJ tumors in terms of recurrence and survival. Materials and methods- Records of all the patients diagnosed for management of their mood disorder. RESULTS: The incidence of depression was 32% and anxiety was 8%. The different factors assessed were patient demographics-age, gender, malignancy features- site, stage, socioeconomic status of patient and treatment factors-number of radiation treatments received, concurrent chemotherapy. These factors were not statistically significant on statistical analysis. CONCLUSION: The incidence of mood disorders (depression, anxiety) is quite high among oncology patients on radiation treatment with about 1/3rd of patients having depression. Identifying these patients and appropriate psychiatric treatment would improve the quality of life of the patient.
and treated with curative intent as GEJ tumors as per Siewert classification, between 2005-2013 were reviewed. Patients of age above 18yrs, ECOG PS 0,1,2, clinical, radiological, endoscopic and histologically proven GEJ tumor limited loco-regionally were included. Kaplan-Meier graph utilized to calculate survival and recurrence pattern. Chi-square(X2) test used to assess association between clinico-pathological parameters and outcome. The comparison of survival and recurrence rate was computed by log rank test. Results- Among 68 eligible patients group-S were 43(63.2%) and group-N 25(36.8%). Predominant histology was adenocarcinoma (85%)ch. Group-N received either neoadjuvant chemotherapy-19(76%) or concurrent chemoradiation-6(24%). Surgery in both groups was Ior- Lewis 52(76.4%) or Minimally invasive Mckeowns 16(23.6%). Median follow-up period was 21months. In group-S, high grade tumors had worse survival (OS-grade I1 20 months Vs grade III 36 months. p-0.015). No clinico-pathological factors affected outcome in group-N. In group-N 5(25%) had grade 3 toxicity. Severe postoperative complications occurred 10(23%) in group-S and 4(16%) in group-N. Group-N has higher DFI (17.5months) and OS (30.5 months) compared to group-S (DFI 14months; OS 21.5months) but without statistical significance (p-0.56 and p-0.83 respectively.) Conclusion-In our single institute study, improved recurrence free period and survival with neoadjuvant treatment over primary surgery group in the management of GEJ carcinoma is not reflected statistically. Further prospective randomized studies are required to assess the effect of neoadjuvant therapy in GEJ tumors.

Abstract Id: YUGP3708

Assembled Multichannel Channel Vaginal Cylinder Based Brachytherapy Vs Single Channel Vaginal Cylinder Based Brachytherapy : A Dosimetric Comparison

Presenter- Dr. Kaustav Chatterjee
Co-author - Dr Suparna Kanti Pal, Dr. Somapriya Basu Roy, Mr Sanjay K Kar

Background A section of carcinoma cervix patients presents with small vault recurrences or residual. The management given is concurrent chemo-radiation including vault brachytherapy. Here we attempted to prepare and dosimetrically evaluate an institution made multichannel vaginal cylinder for brachytherapy. Aims and Objectives To prepare a non-proprietary low cost institution made multichannel vaginal applicator Compare it dosimetrically with the current single channel vaginal applicator available in our institute. Materials and Methods A multichannel vaginal applicator was prepared using bee wax sheets with eight interstitial tubes with provision for inserting a central channel. Using differential amount of bee wax the diameter of the applicator can be customized. After obtaining informed consent, from a post-operative patient of Carcinoma cervix with small volume vault recurrence two CT scans were done using each applicator. The images were transferred to the TPS (Oncentra Brachy TPS V4.5.2). Two plans were generated from each after countering the Organs at risk and the Target volumes- One un-optimized version where the dose was prescribed to 0.5 cm form the surface of the vaginal cylinder, the other being optimized to the treatment volumes. Results D 100 was much better in the optimized versions of both the applicators (multi 94.15% Vs 34.06% & single -- 92.73% vs 40.46%) and was comparable. The conformity index was also comparable in the Optimized versions (0.999 vs 0.997). However the homogeneity index was much lower in the multi-channel applicators compared to the single channel applicator and was significantly lower in the optimized version of the plan. Doses received by Bladder & rectum in terms of V100, V98 & V50 were lowest in the optimized version of the multichannel plan, while it was highest in the optimized version of the single channel plan. The Dose received to D2cc of Bladder and Rectum was much lower in the multichannel applicator compared to single channel applicator in both optimized and non-optimized plans ( for bladder 86.4 vs 137.04 and for rectum 71.9 vs 208.11 in optimized plans ). Conclusion While the clinical outcome needs to be verified in a trial setting this Institution-made multichannel vaginal applicator can be a local alternative (10 $, excluding the Interstitial tubes ) to costly proprietary multichannel vaginal cylinders (4000-6000 $) and is dosimetrically superior to the single channel cylinders.

Abstract Id: YUGP3714

Use Of Platsymal Muscle Only Flap For Reconstruction Of Floor Of Mouth Defects : A Single Centre Study Of 34 Cases

Presenter- Dr. Himanshu Koyani
Co-author - Himanshu Bharatkumar Koyani, Nayan Gupta, Rajan Tankeshali

Introduction: The floor of mouth(FOM) is mucosa and muscle between anterior tongue and mandible. The mylohyoid muscle separates the FOM from the submandibular spaces. After resection of FOM in early lesion of FOM or tongue,many times created defect is too small for free radial forearm flap. But it is important to enforce the defect in such a way that mobility of tongue is maintained and communication between oral cavity and neck is obliterated. Platsymal flap can be useful in this situation. Materials and Methods: From September 2012 to September 2015, 34 patients having T1 or T2 lesion of FOM or lateral border of anterior tongue with NO-1 underwent wide local excision(WLE) and supraomohyoid neck dissection. WLE was done intraorally in all patients. Mandible was preserved. All patients had defect in FOM (average size 2 cm x 4 cm) and communication between oral cavity and neck. Facial artery and vein was sacrificed in all patients. Platysma elevated carefully from skin flap without tearing, introduced into FOM and sutured to tongue. Single negative suction drain was placed. Postoperatively good oral hygiene was maintained. Liquid diet was started on 4th to 7th postoperative day. Results: Out of 34 patients,post operative course in 32 patients was uneventful. Two patients developed salivary fistula indicated by saliva in drain, one on 3rd and other on 4th postoperative day. Both were managed conservatively and drains were removed within 7 days of onset of fistula. No skin blackening of wound dehiscence were noted. 15 patients underwent adjuvant RT. At 6 months, tongue mobility was normal as indicated by normal chewing movement and near normal speech. Conclusions Reconstruction of defect in FOM in selected patients with platysma flap results in easy flap harvest, very low rate of salivary fistula, practically no morbidity and good functional results in terms of chewing and speech.

Abstract Id: YUGP3716

Primary Conjunctival Melanoma With Recurrent Metastases & A Rare Case Report

Presenter- Dr. Kaustav Chatterjee
Co-author - Dr. Suparna Kanti Pal, Dr. Bidisha Naskar Ghosh,

Conjunctival melanoma is a rare neoplasm of the eye. It constitutes 2% of all ocular malignancy. Most of the ocular melanoma arises from uveal tissue and primary melanoma arising from conjunctiva is rare. Its incidence is 0.2-0.8 per million in the white population. It is identified most frequently in the perilimbal interpalpebral bulbar conjunctiva. It can arise, de novo (12%), from an existing nevus (20% to 30%), or, more frequently, from an area of primary acquired melanosis (75%). Here we report a case of conjunctival melanoma in a 27 year old male patient presented with increase in the size of a black spot in conjunctiva of left eye which was excised by cryotherapy. The histology revealed conjunctival melanoma with free margin and the patient was put on follow-up. After a period of twenty-one months, patient developed metastasis to the preauricular lymph node which was histologically confirmed. He was treated with total parotidectomy and supra-omohyoid neck dissection. Again after four months metastasis was found in ipsilateral parotid region which was treated by modified radical neck dissection followed by irradiation. Five months after that the patient presented with metastatic post-auricular lymph-node and malignant pleural effusion. Disease progression
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occurred despite cisplatin based chemotherapy and ultimately patient succumbed to cerebral metastasis. The overall survival was thirty seven month. This case report suggests that conjunctival melanoma is a highly aggressive malignancy with unsatisfactory amenability to loco-regional and systemic therapy.

Abstract Id: YUGP3722
Peri Operative Mortality In Cancer Esophagus- A Case Control Study At A Regional Cancer Centre In South India
Presenter - Dr. Ajeeet Tiwari
Co-author - Ajeeet Tiwari, Kidwai Cancer Institute

Introduction: Surgery for esophageal cancers still carries high rates of morbidity and mortality despite improvements in peri-operative patient management especially with increasingly safe anesthesis and postoperative ICU care. Aims and Objectives: To identify factors affecting 30 day mortality in patients operated cancer esophagus at a Regional Cancer Center in South India over period of 8 years. Materials and methods: A case control study was conducted on 713 patients operated for esophageal cancer over a period of 8 years (2009-2016) between patients who succumbed to the surgery i.e. 30 day mortality [34 patients (4.7%)] and those who did not. Multiple preoperative, intra-operative and postoperative clinical and laboratory parameters were taken into consideration for statistical evaluation. Results: Of the preoperative parameters Age >58.5 (SD +/- 8.03, p=0.01), History of Dysphagia with significant weight loss (p=0.028), Diabetes (p=0.002), Ischemic Cardiac disease (p=0.0001), Low FEV1< 69.5% (SD= +/-16.05, p=0.036), Preoperative length of hospital stay >6.94 days (SD= +/-9.05, p=0.001), involvement of Gastroesophageal junction (p=0.04) and ASA score >2 (p=0.002) were significantly associated with perioperative mortality. Intraoperatively Blood loss (p=0.003), Intraoperative (p=0.015) and postoperative (p=0.0001) blood transfusion, splenectomy (p=0.0001) and excessive intraoperative intravenous fluids (p=0.003) were highly associated with mortality. Decreased Postoperative Day 1 serum Albumin levels< 2.38 (p=0.0001), Increased ICU stay >7.32 days (SD= +/- 6.28, p=0.03), Number of positive lymph nodes >2.97 (SD= +/-4.19, p=0.013), Conduct necrosis (p=0.0001), Recurrent Laryngeal Nerve palsy (p=0.013), Pulmonary venous thromboembolism (p=0.0001), Multiple organ dysfunction syndrome (p=0.0001), LRTI (p=0.0001), Arrhythmia (p=0.005), Sepsis (p=0.0001) and ARDS (p=0.0001) were the postoperative complications that were significantly associated with mortality. Conclusion: Short term outcomes have implications over overall survival and quality of life of patients with resected esophageal cancer. Comprehensive patient care involving preoperative optimization, improved surgical skills, rigorous intra-operative fluid management and dedicated Intensive care units will continue to play a major role in further minimizing mortality and morbidity associated with esophageal cancer surgeries.

Abstract Id: YUGP3726
Granulosa Cells Hiding In The Abdominal Wall : A Rare Expression.
Presenter- Dr. Neha Kumar
Co-author - Neha Kumar, T S Shylasree, Jaya Ghosh

Granulosa cell tumors of the ovary are relatively rare, are associated with favourable prognosis and generally have late recurrences. We report an unusual case of abdominal wall recurrence in a case of adult granulosa cell tumor of the ovary. A 48 year old lady, P3L3, presented to our institution three months after having undergone hysterectomy with bilateral salpingo-ophorectomy and omentectomy outside for a right adnexal mass. The histopathology review was adult type, well differentiated, granulosa cell tumour of ovary. On immunohistochemistry, tumor cells were negative for inhibin, Melan A, synaptophysin, chromogranin and Mic2 EMA. They were positive for PR (50% moderate intensity) and negative for ER. The contrast enhanced CT scan revealed a 1.8 x 1 cm sized metastatic lesion in subcutaneous plane of anterior abdominal wall on left side and a 3.3 x 1 cm lesion on the right. Another 1.7 x 0.8 cm solid enhancing lesion was seen in the right anterior abdominal plane in intermuscular plane. The upper abdomen was normal and there was no pelvic or retroperitoneal lymphadenopathy. Patient was taken up for exploratory Laparotomy and excision of abdominal wall deposits was done. The abdominal wall deposits were not palpable clinically, even under anaesthesia, and were localized by intraoperative ultrasound. Four abdominal wall deposits were found infraumbильно - right upper involving anterior rectus sheath, right lower involving the pelvic peritoneum, and left upper and left lower in the subcutaneous plane above the rectus sheath. All four deposits were removed completely. There was no disease in the upper abdomen or the peritoneum. The patient received six cycles of adjuvant chemotherapy – Paclitaxel and Carboplatin and is currently on follow up. Conclusion : This was a rare case of abdominal wall recurrence in a case of adult type, well differentiated granulosa cell tumor. The abdominal wall deposits were not palpable clinically and were localized by intraoperative ultrasound and subsequently removed.

Abstract Id: YUGP3728
Use Of Induction Chemotherapy As A Predictor For Definitive Treatment In Bulky Locally Advanced Squamous Cell Carcinoma Of The Head And Neck: A Schedule More Suited To Sub Himalayan Region
Presenter- Dr. Vipul Nautiyal
Co-author - Dr. Saurabh Bansal, Dr. Meenu Gupta, Dr. Manisha Patanayak

Purpose: Use of induction chemotherapy (IC) as a predictor for definitive treatment in bulky locally advanced head and neck cancer (LAHNSCC) patients, who are not feasible for any upfront radical treatment in sub-Himalayan population. Materials And Methods: 33 patients (stage IVA and IVB, T4, N3) LAHNSCC were treated with induction chemotherapy (TP) from April 2013 to August 2015. All patients were considered inoperable or not feasible for upfront radical treatment and Eastern Cooperative Oncology Group (ECOG) Performance status was ≥ 2. All patients were reviewed at multidisciplinary tumor board and considered for initial 3 cycles of induction chemotherapy in view of bulky stage IV LAHNSCC. Subsequent Radical (CRR or 5X 7 CTRT) or palliative treatment was decided by tumor board after response assessment of NACT. The Statistical Package for the Social Sciences software (SPSS version 16.0) was used for analysis. The response rates, toxicity (accordance with CTCAE vs. 4.02), completion rate of radical treatment post NACT and overall survival are reported. Results: Median follow up was 9 months (2-28 months).After 3 cycles of IC, 20 patients (60.66%) underwent radical treatment and remaining 13 patients (39.33%) were treated with palliative treatment. Overall grade 2-3 toxicity was seen in 12 patients. No toxicity related mortality was noted. The completion rate of radical treatment post IC was 93.5%. The median OS was 15.36 month (95% CI 1.6-26.34). Total 16 Patients are alive, in which 11 are disease free. Twelve patients are died and 5 patients are lost to follow up Conclusion: Our present experience suggests that neoadjuvant chemotherapy with doublet regime is reasonably well tolerated and feasible in a limited resources settings of patients with locally advanced disease who are not fit for upfront radical treatment.

Abstract Id: YUGP3729
Inter-Fraction Variations Of Dose To Point A, Bladder And Rectal Points In Locally Advanced Carcinoma Cervix Patients Treated With Hdr Brachytherapy Fletcher Suite Applicator
Presenter- Dr. Souvik Das
Co-author - Dr. Annesha Lahiri,

Purpose â€“ Quantification of inter-fraction dose variations to point A, bladder and rectal points using Fletcher suite applicator. Background
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**Abstract Id: YUGP3731**

**Correlation Of Bone Marrow Involvement Using Fdg Pet Â© Ct**

**And Bone Marrow Biopsy In Diagnosis Of Lymphomas**

**Presenter- Dr. Braj Kishore Singh**

**Co-author - Dharmesh Paliwal,**

Correlation of bone marrow involvement using FDG PET Â© and bone marrow biopsy in diagnosis of lymphomas Dharmesh Paliwal, Braj Kishore Singh Department of Nuclear Medicine, Army Hospital (R & R), New Delhi, India ABSTRACT PURPOSE: The evaluation of bone marrow infiltration (BMI) is of crucial importance in the staging of lymphoma. Although bone marrow biopsy (BMB) is the reference standard for the evaluation of BMI, it has limitations. PET/CT has become an excellent tool in staging of lymphoma, and bone marrow uptake is correlated with the involvement of lymphoma. The aim of this study was to assess the utility of PET/CT and its concordance with BMB in the detection of BMI in patients with lymphomas. PATIENTS AND METHODS: One hundred five patients with HodgkinÂ’s lymphoma (70) and Non-HodgkinÂ’s lymphoma (35) were referred for a PET/CT and a BMB at the initial staging. The reference standard was BMB. RESULTS: Bone marrow infiltration was detected by PET/CT in 29 (27%) and by BMB in 27 (25%) cases. There was concordance between PET/CT and BMB in 77 patients (73%) - 14 of them with positive PET/CT and negative standard BMB results (not performed in active sites) and 13 of them have bone marrow biopsy positive and negative PET scan. The sensitivity, specificity, accuracy, as well as positive and negative predictive values of FDG-PET/CT for the detection of BMI was 52%, 80%, 48%, 83%, and 73%, respectively. CONCLUSIONS: FDG PET/CT has good concordance with BMB especially in cases of HodgkinÂ’s lymphoma and aggressive Non Â© HodgkinÂ’s lymphoma which makes it a complementary technique. It also helps select the biopsy site in cases with negative results. Key words: Bone marrow infiltration, Bone marrow biopsy, HodgkinÂ’s lymphoma, Non-HodgkinÂ’s lymphoma

**Abstract Id: YUGP3735**

**Analysis Of Various Factors On Local Control And Survival In Post Operative Cases Of Malignant Salivary Gland Tumors**

**Treated At Our Regional Cancer Center : A Retrospective Study**

**Presenter- Dr. Himani Manchala**

**Co-author - Dr Sumanth Kumar Mallupattu, Dr Sanjeeva Kumari, Dr Rama Krishna**

BACKGROUND: The role of adjuvant therapy has not been clearly defined in certain subgroups of salivary gland tumors. Elective LN irradiation has been the subject of debate. Our study analyzed various prognostic factors and the role of adjuvant radiotherapy in salivary gland tumors on local control rate and median survival. MATERIALS AND METHODS: We analyzed the data of 84 patients of malignant salivary gland tumors from 2010 to 2015 who underwent primary surgery at our institute with median follow up of 32 months (3-84 months) using inclusion and exclusion criteria. The role of various factors like type of surgery (conservative/radical), grade of tumor, histology, PNI, margin+, LVSI+, adjuvant RT, Elective LN irradiation, LN dissection and size of primary tumor on local recurrence was evaluated as primary end point. Median survival was our secondary endpoint. Local reactions were evaluated using CTCAE criteria version 4.03. Statistical analysis was done using SPSS version 22. RESULTS: Demographic and disease characteristics (Table-1) AGED MEDIAN- 40 YRS RANGE- 8- 74 YRS SEX MALE- 38 % (n=32) FEMALES- 62% (n=52) SITE PAROTID-92.8% (n=78) SUBMANDIBULAR-4.8 (n=4) MINOR SALIVARY GLAND-2.4% (n=2) SURGERY CONSERVATIVE- 81% (n=68) RADICAL- 19% (n=16) HISTOLOGY MUCO EPIDEMROID – 50% (n=42) ADENOID CYSTIC – 16.6% (n=14) ADENO CA. -14.3% (n=12) ACNIC CELL CA.- 7.1% (n=6) SQUAMOUS CELL CA- 4.8% (n=4) SARCOMA- 4.8 % (n=4) MALIGNANT. EX PLEOMORPHIC ADENOMA-2.4 % (n=2) LN DISSECTION + 43% (n=36) pLN+ 7% (n=6) TUMOR SIZE >4 CM- 44% (n=44) GRADE HIGH-48% (n=40) INTERMEDIATE-14% (n=12) LOW-38% (n=32) LVSIF+ 2.5% (n=3) MARGIN+ 7% (n=6) PNI+ 7% (n=6) ADJUVANT RT 62% (n=52) ELECTIVE LNI 38% (n=32) RT DOSE MEDIAN- 55 GY RANGE- 50-66 GY 2 YR LC RATE 69% (n=58) METS+ 17% (n=14) Median age 40 years (range-8-66 yrs), 38% were males and 62% were females, 81% underwent conservative surgery and 19 % underwent radical surgery 2 yr local control (LC) in patients who received adjuvant RT is 88.5% Vs 37.5% who didn't receive adjuvant RT which is statistically significant (p<0.001) [odds ratio 10.6, 95% CI, 2.81-40.3]. High grade, LVSI+, PNI+, margin+, tumor size >4 cm and LN + have shown a trend to decrease local control rate but are not statistically significant. Interestingly, patients who have undergone LN dissection have trend towards decreased LC rate, probably due to more conservative/less aggressive LN dissection in patients who are clinically LN+. patients with elective LN irradiation have a better 2 yr LC rate in high grade and large tumors than low grade and small tumors (70% Vs 41%,p=0.04, 64% Vs 30%,p=0.03 respectively). Adjuvant RT doses of more than 60 Gy does not seem to improve LC in adjuvant setting though statistically not significant. The expected median survival in adjuvant RT is 47 months Vs 40 months for surgery alone (p=0.14). CONCLUSION: Adjuvant RT improves local control with trend towards improvement in survival. ELNI in high grade and large tumours is beneficial. Therapeutic ratio doesn't seem to improve beyond 60 Gy in adjuvant setting with R0 resection

**Abstract Id: YUGP3737**

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S235
Abstract Id: YUGP3741
Incidence And Predictive Model For Lateral Pelvic Lymph Node Metastasis In Lower Rectal Cancer
Presenter - *Dr. Kapil Dev
Co-author - Prof KV Veerendrakumar, Prof S Krishnamurthy.

Introduction The lateral pelvic lymph node recurrence after curative resection in rectal cancer has been reported in more than 20% of cases and the LPLNs metastasis is an independent risk factor for local recurrence. Material and methods A prospective cohort study with diagnosis of lower rectal cancer stage II and III performed to identify the factors with significant correlation with LPLN metastasis, were categorised based on the number of positive factors and proposed a risk stratification model to uncover a possible benefit of LPD in specific patient subgroups. Results Forty-three patients with lower rectal cancer underwent curative surgery, total mesorectal excision with bilateral lateral pelvic lymph node dissection. Pre-operative, female gender, raised serum CEA (>5ng/mL), cT4, enlarged mesorectal lymph nodes, borderline enlarged LPLN on MRI, lower location (5cm), non-circumferential lesion were significant predictors for LPLN metastasis. Histopathological, higher tumour grade, higher pT and pN stage, presence of LVI were significant factors. On cox-proportional hazard model analysis, female gender, large tumour, cT4, enlarged mesorectal lymph nodes, borderline enlarged LPLN, pN1 and positive LVI were associated with significant hazard. Conclusion In conclusion, it is recommended that a specific group of patients with lower rectal cancer of stage II and III might be treated with LPD in spite of concurrent chemo-radiation to achieve satisfactory oncological outcome. The proposed stratification grouping is strongly guiding the patient for lateral pelvic lymph node dissection. Further study to prove the oncological advantage of LPND is warranted at large scale. Keywords: Lower rectal cancer; lateral pelvic lymph node dissection; predictive factors; Risk stratification score

Abstract Id: YUGP3739
Independent Prognostic Importance Of ÂŒET StageÂŒ In Patients With Stage II And Illa Primary Colorectal Cancer: A Possible Limitation In Tmn Staging
Presenter - *Dr. Kapil Dev
Co-author - Prof C Ramachandra, Prof KV Veerendrakumar, Prof S Krishnamurthy

Introduction In terms of prognostic significance in colorectal cancer (CRC), staging system shows superiority over other factors. The aim of our study was to determine the validity of the inclusion of CRC T1-2N1 into stage III rather than in the category of stage II. Material and methods This study was a retrospective analysis of 191 CRC patients, who underwent curative treatment with stage II and IIIa. Disease-free, and overall survival were analysed at 3, and 5 years, calculated from the date of completion of primary treatment. Results A significant difference in the 3-year, and 5-year DFS between T4N0 (IIb) and T1/T2N1 (IIa) was seen, 75.0% versus 84.4% (p=0.001), and 62.5% versus 74.02% (p=0.01), respectively. The three-year and 5-year overall survival in patients with stage IIb were significantly worse than that in stage IIIa patients, 80.6% versus 89.1% (p=0.003), and 70.1% versus 83.6% (p=0.001), respectively. Conclusion The T1/T2N1 subgroup of stage IIIa colorectal cancer should be subcategorised into stage II disease, and it is also notable that these changes in the staging system would guide the treatment approaches of patients who crossover the timeframes between TNM editions.

Abstract Id: YUGP3745
Evaluation Of The Dose Conformity And Coverage In Stereotactic Radiotherapy (Srt) And Stereotactic Radiosurgery (Srs) Treatment Plans Using Static Non-Coplanar Conformal Beams And Multiple Dynamic Arcs
Presenter - *Ms. Norzalina Zulkiflli
Co-author - Norzalina Zulkiflli, Ung Ngie Min, Jeannie Wong Hsiu Ding

Introduction: Cancer had increased at alarming rate and causing a major health concern in Malaysia. Stereotactic radiosurgery (SRS) is a non-invasive treatment using highly advanced machine in delivering very high precise dose to well-defined target lesion while sparing surrounding normal tissues. This is a single institutional experience in Radiotherapy and Oncology Department of Hospital Kuala Lumpur. The aim of this study is to evaluate current practice in treating SRS patients and to compare dosimetric parameters between two different treatment planning techniques. Method: A total of 79 previously treated SRS patients were retrospectively evaluated in terms of dose conformity and coverage proposed by Radiation Therapy Oncology Guidelines (RTOG). A total of 30 previously approved plans were re-planned using two different treatment planning techniques; namely static non-coplanar conformal beams (SNCB) and multiple dynamic arcs (MDA). The dosimetric parameters were compared between these two techniques. Results: There was a very strong positive correlation between PTV size and mean dose to the brainstem, p < 0.05. The homogeneity index (HI) and quality of coverage (Q) values were within the recommended RTOG protocol limits. Brainstem and optic chiasm doses were higher in meningioma and schwannoma cases because of large PTV size and located adjacent to these organs. There is no significant difference between dose to PTV and OARs for all SNCB and MDA techniques plans. Dose distributions for lower isodose levels for MDA techniques has better conformity to the PTV compared to SNCB techniques. Conclusion: The dose achieved by organ at risk (OARs) is affected by tumour size and proximity to...
Abstracts

A rare case of a pulmonary atypical carcinoid masquerading as a synovial sarcoma is being reported. The patient is a 20 year old man who presented with a lesion in left lung upper lobe on follow up after being treated for rhabdomyosarcoma of the thigh about 2 years back. The initial primary diagnosis was a metastatic lesion from the previous rhabdomyosarcoma. The core needle biopsy however was reported to be synovial sarcoma. Primary synovial sarcomas presenting as a lung mass are rare tumours. This patient underwent chemotherapy followed by surgery - left lung upper lobe resection. The final histopathology of the mass was reported to be atypical carcinoid - a diagnostic surprise. Atypical carcinoids are a rare subtype of lung cancer. It is estimated that carcinoid tumours overall encompass 1-5 % of all lung neoplasms and atypical carcinoid-10% of the sub population.

**Abstract Id: YUGP3764**

**Dosimetric Comparison Of Hybrid Intensity Modulated Radiotherapy (Imrt) Vs Hybrid Volumetric Modulated Arc Therapy (VMAT) In Carcinoma Middle 1/3 Esophagus As Pre Operative Radiotherapy With Or Without Chemotherapy Â€“ A Single Institution Prospective**

**Presenter - Dr. Chaitanya Kumar**

**Co-author - Charu Garg, Kartikeshwar Patro, A K Anand**

**Introduction:** Radiotherapy has a major role to play in treatment of esophageal carcinoma. However, it presents a particular challenge in treatment planning, especially for the middle third esophagus. The tumor is centralized and surrounded by several organs at risk (OARs): the lungs, heart and spinal cord. Innovative technologies in radiation delivery such as IMRT) and VMAT have successfully achieved good tumor dose while sparing OARs. But these approaches generally produce widely distributed low dose levels thus necessitating need of hybrid approaches. Purpose: To dosimetrically compare Hybrid VMAT vs Hybrid IMRT planning in carcinoma middle third esophagus to tumor and surrounding OARs with pre operative radiotherapy with or without chemotherapy. Material and Methods: 25 patients of carcinoma mid esophagus in various stages (I/II/III) were treated with pre operative radiotherapy with or without chemotherapy from June 2015 to September 2016. The prescribed dose was 4500 cGy in 25 fractions and planning was done on Eclipse Planning system. Hybrid plan included 9Gy in 5fractions by AP-PA fields and 36Gy in 20fractions by either IMRT or VMAT technique. Both Hybrid plans were generated in all cases and Dose Volume Histogram (DVH) comparative analysis was performed for PTV and OAR. Paired t test was used for statistical analysis. Results: The PTV D95 was 43.48Â±0.37Gy and 43.37Â±0.45 in Hybrid IMRT and Hybrid VMAT [p= 0.219].PTV V95% was better in Hybrid VMAT plans i.e, 93.94Â±19.41% as compared to Hybrid IMRT plans i.e, 92.58Â±19.13% [p=0.003]. Hybrid VMAT plans had significantly better HI with value of p=0.003 with values of 0.079Â±0.131 with Hybrid VMAT and 0.086Â±0.097 in Hybrid IMRT. However, CI was comparable in two plans , Lung V5Gy% was 84.92Â±11.41% with hybrid IMRT and 88.16Â±10.12% with Hybrid VMAT [p=0.03]. Whereas MLD and V20 were 16.39Â±1.77Gy and 28.64Â±9.92 in Hybrid IMRT as compared to 15.95Â±1.68Gy and 26.13Â±4.61% with Hybrid VMAT [p=0.0001 and .004 for V20% and MLD respectively]. There was 8.76% in V20 and 22.2% reduction in MLD respectively with Hybrid VMAT. Doses to heart were also reduced with Hybrid VMAT but not statistically significant and spinal cord doses were comparable. Treatment time was significantly reduced with Hybrid VMAT [2min] than Hybrid IMRT [3.6min] p=0.0001. Conclusion: Hybrid VMAT can be a better option in treating mid esophageal carcinoma as compared to Hybrid IMRT. The Hybrid VMAT plans result in equivalent or superior dose distribution to target volumes with a reduction in doses to OAR/MLD [V20 lung and V36 heart]. It has less treatment time thus improving patient comfort and reducing intrafraction errors. These advantages of VMAT comes at the cost of increased low lung doses [V5].

**Abstract Id: YUGP3768**

**The Cd8 Angle In Primary Cutaneous Anaplastic Large Cell Lymphomas- A Case Series**

**Presenter - Dr. Kunal Sharma**

**Co-author - Dr. Lata Kini (Core Diagnostics Pvt Ltd), Dr. Diganta Hazarika (HCG Hospital, Bangalore), Dr. Sumeet Dil**

Primary cutaneous anaplastic large-cell lymphoma (PC-ALCL), is an extremely rare primary cutaneous T cell lymphoma (CTCL), which is classified under the spectrum of Primary cutaneous CD30+ lymphoproliferative disorders. It forms less than 9% of all skin Non-Hodgkin lymphomas. Most of these cases show expression of CD4 and are negative for CD8 (CD30+, CD4+). Very few cases (less than 5%) of this already rare entity, are positive for CD8 and show loss of expression for CD4 (CD30+, CD8+). These cases pose a diagnostic challenge and have to be carefully differentiated from other CD30+, CD8+ T-cell lymphomas and also from cases of secondary cutaneous involvement as an extra-nodal spread in a lymphoma. A high mitotic rate and high Ki-67 index have been linked to a more aggressive clinical course. We report two such rare cases of CD 30+, CD8+, PC-ALCL in a 80 year old female and a 18 year old male patient who presented with isolated non-healing nodular skin lesion with ulceration and absent lymphadenopathy.
Abstract Id: YUGP3770
Nivolumab Monotherapy In Metastatic Melanoma
Presenter- Dr. Rashmi Shirali
Co-author - Rashmi Shirali ,

BACKGROUND: The management of patients with disseminated melanoma is a difficult problem, although recent advances have led to important improvements in patient outcomes (Topalian, Hodi, Force). These include immunotherapy (particularly with checkpoint inhibition). But the use of Nivolumab (NIV) has not been tested in Uzbekistan. METHODS: 14 patients (Pts) with metastatic melanoma without BRAF mutations were treated with NIV (3 mg/kg) 2 weekly for 92 weeks. All had tumor samples tested positive for PD-1 checkpoint protein on T cells. Pts were followed for overall survival (OS), progression-free survival (PFS), long-term safety and response duration after discontinuing Niv. Treatment began in March 2014, current data were analysed in March 2017 with minimal FU of 34 months (time from when the last pt received first dose of NIV). RESULTS: Median age of pts was 64 years, 57% were male, 93% had ECOG PS 0 or 1, 71% had received ≥2 prior systemic therapies. 43% had elevated LDH at baseline. Their 12-month OS rate was 67.8% (95% CI: 62.1-84.2), 24-month OS - 40.1% (95% CI: 36.3-67.0), 36-month OS at second dose was 38.7% (95% CI: 14.5-57.9); median OS - 16.1 months (95% CI: 10.4-36.1) The median PFS at 1 year was 4.9 months (95%CI: 2.3-5.6), at 30 months (last tumour assessment timepoint) it was 21.4%. The objective response rate was 42.9% (95% CI: 30.7-49.5). Common adverse events included fatigue, pruritis and nausea. Drug-related grade 3/4 adverse events occurred in 14.3%. CONCLUSION: This analysis represents the longest survival FU of pts who received anti-PD-1 therapy in Uzbekistan. These results suggest durable, long-term survival post NIV monotherapy, with 38.7% of pts alive at 3 years. NIV was associated with 4.9 months PFS at 1 year in patients of metastatic melanoma without a BRAF mutation. NIV was associated with a low risk of severe toxicities.

Abstract Id: YUGP3772
Need Of Permanent Stoma In The Management Of Advanced Ovarian Cancer Treated With Cyto-Reductive Surgery With Intestinal Resection: Are We Talking About A Prevalent Problem? Presenter- Dr. PREETI YADAV
Co-author - DR SAMPADA DESSAI, DR SATHEESAN B,

ABSTRACT INTRODUCTION The current standard of care for carcinoma ovary is primary cytoreductive surgery followed by adjuvant chemotherapy. Recently published two randomized studies have shown that neoadjuvant chemotherapy followed by interval cytoreductive surgery is non inferior to primary cytoreductive surgery .The amount of disease left behind at the end of surgery(R status ) is the most important prognostic factor .Most often, to achieve complete cytoreduction organ resection is required . Patients requiring bowel resection as a part of cytoreductive surgery may need fecal diversion procedure (colostomy ). In an Indian scenario, there are certain problems which patients come across following ostomies such as physical , social, psychological ,sexual and attire related concerns. Hence frequently oncologists may restore to either shaving off physical , social, psychological ,sexual and attire related concerns. The sonic hedgehog signalling plays a crucial role in regulating embryonic development, tissue patterning and cancer stem cell maintenance. Aberrant HH signalling has been reported to affect tumorigenesis and drug response in various human malignancies. Epigenetic therapy relying on DNA methyltransferase and Histone deacetylase inhibitors are being proposed as potential drug candidates considering their efficiency in preventing development of
cancer progenitor cells, killing drug resistant cells and also dictating $\Delta_G\text{eaeon/}\Delta_G\text{fâe}$ switch of tumor suppressor genes and oncogenes. In this computational docking approach, we have virtually screened 125 epigenetic drugs for their efficiency in inhibiting key regulators of SHH pathway i.e., Sonic hedgehog, Smoothened and Gli. The multitargeted epigenetic therapeutic approach can be a better alternative to current challenges of acute long term toxicity and drug resistance occurring due to traditional single targeted chemotherapy. The three dimensional PDB structures of SHH, Smo and Gli were retrieved from PDB and docked with the epigenetic drugs using AutoDock Vina. The computational docking results showed that Tazemetostat, CHR 3996, GSK 126, Mocetinostat, GSK 343 and UNC 1215 exhibited good binding affinities with SHH, Smo and Gli proteins. These drugs also fulfilled the drug likeness criteria of Lipinskiâ€™s rule of five. The reported drugs viz. Tazemetostat and GSK 343 (EZH2 inhibitors), CHR 3996 and Mocetinostat (HDAC inhibitors), GSK 126 (Histone lysine methyltransferase inhibitor) and UNC 1215 (L3MBTL3 antagonist) are already in the process of clinical trials for cancer treatment. The results therefore revealed the promising nature of these epigenetic drugs in inhibiting multitargets (SHH, Smo and Gli) during carcinogenesis. To the best of our knowledge, this is the first study to report these epigenetic drugs as potential multitargeted hedgehog pathway inhibitors.

Abstract Id: YUGP3787
Modified “Romo” Insertion Technique Of Aum Tracheo- Esophageal Prosthesis: A Note On Post-Laryngectomy Voice Rehabilitation In Indian Scenario
Presenter- Dr. Vishal Rao

Patients undergoing total laryngectomy require subsequent voice rehabilitation, which can be done by different modalities. The tracheo-esophageal voice prosthesis provides the clarity of speech and has a high rate of success in terms of acquisition of post laryngectomy speech. However, the conventionally available TEP sets costs around cost 20,45,000 Rs (300-700 USD) per patient. Hence, the need based development of AUM modified tracheo-esophageal voice prosthesis was done in 2015 keeping in mind the socio-economic strata of Indian laryngeal cancer patients. Here we describe a simplified insertion technique of the modified tracheo-esophageal voice prosthesis (AUM) with a Romovac drain set.

Abstract Id: YUGP3789
Comparison Of Concurrent Chemoradiation With Accelerated Fractionation (Six Fractions Per Week) With Concurrent Chemoradiation With Conventional Fractionation (Five Fractions Per Week) Followed By Brachytherapy In Locally Advanced Carcinoma Cervix
Presenter- Dr. Ambati Bhavani
Co-author- Nalini Rao, Sasikala, Mahalakshmi

PURPOSE: To compare radiotherapy using accelerated fractionation (6 fractions per week) and concurrent chemotherapy with conventional radiotherapy (5 fractions per week) and concurrent chemotherapy to assess acute toxicities, response at 6 weeks and locoregional control at 3 months in locally advanced carcinoma cervix patients. MATERIALS & METHODS: 40 patients with histologically proven carcinoma cervix (International Federation of Gynecology and Obstetrics, FIGO stage IIB-IIIB) were prospectively non-randomized to arm A (study arm): 20 patients and arm B (control arm): 20 patients. Arm A received External Beam Radiotherapy with accelerated fractionation (6 fractions per week) and arm B received EBRT with conventional fractionation (5 fractions per week). Patients in both the arms received radiotherapy to a dose of 45-50.4 Gy in 25-28 fractions using the conformal radiation technique (3D-CRT). All patients received concurrent chemotherapy with inj. Cisplatin 40mg/m2 weekly as a radio sensitizer. After completion of brachytherapy, patients in both the arms received high dose rate (HDR) brachytherapy either intracavitary or interstitial brachytherapy to a dose of 21-24 Gy in 3 or 4 fractions after completion of EBRT. The patients were assessed weekly for toxicities during EBRT. Toxicities were recorded as per RTOG criteria. Response at 6 weeks and locoregional control at 3 months after treatment was assessed by clinical examination. RESULTS: Data was analyzed from 17 patients in study arm and 20 patients in control arm. The median Overall treatment time (OTT) was statistically significantly shortened in accelerated arm when compared to conventional fractionated arm (44 vs. 51 days, p value = 0.0008). Lower GI toxicity was statistically significantly higher in accelerated arm (p value = 0.0436). Upper GI, skin and haematological toxicities were comparable between two arms. Overall response at 6 weeks and locoregional control at 3 months after treatment were comparable CONCLUSION: The results of our study indicate that accelerated fractionation with concurrent cisplatin is a viable option to conventional fractionation with concurrent cisplatin in patients with advanced cervical cancer. However, further randomized trials with larger sample sizes and longer duration of follow-up are required.

Abstract Id: YUGP3791
Correlation Of Molecular Subtypes Of Breast Cancer To SUV Max As Observed On 18-F Fdg Pet/Ct
Presenter- Dr. Siddhant Khare
Co-author- Dr Shashank, Prof BR Mittal, Dr Amanjit Bal

Introduction PET-CT is now recognized as a staging investigation for locally advanced/metastatic breast cancer. We have been following this strategy for staging for the last 5 years. This retrospective review of data was performed to correlate the SUV max of the primary tumor with the molecular subtype of breast cancer. Material and Methods Patients with biopsy proven, treatment naÃ¯ve, stage 3 or 4 carcinoma breast treated between Dec 2012 to June 2017, for whom PET-CT data and IHC4 was available were included in the study. The breast molecular subtypes were assigned according to the IMPAKT consensus statement. Correlations were deduced between the SUV max of primary tumor to molecular subtypes and ER, PR, Her2neu and Ki67. Results 302 patients were included in the study. 52(17.2%) tumors were Luminal A, 131 (43.4%)Luminal B, 42 (13.9%) Her2neu enriched and 77 (25.5%) basal like. In 272 (90.4%) patients, enlarged and/or FDG avid lymph nodes were identified in the ipsilateral axilla and distant metastases were found in 114 (37.7%) patients. SUV max of the primary tumour differed significantly between LA and other subtypes (SUV max: LA Median 7.4, IQR 5.5, Range 2.1 to 21; LB 11.65, 8.7, 2.1-64.4; H 13.5, 8.3, 4.3-41.9, B 15.35, 10.7, 2.1-57.3; p

Abstract Id: YUGP3793
The “Int-Ex Technique”: Internal To External Approach In Carotid Body Tumour Surgery
Presenter- Dr. Vishal Rao
Co-author -

Carotid body tumours are rare and mostly benign neoplasm. They are slow growing but can evade or exert pressure on neighbouring important neurovascular structures. Hence, surgical resection remains the treatment modality of choice for large tumours partially or completely encasing the carotid arteries. But the surgical resection of these tumours with minimum morbidity is challenging because of their highly vascular nature. Earlier literature has dealt with various aspects of management of carotid body tumours including classification, morbidity, work-up, embolisation and extent of resection. However, the options in techniques of dissection for carotid body tumours have not been elaborated much. Here, we describe a stepwise dissection technique of carotid body tumours from the internal carotid towards the external carotid artery. This surgical technique, named as “the internal to external (INT-EX) technique”, provides better control of bleeding during the surgery, ease of dissection and lesser post-operative morbidity.
Abstract Id: YUGP3795
Image Guided Robotic Interstitial Brachytherapy, A New Innovative Treatment For Malignancies
Presenter - Dr. SANJEEET MANDAL
Co-author - Dr. Bhaskar Vishwanathan, Dr Rishabh Kumar, Dr Ramprakash H V

Introduction: The evolution of brachytherapy has been refined over years, but many of the techniques remain unchanged. The limited utilisation of brachytherapy in comparison to conformal external radiotherapy may be due to its invasive approach, operative risk, technical challenge, time consuming, long learning curve and poor technological advancements. However, there is growing evidence for practicing hypo-fractionated regimes in many solid malignancies. The present article focus on the similar roles of image guided - robotic interstitial high dose rate brachytherapy with hepatocellular carcinoma (HCC) as prototype. Materials & Methods: The robotic brachytherapy safety, commissioning and quality assurance should follow American Association of Physicists in Medicine (AAPM) and the Groupe Européen de Curiethérapie - European Society for Radiotherapy & Oncology (GEC ESTRO) report of task group 192 recommendations. The patient selection criteria, pre-treatment planning, technique and treatment of image guided - robotic interstitial brachytherapy for liver malignancy are outlined. We used the image guided robotic interstitial high dose rate brachytherapy to treat a large sized paediatric unresectable HCC; not suitable for transplant/ resection/ RFA and refractory to medical treatment. Results: There were no intra-operative or immediate post-operative complications and at 6 weeks post-procedure assessment, we achieved near complete response with no symptoms. Conclusions: This is the first study in usage of image based robotic interstitial high dose rate brachytherapy for liver malignancies. The technique described is simple, safe, fast, precise and effective treatment modality for hepatocellular carcinoma. We also emphasised the image guided robotic interstitial brachytherapy as an exciting platform for its similar role to ablate liver metastases or other site malignancies.

Abstract Id: YUGP3799
Review Of Management And Outcome Of Medulloblastoma Patient Treated At Our Institute
Presenter - Dr. DEV KUMAR YADAV
Co-author - Amit Pandey, Arun Kumar Yadav, Alannkta Singh

INTRODUCTION: Medulloblastoma accounts for 15-20% of all CNS tumor in children. It is a Malignant Invasive Embryonal tumor of cerebellum with predominantly neuronal differentiation and an inherent tendency to metastasize via CSF pathway. AIM: Aim of this study is to review the management and outcome of Medulloblastoma patient treated at our Institute MATERIAL AND METHOD: The clinical data of all patients were collected- 1. Histologically proven medulloblastoma treated at our center during 2008-2017 were reviewed retrospectively. 2. Data were analysed with reference to tumor related factors such as symptoms , location and Histochemistry . Extent of Resection, Radiotherapy, Chemotherapy, follow up. RESULT: Among 70 Patients (49 male and 21 female), commonest presenting symptoms headache, vomiting and difficulty in walking, location wise cerebellum(70%) followed by brain stem,ventricle and other brain part. CSI has been delivered 23.4 Gy and 36 Gy depending on standard risk and high risk patient with posterior fossa boost using conventional fractionation 1.8 Gy/day, follow up period range from 6-40 month, 15 patient Relapsed in which 8 only Shunt Surgery was performed and rest 7 with Incomplete Resection has been done.

Abstract Id: YUGP3801
Cancer Screening In Telangana -Our Experience
Presenter - Dr. Sowmya Korukonda

CANCER SCREENING IN TELANGANA - OUR EXPERIENCE
ABSTRACT AUTHORS Dr. Sowmya Korukonda, M.S., DNB( Surgical Oncology) Senior Resident MNJIO&RCC Hyderabad Dr. Jaya Latha N., M.D. (Radiation Oncology) MNJIO&RCC HO Dr. Ramprakash H V

INTRODUCTION: The Telangana government has published an operational framework for the state’s first cancer screening programme. There will be mandatory screening for oral, breast, and cervical cancer in people over the age of 30 in 3 districts of Telangana before the programme expands to other areas. MNJ Institute of Oncology and Regional Cancer Centre has teamed up with the Government of Telangana operating this program and this is our experience with regard to the implementation of the program using the existing Government Health System. METHODOLOGY The main idea of the program is to reach out to the people through the existing health workers at the village level. Hence, the PHC medical officers, Health Supervisors, ANM’s, and ASHA workers play the key roles in this program and they all are trained at various levels regarding the basics of cancer, the need for cancer awareness, early detection and treatment and of all how to identify cancer and where to refer them. The ASHA Workers will spread the cancer awareness and motivate people for cancer screening at the subcentres to be done by the Health Supervisors and the ANM’s and the Medical Officers at the PHC. RESULTS The training of the health workers has been successfully completed in the 3 districts of Telangana - Janagao, Siddipet, Pedapalli, by June 2017. The program has been initiated in all the 3 districts in July 2017. We would like to report the interim results of this pilot project in November 2017 to discuss the feasibility of such screening program using the available health resources at the village level.

Abstract Id: YUGP3805
Recurrence Pattern And Associated Risk Factors For Recurrence Of Breast Cancer
Presenter - Dr. Shahnaz Aliya
Co-author - Rukhsana Rabban, ,

Background Death due to recurrence is a common scenario after completion of treatment of breast cancer. Recurrence may occur at any time after initial treatment. Approximately 10-20% of patients with breast cancer will develop a clinically isolated local recurrence. A prolonged interval between initial treatment is a good prognostic factor for subsequent outcome , though many factors are associated with recurrence. Materials and method: This a cross sectional study conducted in a tertiary government hospital from January 2016 to December 2016.Total 100 patients are enrolled as sample of which 10% patients were of stage I, 34% of stage II and 56% of stage III. All the patients had local recurrence. Detailed treatment history were collected from previous documents. All the patients had definitive surgery. Thirty percent patients underwent lumpectomy and seventy percent underwent total mastectomy with axillary clearance. All patients received adjuvant treatment . External beam radiotherapy was taken by 80% (with boost 15% patient ).About 5% patients do not receive External beam radiotherapy. In my series 92% patients received hormonal therapy . Several factors are associated with increased risk of recurrence. Among them tumor size, grade, histology, marginal status, nodal status etc carry utmost importance.. Result: Study showed that 29 patients had local recurrence, 20 patients had locoregional recurrence and rest that is 51 patients had distant metastases. Among them 5% patients had lung metastases, 7% liver, 8% brain 2% skin and rest 19% had bone metastases. Conclusion: To prevent the recurrence we must know about it in details so that good quality of life can be maintained. Contact Person Dr.Aliya Shahnaz FCPS (Radiotherapy) Assistant Professor, Department of Radiotherapy,Dhaka Medical College. Email address shahnazaliya@yahoo.com
Abstract Id: YUGP3811

Design And Study Of Automatic Dwell Position And Dwell Time Quality Assurance Device For Hdr Brachytherapy

Presenter- Dr. SENTHILKUMAR SHANMUGAM
Co-author - ,

Introduction: High Dose Rate (HDR) brachytherapy deliver a high radiation dose directly into the patient tumor volume. Due to the high risk of complications resulting from an incorrect treatment of HDR afterloader Brachytherapy, it is essential that some accurate methods and good measuring instrumentation for quality assurance (QA). HDR brachytherapy dose delivery depends on the positioning accuracy of the Ir-192 source at the proper dwell position and accurate dwell timing inside the applicator. Incorrect implementation of either of these parameters can potentially lead to insufficient tumor control and high dose being delivered to the incorrect treatment volume. Consequently, accurate positioning verification of the HDR source is a fundamental part of quality assurance (QA) procedure. A number of methods have been used to check the positional accuracy like mechanical ruler, gafchromic film autoradiography and video cameras. However, these methods are time consuming for a routine QA program and they cannot furnish information on the actual source locations, So these techniques may not enough to verify the accuracy of the HDR source position and dwell timing. The purpose of this study was to develop and evaluate indigenously software based automatic real time On-line prototype HDR QA device that can perform HDR brachytherapy source positioning and dwell time measurements automatically. Material and Methods: The indigenously developed software based automatic real time On-line prototype HDR QA device consisted of In-house software, laptop, webcamera, light tight box, PMMA block and a fluorescent screen. The webcamera was placed in the top of the light tight box. The HDR source transferring tube was connected in the bottom of the light tight box. Ir-192 source would be loaded was put on the fluorescent screen and a sheet of PMMA was placed below the fluorescent screen. When the Ir-192 radioactive source moving on the fluorescent screen the gamma photons converted into light photon by the fluorescent screen. The visible lights indicates the real time positioning of the source. The visible light signal was recorded by the web camera, which was placed in the top of the light tight box. The web camera video signals was fed into a computer in-house software. The software will automatically calculate and determine the distance between successive dwell positions. Step intervals ranging from 5mm to 25mm were set. The differences between two dwell positions were compared with the assigned values. For timing measurements, individual images from the video signal were similarly processed to identify the location of the source. Source actual dwell time was calculated from number of images, which indicated the source at the corresponding position. The total transit time was measured by subtracting source stationary time from total dwell time. Simultaneously Gafchromic EBT film autoradiography was also used for comparing the positioning accuracy. Results and Discussion: The indigenously developed HDR QA device was able to successfully perform positioning and timing QA measurements automatically and the movement of the source can be seen in the computer screen in the control console area during the procedure. It can provide fast and precise positional verification of a HDR treatment plan. Advantages of my technique is its fast and precise positional verification, ability to visually check source treatment for safety checks and eliminating confusion of distance between physical end of the catheter and center of the source. We can have the softcopy & hardcopy results for the further evaluation and comparison. The QA test can be recorded and stored in the computer, which can be retrieved for the offline verification after the treatment. The device is capable to store more than 100 thousand QA performance. Conclusion: The indigenously developed HDR QA device was able to successfully perform positioning and timing QA measurements. Relative to radiochromic and radiographic film based autoradiography, which can only provide a static evaluation positioning, optical detection of temporary radiation induced fluorocence enables dynamic detection of position, and subsequently timing. The system can be implemented in an automated fashion leading to reduced time effort and increasing the resolution, accuracy and repeatability of measurements. The positioning and dwell time procedures can be stored for all the patient and machine QA, which can be able to rerun the recorded information anytime for the verification and analysis. Future directions will include expanding the capability of the system to provide dosimetry information in mobile apps.

Abstract Id: YUGP3813

Outcomes Following Breast Cancer Treatment In A Comprehensive Cancer Center: An Observational Study

Presenter- Dr. Basavalingaiah S Ajaikumar
Co-author - Dr. Mahesh Bendemegal, Dr. Gopinath K S, Dr. Ramesh Bilimagga

Basis of study: Breast cancer is one among the second most commonest cancer afflicting the females above 40 years. The incidence of breast cancer is on the rise in metros and cities in our country. In this study we assess the clinical and demographic characteristics and outcomes following treatment of the breast cancer patients undergoing treatment. Materials and Methods: One thousand three hundred and seventy seven breast cancer patients registered in hospital based registry of a comprehensive cancer center between 2007 to 2012 were followed up for disease free survival. Data were analysed using chi square test for proportions and Kaplan Meier Survival analysis. Results: 1377 patients with stage I-III breast cancer were evaluated for 3 year DFS and OS 96.7%, 92%, and 81% were surviving at their median estimates of 34.8, 32.9 and 28.1 months respectively for stage I, stage II and stage III disease (log rank $p$ = 42.1).

Abstract Id: YUGP3815

Marjolinâ€™s Ulcer In Old Burn Scar: A Case Series

Presenter- Dr. Richa Srivastava
Co-author - Dr (Prof.) Vijay Kumar, ,

BACKGROUND Burn injury is very common in India. Lack of post burn care and management will lead to hypertrophic scarring and chronic non healing wound which later on turn into Marjolinâ€™s ulcer. Marjolinâ€™s ulcer describes malignant degeneration in any chronic wounds, and majority of them arise in burn scars. OBJECTIVE To describe clinical characteristics of patient with Marjolinâ€™s ulcer arising in chronic burn scar. MATERIAL AND METHODS A case series study was done at King George Medical College in Department of Plastic Surgery from August 2015 upto September 2016 identifying 8 patients with chronic burn scar that underwent malignant transformation into a carcinoma. Data related to patients were retrieved from their medical records. All lesions were secondary to burns from various causes. All patients were proven to have malignancy by biopsy. Result Of the 8 patients 6 were male and 2 were female and the mean age was 42.7years(range 18-80years). On histopathological examination all were diagnosed as well differentiated squamous cell carcinoma. The lower limb was most frequently affected. time period between exposure to burn injury and appearance of ulcer was on an average 15 years (10to20years). Treatment was done with complete excision followed by cover with either split thickness skin graft or localregional flap depending upon the resultant defect. Conclusion Chronic burn scar will lead to malignancy. Through clinical examination and biopsy of all suspected tumor in old burn scar is mandatory. We should try to prevent it by taking good post burn care in form of early wound coverage and post healing massage and pressure garment to prevent complications like Marjolinâ€™s ulcer and hypertrophic scarring.

Abstract Id: YUGP3817
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Small Sized Thyroid Cancers: A Single Institutional Experience In India
Presenter - Dr. Sowjanya Gandla
Co-author - Dr. Vishal Rao,

Abstract The incidence of small differentiated thyroid carcinomas is increasing worldwide in the recent years, especially tumours of size less than 2cm in diameter. In this study, we have analysed the patterns of behaviour of small sized thyroid carcinomas (< 2cms, T1 tumors) in comparison with large sized thyroid carcinomas. Methodology: This is a retrospectively analysed data of patients with thyroid carcinoma. The following parameters were analysed: Distribution with regard to age, sex and presence of metastasis based on radioiodine scan. The following histopathological details were collected: maximal tumour diameter, extra thyroidal extension and lymphovascular invasion. The histopathological features of small sized thyroid cancers (less than 2cms) were compared with large sized thyroid cancers (more than 2cms). Results: Out of 152 patients, 39 patients were excluded due to the non-availability of complete details. Among the 113 patients of thyroid carcinomas, 43 patients (28%) were presented with small sized tumours (measuring less than 2 cm). In small sized thyroid tumours, 21.6% showed extra-thyroidal extension. 2.7% of the small sized thyroid carcinomas showed perineural invasion as compared to 6.3% of the large sized thyroid carcinomas. 20% of the small sized thyroid carcinomas showed lympho-vascular emboli. 51.2% of the small sized thyroid carcinomas presented with nodal metastasis as compared to 40% of the large sized thyroid carcinomas. 57.5% of the small sized thyroid carcinomas showed extracapsular extension as compared to 57.8% of the large sized thyroid carcinomas. Conclusion: Despite small size, thyroid carcinomas have properties to behave aggressively as comparable to large sized thyroid carcinomas. Taking the above facts into account, the small thyroid cancers should be treated with considerable caution as large thyroid cancers, especially since we have limited tools to predict the preoperative poor prognostic factors.

Abstract Id: YUGP3820
Correlation Of Cd34 And Hla-Dr Expression With Clinico-Pathological Profile And Outcomes In Mixed Phenotype Acute Leukemia
Presenter - Dr. Sharitha Naganna
Co-author - Dr. Renu Ethirajan, Dr. Radheshyam Naik, Dr. Veena Ramaswamy

Mixed phenotype acute leukemia (MPAL) is a rare subtype of acute leukemia and accounts for 2-5% of all acute leukemias. MPAL is classified under acute leukemias of ambiguous lineage. Acute undifferentiated leukemia is another subtype which comes under this category. MPAL refers to leukemias co-expressing more than one lineage specific marker. The various subtypes of MPAL comprises of B/myeloid, T/myeloid, B/T lymphoid and B/T/myeloid (triphenotype leukemia). The diagnosis of MPAL is primarily made with the help of flow cytometry. Also, various genetic abnormalities have been associated with MPAL. MPAL associated with t(9;22) and t(11q23) translocations have distinctive features and are considered separate entities. Clinically, MPAL manifests with the usual features of AML. The CR rates for MPAL are variable, as are their clinical courses. Many previous studies have depicted its association with lung cancer. Therefore, the present study emphasizes on the role of XPD SNPs (Lys751Gln, Asp312Asn) with lung cancer risk and its association with overall survival and clinical response in North Indian population. Materials and Methods: Two XPD polymorphisms were detected using PCR-RFLP 370 patients and 370 controls. The association between XPD polymorphisms and lung cancer risk as well as its histological subtypes was determined using Logistic regression analysis. Overall survival was evaluated for 311 patients using Kaplan-Meier method and Cox regression hazard model. We further analyzed survival according to the chemotherapeutic regimen used for survival analysis. Clinical response for 202 patients was evaluated using multivariate logistic regression analysis. Result: The mutant genotype (CC) was associated with an increased lung cancer risk (p=0.01) and also with its all histological subtypes i.e. ADC (p=0.03), SQCC (p=0.008) and SCLC (p=0.02) for XPD Lys751Gln polymorphism. There was a significant association between the XPD Asp312Asn polymorphism and OS (P = 0.01, by log-rank test), with median survival times of 1.7 (A/A) and 9.0 (G/A) months, respectively, suggesting that any copies of the A allele were associated with a poor outcome. These significances remained after adjustment using Cox regression model (HR=13.38, 95%CI=3.59-49.81, p=0.0001). In a subgroup analysis based on chemotherapeutic regimens, it was observed that patients administered Inototecanâ€“platinum, the XPD Lys751Gln mutant genotype (CC) was significantly related to better overall survival (OS) as compared to wild type genotype (AA) (25.43 vs 5.63, Log rank p=0.01). The Cox regression model revealed a significant effect (HR=0.21, 95%CI=0.08-0.57, p=0.002), whereas a poor survival was reported for subjects who were carrying the mutant genotype (AA) for XPD Asp312Asn polymorphism and treated with the same regimen as above in comparison with wild type genotype (GG) (1.86 vs 7.28, Log rank p=0.01). Similarly, patients treated with Pemetrexedâ€“platinum doublets and carrying the heterozygous genotype of Asp312Asn polymorphism had a poor survival (HR=2.01, 95%CI=1.14-3.56, p=0.01). Conclusion: XPD Lys751Gln associated with risk for lung cancer and its histological subtypes. Lys751Gln, Asp312Asn (Inototecanâ€“platinum doublets group) and XPD Asp312Asn (Pemetrexedâ€“platinum doublets group) were associated with OS in unrespectable of NSCLC patients treated with second-line platinum-based chemotherapy and might act as a predictive marker in lung cancer patients treated with platinum based doublet chemotherapy. These findings support the notion that assessment of genetic variations of XPD/ERCC2 could facilitate the triesta lab. Electronic records will be reviewed for information on age, gender and CBC parameters. Bone marrow aspirate smears will be reviewed. Flow cytometry reports will be retrieved and will be reviewed. The most widely used classification is the WHO criteria for the diagnosis of MPAL. Previously, EGILâ€™s and St. Judeâ€™s criteria were used for the diagnosis of MPAL. All the different classification systems will be compared and the cases will be re-evaluated according to WHO classification. Immunophenotyping by flow cytometry is done using BD-FACS CANTO. Flow cytometry is done in all acute leukemias using the following 4 panels: A-iot: Cyt CD3, CD45, Cyt MPO, CD79a, CD34, CD19, CD7, smCD3 B-ALL: CD20, CD45, nuTdt, CD34, CD19, CD10 T-ALL: Cyt CD3, CD45, nuTdt, CD4, CD8, CD10, smCD3 AML: CD64, CD45, CD15, CD13, CD34, CD117, CD33, HLA-DR.

Abstract Id: YUGP3822
Xpd Polymorphism And Its Association With Lung Cancer Risk, Overall Survival And Response In North Indian Patients Treated With Platinum Based Chemotherapy
Presenter - Ms. Shweta Lawania
Co-author - Siddharth Sharma, Navneet Singh, Digamber Behera

Aim: Xeroderma pigmentosum complementation group D (XPD)/Excision repair cross complementation group 2 (ERCC2) is an ATP-dependent DNA helicase associated with human DNA repair system. Many previous studies have depicted its association with lung cancer. Therefore, the present study emphasizes on the role of XPD SNPs (Lys751Gln, Asp312Asn) with lung cancer risk and its association with overall survival and clinical response in North Indian population. Materials and Methods: Two XPD polymorphisms were detected using PCR-RFLP 370 patients and 370 controls. The association between XPD polymorphisms and lung cancer risk as well as its histological subtypes was determined using Logistic regression analysis. Overall survival was evaluated for 311 patients using Kaplan-Meier method and Cox regression hazard model. We further analyzed survival according to the chemotherapeutic regimen used for survival analysis. Clinical response for 202 patients was evaluated using multivariate logistic regression analysis. Result: The mutant genotype (CC) was associated with an increased lung cancer risk (p=0.01) and also with its all histological subtypes i.e. ADC (p=0.03), SQCC (p=0.008) and SCLC (p=0.02) for XPD Lys751Gln polymorphism. There was a significant association between the XPD Asp312Asn polymorphism and OS (P = 0.01, by log-rank test), with median survival times of 1.7 (A/A) and 9.0 (G/A) months, respectively, suggesting that any copies of the A allele were associated with a poor outcome. These significances remained after adjustment using Cox regression model (HR=13.38, 95%CI=3.59-49.81, p=0.0001). In a subgroup analysis based on chemotherapeutic regimens, it was observed that patients administered Inototecanâ€“platinum, the XPD Lys751Gln mutant genotype (CC) was significantly related to better overall survival (OS) as compared to wild type genotype (AA) (25.43 vs 5.63, Log rank p=0.01). The Cox regression model revealed a significant effect (HR=0.21, 95%CI=0.08-0.57, p=0.002), whereas a poor survival was reported for subjects who were carrying the mutant genotype (AA) for XPD Asp312Asn polymorphism and treated with the same regimen as above in comparison with wild type genotype (GG) (1.86 vs 7.28, Log rank p=0.01). Similarly, patients treated with Pemetrexedâ€“platinum doublets and carrying the heterozygous genotype of Asp312Asn polymorphism had a poor survival (HR=2.01, 95%CI=1.14-3.56, p=0.01). Conclusion: XPD Lys751Gln associated with risk for lung cancer and its histological subtypes. Lys751Gln, Asp312Asn (Inototecanâ€“platinum doublets group) and XPD Asp312Asn (Pemetrexedâ€“platinum doublets group) were associated with OS in unrespectable of NSCLC patients treated with second-line platinum-based chemotherapy and might act as a predictive marker in lung cancer patients treated with platinum based doublet chemotherapy. These findings support the notion that assessment of genetic variations of XPD/ERCC2 could facilitate the triesta lab. Electronic records will be reviewed for information on age, gender and CBC parameters. Bone marrow aspirate smears will be reviewed. Flow cytometry reports will be retrieved and will be reviewed. The most widely used classification is the WHO criteria for the diagnosis of MPAL. Previously, EGILâ€™s and St. Judeâ€™s criteria were used for the diagnosis of MPAL. All the different classification systems will be compared and the cases will be re-evaluated according to WHO classification. Immunophenotyping by flow cytometry is done using BD-FACS CANTO. Flow cytometry is done in all acute leukemias using the following 4 panels: A-iot: Cyt CD3, CD45, Cyt MPO, CD79a, CD34, CD19, CD7, smCD3 B-ALL: CD20, CD45, nuTdt, CD34, CD19, CD10 T-ALL: Cyt CD3, CD45, nuTdt, CD4, CD8, CD10, smCD3 AML: CD64, CD45, CD15, CD13, CD34, CD117, CD33, HLA-DR.
therapeutic decisions for individualized therapy in advanced lung cancer patients.

Abstract Id: YUGP3826
Role Of Imaging To Predict The Deep Surgical Margin In Gingivobuccal Cancers
Presenter - Dr. Sowjanya Gandla
Co-author - Dr. Vishal Rao, Dr. ShivKumar Swamy,

INTRODUCTION: Buccal mucosa cancer is one of the most common cancer in the oral cavity. Of all the oral cavity squamous cell carcinomas, the carcinomas arising in the gingivobuccal complex are associated with poor prognosis. In patients with gingivobuccal cancer, loco-regional recurrence is the main cause of treatment failure. Positive surgical margin is an important prognostic factor that can be controlled by the operating surgeon. In gingivobuccal complex cancers, often it is difficult to assess the extent of surgical resection required for adequate deep surgical margin. Usually in buccal mucosa cancers the deep surgical margin (skin preservation) is assessed by the palpation of the skin (skin pinch test) which is a subjective test. The skin resectability or preservation in buccal mucosa carcinomas is based on the subjective assessment. There is no objective method of assessment of depth of tumour invasion in the buccal mucosa carcinomas. The present study evaluates the role of imaging in the assessing the deep surgical margin and skin preservation in buccal mucosa carcinomas. MATERIALS & METHODS: The study was conducted in Health Care Global Enterprises Ltd, Bangalore from February 2016 to June 2017. Patients of histologically proven buccal mucosa carcinoma without the gross involvement of the skin were included in the study. As a routine computed tomography imaging/ Magnetic resonance imaging with contrast was done preoperatively with specifications mentioned. In imaging, the distance between the base of the tumour and skin of the cheek is measured by a senior radiologist preoperatively. The involvement of the skin is assessed by the pinch test of the skin (skin pinch test). If the skin is not pinchable then the skin is excised. If the skin is pinchable then the skin is preserved. The specimen will be sent for frozen section and clearance. The deep surgical margin is assessed if the skin is pinchable. The frozen section findings are confirmed by histopathological examination and the depth of invasion of the tumour is measured and the clearance of the deep surgical margin is confirmed. The correlation between imaging, skin pinch test and histopathological examination of the specimen is assessed.

RESULTS: The study was done on 27 cases at the department of head and neck surgical oncology, Health Care Global Enterprises Ltd, Bangalore. The sensitivity of the skin pinch test to predict the deep surgical margin and skin preservation is 82.6%. The specificity of Skin pinch test is 50%. Positive predictive value and negative predictive value are 90.4% and 33.33%. The sensitivity of the imaging to predict the deep surgical margin and skin preservation is 100%. Specificity for imaging is 75%. The positive predictive value and negative predictive value for imaging are 95.83% and 100% respectively.

CONCLUSION: The sensitivity and specificity of imaging to predict the skin preservation (deep surgical margin more than 5mm) is 100% and 75% respectively compared to sensitivity and specificity of skin pinch test of 82.6% and 50% respectively. Imaging is an effective tool in predicting the skin preservation and skin excision compared to skin pinch test.

Abstract Id: YUGP3827
A Case Of Synchronous Multiple Primary Malignant Neoplasms.
Presenter - Dr. Arunmohan P V
Co-author - Dr.Harshitha M Jain, Dr.Sampuran Kumar Acharya,

Abstract Background: The incidence of multiple primary malignant neoplasms ranges from 0.7% to 11.7%. The major haematological malignancies associated with solid tumours include multiple myeloma, myelodysplastic syndromes, non-hodgkins lymphoma and chronic myelogenous leukemia. Itâ€™s very rare to have gynaecological and haematological malignancy together. Published literature has reported that such malignancies are often located at the same organ, such as simultaneous hodgkins lymphoma and adenocarcinoma in the uterine cervix and adenocarcinoma and lymphoma in the stomach. A rebiopsy is the only way to verify the suspicion of synchronous multiple primary malignant neoplasm. Since there is no standard treatment for such rare conditions its very challenging to manage such cases. Case report: A 63 year old female presented with bleeding per vaginum for 3 months. IHC of cervical growth suggested squamous cell carcinoma .MRI of abdomen pelvis revealed a lesion in the left femur which was evaluated and diagnosed as multiple myeloma stage 1A. This patient received concurrent radiotherapy(50 Gy in 25 fractions) and 4 cycles of weekly cisplatin followed by intracavitary brachytherapy (6.5 Gy X 4 fractions) for cervical malignancy. The patient also received systemic therapy (24 cycles of bortezomib and dexamethasone) for multiple myeloma. At 23 months of follow up the patient is alive and having no evidence of disease. The review of medical literature will be included in the case report.

Abstract Id: YUGP3831
Difficult Decision In Thoracic Surgery
Presenter - Prof. Shailendra Kumar
Co-author - Archana Mishra ,

Difficult decision in Thoracic Surgery Shailendra Kumar1, Archana Mishra2 Department of Cardiac Thoracic & Vascular Surgery, KGMC, Lucknow. Decision making is tuff in everyday life of all clinicians including surgeons. Life altering decisions should be made on spot. The ability to make such decisions is the hallmark of a surgeon. On an average only 15% of medical decisions are scientifically based. It may even go lower percentage for thoracic conditions. The question is why such situation arises in the modern era of fastened technical and communication skills and data processing development. In this discussion, we will critically analyze different factors influencing medical decision in clinical practice pertaining to thoracic surgery. It is important to integrate reported evidence, its interpretation and appropriate guidelines into daily practice. Constant review of practice pattern, updating management algorithms and critical assessment of results is necessary to maintain optimal quality care. Documentation of these processes should be must. In this modern era of clinical practice it is essential for the surgeons to adopt leadership roles, otherwise we will find ourselves at distant from patients and discount our surgeonâ€™s expertise in making vital decisions.

Abstract Id: YUGP3835
Survival Benefit Of Oral Tegafur/Uracil And Leucovorin Metronomic Chemotherapy As A Second Line Therapy For Patients With Recurrent Or Metastatic Colorectal Cancer. A Study From India
Presenter - Dr. Anita Ramesh
Co-author - Ashish B. Prasad ,

Abstract Background: Cancer therapy is expensive and lays huge economic burden on the patient/family. Metronomic chemotherapy with its good efficacy rates and lower adverse events is also economical. Therefore this can be a boon in cancer treatment, particularly in resource limited country like India. This phase II study examined safety and activity of a three drug metronomic regimen comprising of UFT/Leucovorin, cyclophosphamide, and etoposide in patients with colorectal carcinoma with documented progression. Materials and Methods: The study was conducted in accordance to the Declaration of Helsinki and Good Clinical Practice Guidelines. The study protocol and other documents were approved by the Institutional Ethics Committee. All the participating subjects provided written informed consent. Patients with metastatic and recurrent...
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measurable colorectal cancer with documented progression who previously received first-line therapy oxaliplatin-based regimen were enrolled in the study. Participants received oral tablet tegafur uracil twice daily and tablet leucovorin 15 mg for 4 weeks. They also received tablet cyclophosphamide 50 mg and tablet etoposide 50 mg orally once daily for 3 weeks followed by a gap of 1 week. Treatment was out-patient basis for every 28 days and was continued until disease progression or occurrence of unacceptable toxicities. The primary end point was response rate for patients and secondary end points were progression free survival (PFS), overall survival (OS) and safety. Secondary end-points evaluated include progression free survival (PFS), overall survival (OS) and safety. Results: A total of 30 patients were recruited. The site of primary tumor was colon in 70% and rectum in 30% cases. Among the patients, twenty-three had undergone prior surgery, thirteen had received adjuvant chemotherapy and six had also received radiation therapy. All patients had previously received chemotherapy with Oxaliplatin+Capecitabine/FOLFOX. The median number of treatment cycles were 12 with mean duration of treatment of 15 months. Among the 30 patients, 24 (80%) were withdrawn due to progressive disease and 6 (20%) were withdrawn due to adverse events. Out of the study patients, 2 patients had treatment delays and 3 had dose adjustments. The median duration of follow-up at the clinical cut-off date was 33.5 months (95% CI 28.3, 38.6 months). Using the RECIST criteria, overall response rate was 83.3% (Complete response (CR) in 23.3% and partial response (PR) in 60%) with median duration of response of 10.3 months (see Table 1). Median progression free survival was 18.3 months (95% CI 15.8, 20.7). Estimated median overall survival time was 30.1 months. ? Table 1. Analysis of Efficacy Overall response rate a±ε Partial response a±ε Complete response 83.3% 60% 23.3% Median duration of response (months) 6.3 months Progression-free survival (months) 18.3 months Median survival (months) 30.1 months The most common adverse event was Grade 2 fatigue seen in 33.33% of patients. Four patients (13.3%) experienced toxicities with a worst grade of 4, mainly gastrointestinal events such as vomiting and diarrhea. Grade 3 anemia was seen in 1 (3.3%) and grade 3 neutropenia in 1 (3.3%). There was 1 treatment-related death (Grade 5 event) caused by neutropenic sepsis. Conclusion: The lower toxicity and the favorable anti-tumor efficacy of metronomic chemotherapy with UFT/Leucovorin, cyclophosphamide, and etoposide regimen can constitute a therapeutic option for colorectal carcinoma with documented progression. Key words: Colorectal carcinoma, metronomic chemotherapy, tegafur uracil, efficacy, safety, India.

Abstract Id: YUGP3837

Regulation Of Tsc1 By Mir-130a In Oral Squamous Cell Carcinoma

Presenter - Mr. Karthik Mallela
Co-author - Dr. C.S. Ravinder, Dr. Kodaganur S. Gopinath, Prof. Arun Kumar

Oral squamous cell carcinoma (OSCC) is a multifactorial disease with multiple genetic and epigenetic alterations including changes in microRNA (miRNA) expression. Deregression of PI3K-mTOR signaling pathway has been implicated in oral cancer. Many studies have shown that the PI3K/akt/TSC2/mTOR pathway is under the light regulation of miRNAs. The TSC1 (Hamartin) and TSC2 (Tuberin) complex negatively regulates the mTOR complex 1 (mTORC1) and thereby acts as a negative regulator of the PI3K/akt pathway, regulating cell growth and proliferation. TSC1 is known to be downregulated in various cancers, including the OSCC. However, the role of TSC1 in OSCC is not well understood. MicroRNAs are short (20-22bp) non-coding RNAs that regulate gene expression by binding to their target gene mRNAs at the 3′UTR region and lead to their degradation or repression of translation. Here, we discuss the role of oncogenic miR-130a in the regulation of TSC1. Overexpression of miR-130a in OSCC cells reduced the level of TSC1 and increased cell proliferation. Conversely, the delivery of miR-130a inhibitor to these cells drastically increased the level of TSC1. The present study thus highlights the importance of miR-130a-mediated regulation of TSC1 in OSCC pathogenesis.

Abstract Id: YUGP3839

An Audit To Determine Compliance And Toxicity In Anal Canal Cancers: A Single Institution Experience

Presenter - Dr. Ramesh Kumar
Co-author - Neeraj Rastogi, Shagun Misra, Shaleen Kumar

OBJECTIVES: To determine safety, efficacy and outcome of anal canal cancer patients treated with chemoradiation. METHODS: retrospectively audited data of anal canal cancer patients treated in our institute at Sanjay Gandhi PGI in 6-year period. Patients were treated either with radiotherapy or chemoradiation using Cisplatin+5FU or Mitomycin+ 5FU with radiotherapy. All toxicity graded by CTC AE 4.0 RESULTS: From 2009-2015, 58 anal canal cancer patients registered, 51/58 patients were eligible for radical treatment. Median age of patients was 60 years(range 30-79), there were 41 male and 10 female patients. As per TNM staging, T1/T2 =24, T3/T4=27 and 24 patients were node positive. 46 patients were grouped as stage I / II disease. 41 Patients received chemoradiotherapy, 9 Patients received radiotherapy alone while 1 patient received chemotherapy alone. The planned treatment completed in 30/51(75%) and 13/51(25%) patients did not complete treatment due to toxicities. 17 patients had >grade 3 Gastrointestinal/Haematological toxicity. 12/51(23%) patients died during treatment due to diarrhoea/neutropenia. At the time of audit in 2016, 16/51(30%) patients were lost to follow up with disease as they were advised abdomino-perineal resection. Kaplan Meier method was used to estimate probability of survival, the lost to follow up with or without disease were considered as event. During follow up 20% patients had local recurrence and 11% had distant metastases. Mean DFS and OS were 13.7+3.7 and 17.6+3.3 months respectively, 5 year DFS and OS were 7.3 % and 19%(taking worst case scenario) CONCLUSION: The combined chemo-radiation is the standard of care but poor outcome was related to poor tolerability, higher treatment deaths which worsened compliance as well as 30% of cases were lost to follow up, so there is a need for re-evaluation of treatment protocol

Abstract Id: YUGP3841

Incidence Of Fungal Infection In Oropharyngeal Malignancy During Radiotherapy

Presenter - Dr. Amit Pandey
Co-author - Dev kumar Yadav, Arun Kumar Yadav, Mansi Barthwal

Introduction-Certain fungal organisms, notably Candida albicans, are commensal inhabitants of the oral cavity in a large proportion of individuals. Under normal conditions, these fungal organisms co-exist with the other microorganisms of the normal oral flora and do not cause disease. However, changes in the oral and/or systemic environment can result in an overgrowth of these fungal species, leading to clinical oral fungal infection. Radiation given during treatment of oral and pharyngeal malignancy frequently causes alteration of the oral environment predisposing to the colonization of the oral mucosa by yeast species most frequently candida albicans. Objective-To find out association between radiation therapy and frequency of fungal infection in oropharyngeal malignancy. Materials and Method-3 samples by oral rinse method were taken from the patients undergoing radiotherapy,first sample before the starting of radiotherapy,second inbetween the course of radiotherapy and third after completion of radiotherapy. The occurrence of high grade mucositis were
found to be significant in patients positive for fungal infections during radiotherapy.

Abstract Id: YUGP3843
Srbrt â€“ Can It Be An Alternative Option In Locally Advanced Carcinoma Cervix, Unsuitable For Brachytherapyâ€“ A Retrospective Analysis.
Presenter- Dr. INDERJIT KAUR
Co-author - Swarupa Mitra, Manoj Kumar Sharma, Soumya Dutta

INTRODUCTION: Concurrent chemoradiation followed by brachytherapy boost is the standard of care in the management of locally advanced carcinoma cervix. Brachytherapy allows a high dose to the residual disease following External Beam Radiotherapy, with a steep dose fall off and better sparing of normal structures. Yet there are many patients who are not suitable for brachytherapy for various medical and non-medical reasons. These patients may be offered boost with Stereotactic Body Radiotherapy (SBRT). AIM: To assess the response of SBRT Boost in patients of carcinoma cervix, who are not suitable for Brachytherapy either ICRT or ISRT. METHODS AND MATERIALS: A retrospective analysis of 14 patients was carried out for carcinoma cervix patients who underwent SBRT boost from June 2013 to January 2017 at Rajiv Gandhi Cancer Institute and Research Centre. For SBRT, CTV consisted of the gross disease on physical examination and on MRI. CTV included entire cervix and grey areas on MRI. CTV was extended by 5mm uniformly to create PTV. Response evaluation was done at 3 months with MRI. Recurrence rates, acute and chronic toxicities, disease free survival and overall survival were calculated at the last follow up. RESULTS: 14 patients were included in the study, who underwent SBRT boost after EBRT. Mean age of patients was 56.75yrs (40-82yrs). Most of the patients (50%) belonged to stage IIIB, 33.3% belonged to Stage IIA and 16.7% to IIB. Out of these 14 patients, 7 (50%) had a large residual disease and difficult implant and 2 (14.3%) refused ICRT, 3 (21.4%) had medically unfit for anaesthesia, 2 (14.3%) had anatomical contraindications for ICRT. On dosimetric analysis PTV mean volume was found to be 123.34 cc with a mean dose of 19.86Gy. BED for PTV was 29.47Gy10 (mean, EQD2 â€“ 25.15Gy) and doses to 2cc volume of OARs were: Bladder - 49.44Gy3 (mean, EQD2 â€“ 29.77Gy), Rectum - 47.83Gy3 (mean, EQD2 â€“ 28.80Gy) and Sigmoid 25.32Gy3 (mean, EQD2 â€“ 15.25Gy). Mean isodose line covering target volume was 90.86% (range - 71.3% - 99.3%). On evaluation after 3 months, 1 patient had complete radiological response, 1 had a partial response and 2 had progressive disease. Median overall and disease free survival was 16.5 and 10 months. Only 1 patient developed grade 2 acute cystitis and 2 had grade 2 diarrhoea. None of the patients had chronic rectal or bowel toxicity. CONCLUSION: SBRT can be an alternative option for those patients who are unsuitable for ICRT or ISRT. Dosimetrically equivalent doses can be achieved to PTV and OARs with comparable toxicities. Head on comparison and long term follow up is required to assess the biological equivalence of SBRT with Brachytherapy.

Abstract Id: YUGP3845
Primary Intracranial Sarcoma - Report Of Two Cases And A Review Of Literature
Presenter- Dr. Manesh Singh
Co-author - Dr. Sapna Nangia, Dr. Robin Khosa, Dr. Varindera Paul Singh

Primary intracranial sarcomas (IS) are exceedingly rare malignant CNS tumors arising characteristically from the mesenchymal tissue and were first described by Bailey in 1929. The inconsistency in the definition and classification of IS in the earlier reports led to an overestimated reported incidence of about 4.3%. A detailed report of 19 cases of intracranial sarcomas of the 25,000 brain tumor biopsies in 1991 by Paulus et al put into perspective the rather low incidence rate of less than 0.1%. Classification of primary intracranial sarcomas are similar to their extracranial counterparts and the most common histology in the series by Paulus et al was malignant fibrous histiocytoma, or, undifferentiated pleomorphic sarcoma. The clinical presentation mimics that of the other intracranial space occupying lesions, however, unlike glial tumors, extracranial metastatic risk is markedly high with an incidence of upto 40%. The reported literature is sparse and clearly defined treatment strategies are yet to be established. Nevertheless, a multimodal treatment approach with upfront surgery followed by adjuvant therapy, utilizing both radiotherapy and chemotherapy, is commonly used. We present the unusual cases of two adolescent girls with primary IS with distinct histopathologies i.e pleomorphic sarcoma and rhabdomyosarcoma, both these subtypes having been grouped under â€“mesenchymal non-meningothelial tumorsâ€™ in the 2016 WHO classification of CNS tumors. Inherently characterized by biological aggressiveness and consequential dismal prognosis, the few case reports of primary IS with long term survivors clearly elucidate the importance of multidisciplinary treatment for these rare tumors. Both of our patients received tri-modality treatment after histopathological confirmation with immunohistochemistry and are clinically well and radiologically disease free at one year and three years after diagnosis.

Abstract Id: YUGP3849
Ubiuillin Overexpression Protects Lung Cells From Diesel Exhaust Particles Induced Toxicity.
Presenter- Mr. Nishant Singh
Co-author - Sanjay Yadav,

Background: Diesel exhaust particle (DEP), is an important ingredient of ambient air, emitting from vehicle exhaust emissions in urban areas considered as pulmonary carcinogen. Animal studies have shown that long-term exposure of DEP induces tumor formation in lungs. Small regulatory RNA molecules known as microRNAs are post-transcriptional gene regulators, which controls the protein synthesis in sequence specific manner. Ubiqulitin (UBQLN), a member of ubiquitin-like protein family which are first discovered for their roles in maintaining proteostasis of cells. However, recent studies have shown that UBQLNs also regulate carcinogenesis of lungs. In the present study, efforts have been made to study the effect of DEP on lung cells and study the role of Ubiquilin and regulating miRNAs in DEP induced lung toxicity. Methods: DEP obtained from National Institute of Standards and Technology, Standard Reference material 2975, Gaithersburg, Size distribution and zeta potential of DEP were determined using dynamic light scattering (DLS) and phase analysis light scattering, DEP is further characterized by Transmission Electron Microscopy (TEM). Expression of Ubiquilin and miR-155 was studied by Real Time PCR & western blotting. To further study the effect of Ubiquilin overexpression in DEP toxicity, Ubiquilin overexpressing cells were created by lentiviral vector system by transfection UBQLN1 (MIG-UBQLN1) or control vector (MIG-ER) sorted for GFP using by flow cytometer. Apoptosis was measured using Annexin V-APC and propidium iodide (PI) labeling and alamar blue cell proliferation assay. Results: Exposure of DEP to A549, a lung carcinoma have significantly up-regulated the mRNA and protein levels of Ubiquilin and down-regulated expression of miR-155, which regulates the expression of UBQLN. Moreover, TEM imaging has shown that over-expression of Ubiquilin induces accumulation of DEP particles in vacuole like structure in A549 cells. Conclusion: Exposure of ultrafine DEP up-regulates Ubiquilin levels in A549 cells and increased expression of Ubiquilin induces accumulation of DEP particles in vacuole like structure in A549 cells which helps cells to cope with the DEP induced toxicity.

Abstract Id: YUGP3851
Nuclear Receptors In Head And Neck Squamous Cell Carcinoma - A Pilot Study
Carcinoma Cervix - A Prospective Study Based Parameters In The Treatment Of Locally Advanced

Computed Tomography And Magnetic Resonance Imaging

Presenter - Prof. Ravi Nayar
Co-author - Naveen Krishnamoorthy, Vishal US Rao, Mithua Ghosh

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Introduction

Strategies for improving the survival in Head and Neck Neoplasms have largely focused on EGFR receptor blockade by antibodies or tyrosine kinase inhibitors. However there is an increasing interest in looking at nuclear receptors (NRs) as therapeutic targets. Materials and method After obtaining permission from the Hospital IERB, 20 histopathological samples of Head and neck Squamous cell carcinoma - 5 each of buccal mucosa, larynx, tongue, and retro molar trigone were retrospectively studied. The histopathological samples were obtained either during biopsy or surgery and studied for Estrogen Receptor (ER), Progesterone Receptor (PR), Her-2-neu and E-cadherin status by Immunohistochemistry (IHC). Results Lymph nodes were positive in 8 patients; 3 each of laryngeal and tongue SCC and 2 cases of Retro molar trigone (RMT) SCCs. Among these 8 patients, 5 tested 3+ for E-cadherin while 3 had only 2+ on IHC. All of them were negative for ER status. One patient with RMT SCC tested positive for PR status. Her-2-neu was positive in 2 cases, one patient with Grade 2 SCC of larynx with positive lymph nodes and the other with Recurrent node negative RMT SCC. Conclusion The finding of Her-2-neu positivity in 10% of head and neck SCC needs to be further investigated as it may have a potential role in targeted therapy. The absence of estrogen receptors in the study is in contrast to literature reports and needs to be validated further.

Abstract Id: YUGP3853

Recurrent Ivc Leiomyosarcoma With Duodenal Involvement - A Case Report

Presenter - Dr. Jagadeesh Krishnamurthy
Co-author - Jagadeesh Krishnamurthy, Prashanth Basappa Chowdary, Basant Mahadevappa

Recurrent IVC Leiomyosarcoma with Duodenal involvement - A case report Jagadeesh Krishnamurthy, Prashanth Basappa Chowdary, Basant Mahadevappa Department of Hepatopancreaticobiliary Surgery and Liver Transplantation, HCG Hospital, Bengaluru, Karnataka, India. Abstract: Tumours of the Inferior Vena Cava (IVC) are extremely rare and Leiomyosarcoma forms the majority of the IVC tumours. These tumours are often incidentally detected on imaging. They are slow growing tumours and surgical resection forms the mainstay of treatment with the aim of achieving cure. However these tumours are notorious for recurrence with close to half of them recurring following surgery. We present a case of Recurrent Leiomyosarcoma of the IVC with involvement of the duodenum causing bleeding and partial obstruction. Patient underwent resection and interposition graft placement of the IVC and a whippleâ€™s procedure. Patient is planned for adjuvant radiotherapy.

Abstract Id: YUGP3855

Correlation Of Target Volume Using Clinical, Sonographical, Computed Tomography And Magnetic Resonance Imaging Based Parameters In The Treatment Of Locally Advanced Carcinoma Cervix- A Prospective Study

Presenter - Dr. SOUVIK PAUL
Co-author - Dr. Abhishek Basu, Dr. Kazi S Manir, Dr. Krishnangshu Bhanja Choudhury

AIMS AND OBJECTIVES: MRI is considered the â€œgold standardâ€ for delineation of target volumes (GTV, HR-CTV, IR-CTV) in 3D Image Based Brachytherapy as defined by GYN GEC ESTRO and ICRU 89. However, CT, USG and clinical examination are also used to delineate cervical tumour in many situations. We therefore designed this study to compare CT, trans abdominal USG and clinical examinations (Clin) with MRI to assess and correlate the dimensions and volume of the cervical growth before treatment and HRCTV after definitive chemoradiation (CRTR) at the time of HDR Intracavitary Brachytherapy (HDR ICBT) in cases of locally advanced Carcinoma Cervix (LaCaCx). MATERIAL AND METHOD: LaCaCx FIGO stage IIb - IIb patients receiving definitive CRTR (50.4 Gy/28/5.5 weeks) delivered by Theratron 780E Telecobalt; 4 field; CT simulation plus weekly Inj. CDDP 40 mg/m2 followed by HDR ICBT were enrolled for this single institutional prospective trial. Dimensions of the cervical growth â€“ supero-inferior (SI; height), medio-lateral (ML; width) and antero-posterior (AP; thickness) at baseline were assessed independently clinically, and by USG, CT and T2wMRI. After CRTR during HDR ICBT, the same dimensions as well as volumes of the HRCTV delineated by Clin, USG, CT and MRI were assessed. Paired t test was used along with the Pearsonâ€™s correlation to assess the concordance of Clin, USG and CT based dimensions and volumes with those of MRI (as the standard) of the tumour at baseline and HRCTV at HDR ICBT. RESULTS: Between 01/2015 and 06/2017, 25 patients with median age 55 years and 16/25 in stage IIb were enrolled. Pre-EBRT AP dimensions Mean±SD (in cm) were as follows: for MRI 3.83±1.17 vs CT 3.59±1.35 (correlation +0.739), USG 3.77±1.91 (correlation +0.497) and Clin 3.71±1.11 (correlation +0.482). The paired samples correlation was statistically significant for all pairs. For ML dimension (Mean±SD in cm) MRI (4.84±1.50) correlated well with CT (5.46±1.57, correlation +0.621, p = 0.001) but less so with USG and Clin (correlations +0.139 and +0.164 respectively; both p = NS). Similarly for SI dimensions (Mean±SD in cm), MRI 4.25±1.41 also correlated with CT (4.01±1.42, correlation +0.655; p = 0.000) and USG 3.59±1.18 (correlation +0.455; p = 0.022) but not Clin 3.96±1.73 (correlation +0.227, p = 0.276). MRI volumes (92.51±74.55cc) were higher than but correlated with CT (89.06±85.91cc, correlation +0.867, p = 0.000), USG (66.47±74.82cc, correlation +0.581; p = 0.002) and Clin (68±3.36cc, correlation +0.168; P = 0.422). 17/25 patients achieved CR. At HDR ICBT, compared to MRI, all dimensions of HRCTV correlated well with other methods â€“ best with CT (correlation for AP, ML, SI and volume being +0.917, +0.984, +0.86 and +0.845 respectively) followed by USG and Clin, (all p statistically significant). CONCLUSIONS: Measurements of tumour dimensions at baseline and of HRCTV at HDR ICBT were comparable for all tests, but the correlation of MRI was best with CT followed by USG and Clin. AP and SI dimensions were underestimated by all whereas ML was overestimated by CT and underestimated by USG and Clin vs MRI. The correlation with MRI increased for all methods at HDR ICBT.

Abstract Id: YUGP3857

Neoplastic Hilar Obstruction: An Institutional Experience

Presenter - Dr. Jagadeesh Krishnamurthy
Co-author - Jagadeesh Krishnamurthy, Prashanth Basappa Chowdary, Basant Mahadevappa

Introduction: Neoplastic hilar obstruction to the liver outflow presents a unique challenge to the surgeon wherein, the balance between a curative and possibly larger resection has to be achieved against a palliative treatment. These are often technically demanding and have thus far produced equivocal outcomes on both ends. Quantification of the bilirubin and approaches through various guidelines, lack of surgical expertise and a lack of dedicated multidisciplinary tumor board across the patient population leads to a non-uniform way of treating these patients. Most of the referrals are late or are after interventions and complications. We present to you a wide experience of patients with neoplastic hilar obstruction who presented to us at various stages...
Abstracts

Malnutrition In Cancer Patients Undergoing Chemotherapy

Abstract Id: YUGP3861

Malnutrition In Cancer Patients Undergoing Chemotherapy

Presenter- *Ms. ANJANA K V*

Co-author - SILPA KS, ARUN PHILIP, PAVITHRAN K

BACKGROUND: Malnutrition is common in patients with cancer and in many cases can result in shortened survival. Mainly chemotherapy regimens seems to be an important nutritional risk factor. More than 20% of cancer mortality can be attributed to the effects of malnutrition, rather than malignancy itself. Malnutrition results in poor response to treatment, increased length of hospital stay, increased risk of infections, toxicity, reduced quality of life, and increased health care costs in patients with cancer. AIM: This study was aimed to assess the nutritional status of patients undergoing chemotherapy. MATERIALS AND METHODS: A prospective study was conducted among the out patients undergoing chemotherapy at Amrita Institute of Medical Sciences and Research Centre Kochi. This study was conducted from November 2015 to April 2017. 300 patients were included in this study after getting informed consent. Nutritional status was assessed by MNAS(Mini Nutritional Assessment Scale) before the first and 3rd cycle of chemotherapy. The nutritional parameters assessed were BMI (body mass index), MAMC (mid-arm muscle circumference), calf circumference (CC), weight loss, dietary assessment, general assessment and self assessment. Nutritional status assessed based on the following scoring. >24 points = Well nourished; 17 to 23.5 points = at risk for malnutrition and < 17 points = malnourished. RESULTS: Out of the 300 patients 93 patients were found to be malnourished before the initiation of chemotherapy, 200 were at risk of malnutrition and 7 patients were well nourished. Before the initiation of 3rd cycle of chemotherapy 63.5% patients were malnourished from a total of 200 (risk of malnutrition), rest of the patients remains same as at risk of malnutrition. After receiving 2 cycles of chemotherapy 1 patient from well nourished group became malnourished and 5 were at risk of malnutrition. Most of the patients having malnutrition were in Stage 3 of disease (98/300) or in stage IV (94/300). CONCLUSION: We can conclude that the number of patients at risk of malnutrition increases after the start of chemotherapy and is also associated with the stage of the disease. The nutritional status assessment must be carried out on all patient at the beginning and during the treatment and it should be corrected properly as it can affect the response to treatment and can reduce the morbidity.

Do Nutritional And Inflammatory Biomarkers Have Prognostic Significance In The Early Post Operative Period In Head And Neck Cancer AË” A Pilot Study

Abstract Id: YUGP3862

Do Nutritional And Inflammatory Biomarkers Have Prognostic Significance In The Early Post Operative Period In Head And Neck Cancer Aë” A Pilot Study

Presenter- *Dr. PIYUSH SINHA*

Co-author - Dr. Ravi Nayar,

This pilot study evaluated prognostic significance of patient/tumor factors and nutritional/inflammatory parameters with respect to the early post operative period factors such as wound infection (WI) rates and length of hospital stay (LOS) in Twenty-six head and neck cancer (HNC) patients undergoing surgery. Prognostic indices were calculated using patient and tumor related variables including age, sex, co-morbidity, tobacco usage, pathological diagnosis, hemoglobin (Hb) and albumin. The WI rate was 30% and significantly correlated with both tobacco usage (P=0.021) and nutritional indices such as Albumin/ Globulin ratio (A/G ) (P = 0.034) and Nutritional Risk Index (NRI) (P = 0.043) . LOS (9.32 Â± 2.719) was significantly correlated to Albumin levels (P= 0.002), A/G ratio (P = 0.02) and PNI (P = 0.006) and NR Index (P = 0.002). This pilot study suggests that a positive history of tobacco usage and immune nutritional factors may influence early post-operative outcomes in head and neck surgery.

Role Of Hypo Fractionated Stereotactic Body Radiotherapy For Oligometastases In Liver

Abstract Id: YUGP3866

Role Of Hypo Fractionated Stereotactic Body Radiotherapy For Oligometastases In Liver

Presenter- *Dr. Chandana Sanjee*

Co-author - Chandana Sanjee,

Role of Hypo fractionated Stereotactic Body Radiotherapy for Oligometastases in Liver Chandana Sanjee, Gurunath Kilara, Ramesh Billimagga, Lohith Gopal Abstract Background: The overall survival for
Abstract Id: YUGP3868
Malnutrition In Cancer Patients Undergoing Chemotherapy
Presenter - *Ms. ANJANA K V*
Co-author - SILPA K S, ARUN PHILIP, PAVITHRAN K

BACKGROUND: Malnutrition is common in patients with cancer and in many cases can result in shortened survival. Mainly chemotherapy regimens seems to be an important nutritional risk factor. More than 20% of cancer mortality can be attributed to the effects of malnutrition, rather than malignancy itself. Malnutrition results in poor response to treatment, increased length of hospital stay, increased risk of infections, toxicity, reduced quality of life, and increased health care costs in patients with cancer. AIM: This study was aimed to assess the nutritional status of patients undergoing chemotherapy. MATERIALS AND METHODS: A prospective study was conducted among the out patients undergoing chemotherapy at Amrita Institute of Medical Sciences and Research Centre Kochi. This study was conducted from November 2015 to April 2017. 300 patients were included in this study after getting informed consent. Nutritional status was assessed by MNAS (Mini Nutritional Assessment Scale) before the first and 3rd cycle of chemotherapy. The nutritional parameters assessed were BMI (body mass index), MAMC (mid-arm muscle circumference), calf circumference (CC), weight loss, dietary assessment, general assessment and self assessment. Nutritional status assessed based on the following scoring: >24 points = Well nourished; 17 to 23.5 points = at risk for malnutrition and < 17 points = malnourished. RESULTS: Out of the 300 patients 93 patients were found to be malnourished before the initiation of chemotherapy. 200 were at risk of malnutrition and 7 patients were well nourished. Before the initiation of 3rd cycle of chemotherapy 63.3% patients were malnourished from a total of 200 (risk of malnutrition), rest of the patients remains same as at risk of malnutrition. After receiving 2 cycles of chemotherapy 1 patient from well nourished group became malnourished and 5 were at risk of malnutrition. Most of the patients having malnutrition were in Stage 3 of disease (98/300) or in stage IV (94/300). CONCLUSION: We can conclude that the number of patients at risk of malnutrition increases after the start of chemotherapy and is also associated with the stage of the disease. The nutritional status assessment must be carried out on all patient at the beginning and during the treatment and it should be corrected properly as it can affect the response to treatment and can reduce the morbidity. NO CONFLICT OF INTEREST

Abstract Id: YUGP3869
Clinical Application Of Computer Aided Design And Three-Dimensional Printing In Pre-Planning Of Tongue Cancer Surgery
Presenter - *Dr. PIYUSH SINHA*
Co-author - Dr.U.S. Vishal Rao ,

INTRODUCTION: Tongue cancer is one of the most commonly seen oral cavity cancer in India. It requires precise surgical planning and assessment for resection and reconstruction, thereby reducing the morbidity to the patients and improving the outcomes. METHODOLOGY: Two patients were selected based on the complexity of their tumours and 3D Printed models were fabricated in flexible material with differentiating colours to easily demarcate the lining of the tongue and tumour. These models were utilized by the surgical team in decision making of tumour resection and plastic reconstruction. RESULT: Three-dimensional printing of tongue proved to be a supplemental asset in better surgical planning of disease resection, reconstruction and patient education. Conclusion: The 3D models helped the oncolgy surgeon by providing an impactful visual aid alongside his operating table. It helped the plastic surgeon to chart out a plan in order to reconstruct a cosmetic and functional tongue. Hence proving to be a valuable supplement in overall planning of tongue cancers.

Abstract Id: YUGP3873
A Prospective Study Comparing Prostate Specific Antigen Levels In Carcinoma Prostate Patients Treated Using Intensity Modulated Radiotherapy (Imrt) Alone And Intensity Modulated Radiotherapy With Stereotactic Body Radiotherapy Boost (Sbrt)
Presenter - *Dr. Chandana Sanjee*
Co-author - Radiation Oncology Resident(DNB),

INTRODUCTION: In Hypofractionated SBRT boost, the Prostate receives high dose per fraction with steep dose gradients around target which has radiobiological superiority and completes treatment faster than Conventional boost arm. Hence it would be interesting to study the biochemical progression free survival and toxicity in both arms. AIM of the study: To study if Conventional dose Intensity Modulated Radiotherapy (IMRT) + Hypo fractionated Stereotactic Body Radiotherapy will lead to better biochemical response in Prostate Cancer patients compared to IMRT alone. OBJECTIVES: 1. To assess and compare the biochemical response of Carcinoma Prostate patients treated using IMRT alone (Arm A) and IMRT with SBRT boost (Arm B) using serial Prostate Specific Antigen. 2. To assess and compare weekly for Acute Gastro-intestinal, Genito-urinary and Skin toxicity in both the arms and score them according to RTOG Acute Radiation Morbidity Scoring Criteria. 3. To assess and compare Chronic Gastro-intestinal, Genito-urinary toxicity and Skin toxicity in both the arms and score them according to RTOG Chronic Radiation Morbidity Scoring Criteria. RESULT: In total, 45 patients were recruited for analysis who received Dose escalated IMRT and IMRT+SBRT as one of the mode of management for intermediate and High Risk Prostate Cancer. Twenty Four patients received Dose escalated Conventional dose IMRT in Arm A and Twenty one patients received IMRT+Hypo fractionated SBRT Boost in the Arm B. Due to the slow accrual of patients and short duration planned, sample size was not achieved in SBRT boost arm. As per American Society of Therapeutic Radiation-Phoenix recommendation biochemical failure after radiotherapy with or without short-term hormonal therapy, was defined as a rise of PSA by 2 ng/mL or more above the nadir PSA (defined as the lowest PSA achieved) (70) In our study, after a median follow up of fifteen months none of the patients in either arm had biochemical failure. The average PSA pre RT (after AST) was 3.09ng/ml in IMRT boost arm and 4.1ng/ml in SBRT boost arm. All patients completed at least one follow up. At the first follow up at 3 months the mean PSA in IMRT arm was 1.03ng/ml and SBRT boost arm was 0.76ng/ml. 21 patients from IMRT boost arm and 18 patients of SBRT boost could complete second follow at 6 months, the mean PSA was 0.38ng/mL and 0.57ng/mL respectively. In our study, Acute grade 2
Abstract Id: YUGP3875

**A Study Of Districtwise Distribution Of Carcinoma Gall Bladder Cases Reporting To Regional Cancer Centre Of Bihar And Its Correlation With High Arsenic Zones Of The State**

**Presenters:** Dr. Shradhha Raj
**Co-author:** Richa Madhawi, Dinesh K Sinha, Rajesh K Singh

**Introduction:** Gall Bladder malignancy is a rare though lethal malignancy with marked ethnic and geographical variations. Unfortunately, India, especially its north and north-eastern states is greatly affected by this deadly disease. Still, very less is known about its etiopathogenesis. Lately, few research studies have linked High Arsenic level in water and soil, which is prevalent in the Gangetic belt, to the Cancer of Gall Bladder. In the present study, we have analysed the frequency and distribution of Gall Bladder Malignancies in various districts of Bihar and its relation with the High Arsenic zones. Materials and methods: Between Jan 2016 to Dec 2016, a total of 6215 cancer patients were registered in the HBCR (Hospital Based Cancer Registry) of Regional Cancer Centre, Patna, out of which 581 patients were Gall Bladder Cancer. We related this to 15 districts of Bihar, that are declared ‘High Arsenic zones’, on the basis of groundwater Arsenic content, by the Ministry of Water Resources, River Development and Ganga Rejuvenation and Department of Agricultural Research and Education. This data was compared with cases from districts from ‘Non –High Arsenic Zones’ and subjected to statistical analysis using unpaired t test for reaching the conclusion. Results: There was a significant female preponderance (p=0.0001) along with an early age of onset among females (F=51.86yrs, M=55.86yrs, p=0.0001) in Gall Bladder cancer patients. The difference in frequency and distribution of Gall Bladder Malignancies among High Arsenic zones (9.07%±0.04%) and Non-High Arsenic zones (9.51%±0.03%), was not statistically significant (p = 0.728). Non-High Arsenic districts of Bihar like East Champaran, Sitamarhi, Madhubani, Muzaffarpur, Gaya, Nawada, Jehanabad and Nalanda were also affected by the disease. Conclusion: In the present study, High Arsenic content in ground water and soil does not seem to significantly affect the distribution of Carcinoma Gall Bladder across various districts of Bihar. However, this incidence of Acute Grade 2 toxicity was in seen in 5 patients, Three(12.5%) were from IMRT boost arm and Two (9.5%) from SBRT boost arm. Acute Grade 3 GI toxicity was seen 1(4.7%) patient of SBRT boost arm. In our study, Acute grade 1 skin toxicity was in seen in 37 patients, Nineteen (79.1%) were from IMRT boost arm and Eighteen (85.7%) from SBRT boost arm. Acute Grade 2 GI toxicity was seen 6 patients, Five (20.8%) from IMRT boost arm and One(4.7 %) from SBRT boost arm. None had Grade 3 toxicity. In our study, Late grade 2 GU toxicity was in seen in five (20.83%) patients from IMRT boost arm and two (9.5%) from SBRT boost arm. Late Grade 3 GU toxicity was seen patients. One(4.2%) from IMRT boost arm and None from SBRT boost arm. In our study, Late grade 2 and 3 GI were not seen. CONCLUSION: From our study, it is shown that, patients receiving Hypo-fractionated Stereotactic Radiotherapy boost are equivalent to Conventional Dose boost when biochemical progression free survival is compared. The difference in duration of the treatment was statistically significant. The incidence of Acute Grade 2 toxicity was higher in IMRT Conventional dose boost (Not statistically significant and the incidence of Acute Grade 3 toxicity was higher in Hypo-fractionated arm (Not statistically significant).

**Relation Between Menopausal Status And Age, Stage At Presentation And Subsequent Metastasis In A Cohort Of Breast Cancer Patients From A Tertiary Cancer Centre In Kerala.**

**Presenters:** Mrs. SILPA KS
**Co-author:** ARUN PHILIP, BEENA K, VIJAYAKUMAR D K

Breast cancer is the most common malignancy seen among women. Some of the biological parameters like menopausal status has been reported to alter the prognosis of breast cancer patients. Menopausal status plays a very important role in the prognostication and treatment determination of patients with breast cancer. Indian breast cancer is supposed to be more in younger patients and possibly also more aggressive. Aims: We decided to look into our 11 year data to for any association between menopausal status, age , stage at presentation and development of subsequent metastasis; Result: During the period 2004 â€“ 2014 , 3469 patients were diagnosed to have breast cancer. Median age was 53 years (range of 19 â€“ 92 years). Out of 3469 , 99% (n = 3451) were females and the rest 0.5% Even though the premenopausal group had slightly more cases with subsequent metastasis after treatment, this difference was not statistically significant. When we take age 50 as a cut-off in breast cancer patients, 90% of those below 50 were pre-menopausal while 87% of those with 50 and above were post-menopausal conclusion : 65% of our breast cancer patients were in the post-menopausal group and 35% in the premenopausal. The stage at presentation was not significantly different in the two groups. The incidence of subsequent metastasis though slightly more in the pre-menopausal group, the difference was not statistically significant. Where the menopausal status is not known, it may be safe to use age 50 as a cut-off for deciding the menopausal status. . Conflict of interest : No conflict of interest.

**Abstract Id: YUGP3880**

**Smoking Behavioural Of Current Cancer Patients ; A Prospective Study Form A Tertiary Care Centre.**

**Presenters:** Mrs. SILPA KS
**Co-author:** ARUN PHILIP, Sani K Sunny, PAVITHRAN K

**BACKGROUND:** Smoking and cancer are two sides of a coin. It causes an enormous burden on public health. Every one in five cancer deaths are caused by tobacco use. Smoking is one of the strongest predictor of survival rate and treatment outcomes in cancer patients. The probability of getting second primary cancer or a cancer recurrence is more common among patients, who continue the habit of smoking and tobacco use and it also affect their quality of life. **MATERIALS AND METHODS:** This prospective study was conducted among the out patients coming to Oncology Department of Amrita Institute of Medical Science Kochi. Our study population comprises , all cancer patients those who diagnosed during December 2016 to May 2017. Personal history details , demographics, clinical details were collected through in person contact, electronic medical records respectively. **RESULTS:** During the study period a total of 500 patients were included. The probability of getting second primary cancer or a cancer recurrence is more common among patients, who continue the habit of smoking and tobacco use and it also affect their quality of life. **MATERIALS AND METHODS:** This prospective study was conducted among the out patients coming to Oncology Department of Amrita Institute of Medical Science Kochi. Our study population comprises , all cancer patients those who diagnosed during December 2016 to May 2017. Personal history details , demographics, clinical details were collected through in person contact, electronic medical records respectively. **RESULTS:** During the study period a total of 500 patients were included. Median age was 62 (a range of 18 â€“ 86 ). Prior to the diagnosis of cancer incidence of active smokers , passive smokers, non smokers were ,48.8% (n = 244), 48.6% ( n = 243), 2.6 ( n=13) respectively. Of the 244 (48.8%) patients who had the habit of smoking and tobacco use before the diagnosis of cancer, only 20 (8%) patients continued their habit, were as the rest (n= 224,92%)discontinued the stopping. Out of 244 smokers 218(89%) were only 20 (8%) patients continued their habit, were as the rest (n= 224 only 20 (8%) patients continued their habit, were as the rest (n= 224 only 20 (8%) patients continued their habit, were as the rest (n= 224 only 20 (8%) patients continued their habit, were as the rest (n= 224 only 20 (8%) patients continued their habit, were as the rest (n= 224 only 20 (8%) patients continued their habit, were as the rest (n= 224 only 20 (8%) patients continued their habit, were as the rest (n= 224 only 20 (8%) patients continued their habit, were as the rest (n= 224 only 20 (8%) patients continued their habit, were as the rest (n= 224 only 20 (8%) patients continued their habit, were as the rest (n= 224 only 20 (8%) patients continued their habit, were as the rest (n= 224 only 20 (8%) patients continued their habit, were as the rest (n= 224 only 20 (8%) patients continued their habit, we....
Abstract Id: YUGP3885
Uncommon Neoplastic Pathology Of Fingers- A Clinical Curiosity
Presenter- Dr. Noor Mohammed
Co-author - Dr Ulhas, Dr Suraj, Dr Pramod Chinder

Introduction: Tumours involving the fingers are rare. Although swelling in the hand are not uncommon, most of them are benign conditions. Of all tumors in the hand, 1-2% are malignant. Primary malignant tumours are subdivided further into skin tumours, musculoskeletal tumours, and soft tissue tumours. While malignant hand tumours are relatively uncommon, the incidence of metastatic tumours is exceedingly rare. Material and methods: We retrospectively analysed our data for last 5 years and report 19 cases of tumours involving finger- primary or metastatic. Relevant imaging, metastatic work up and biopsy had been done in all cases. We had ten cases of bone tumours (which includes giant cell tumours, enchondroma, aneurysmal bone cyst, fibromyxoma, langerhan cell histiocytosis), three cases of subungual melanoma, one case of melanoma of index, one case of amelanotic melanoma, one case of squamous cell carcinoma, one case of tendon sheath tumour, one case of endotheslioma and one case of metastasis from follicular carcinoma of thyroid gland. All the primary cases were treated with surgery, and the metastatic lesion from thyroid malignancy was treated with radioiodine therapy. In one case of melanoma, molecular markers were done, which expressed BRAF mutation, and treated accordingly. Conclusion: These cases highlight the importance of keeping the possibility of malignancy in finger lesions. They could have been easily mistaken for more common non neoplastic lesions. High index of suspicion, complete clinical evaluation and relevant investigations including biopsy wherever necessary is crucial for correct diagnosis and optimal patient outcome. Key Words: Finger tumours, malignancy.

Abstract Id: YUGP3887
Mirna Profiling Study Of Head And Neck Cancer
Presenter- Dr. ARUN KUMAR YADAV
Co-author - NISHANT SINGH, MADAN LAL BRAHMA BHATT, SANJAY YADAV

Background: Head and neck squamous cell carcinomas (HNSCC) is one of the most prevalent type of cancer known in Indian population. Studies are needed to identify the early biomarkers for HNSCC. MicroRNAs (miRNAs) are non-coding RNA molecules, expression of which can be used as biomarker for early diagnosis of HNSCC. Materials and methods: For global miRNA profiling total RNA, which also contained small RNAs were isolated from ten HNSCC tissue samples and adjacent control. Purity and concentration of eluted RNA was assessed using the NanoDrop1000A® spectrophotometer (NanoDrop Technologies), Reverse Transcription reaction was carried out with megaplex RT primers of pool A and pool B and the expression of 667 unique miRNAs was studied by Taqman Low Density Arrays(TLDA) Pool A and pool B (TaqMan® Human MicroRNA Set Cards v2.0). Result: Volcano plot analysis of TLDA array (considering two folds as minimum change and p < 0.05) of cancerous tissue and adjacent control shows differential expression of 20 miRNAs including miR-205 and 221 & 141* as highly over-expressed miRNAs. Conclusions: Pannel of identified miRNAs can be further validated as circulatory biomarker in bio-fluids and can be use as potential biomarker for early detection of HNSCC.

Abstract Id: YUGP3889
Non Fdg Avid Isolated Synchronous And Metachronous Metastasis To Head And Neck Region From G1 Malignancies
Presenter- Dr. ULHAS PAGA
Co-author - Dr NOOR MOHAMMED, Dr SHIVANAND SWAMY, DR AMARENDRA S

Introduction: Cutaneous metastasis from gastro-intestinal malignancies are rare (0.4-5%). The common patterns of dissemination and recurrence of GI malignancies are known and well documented. However, isolated extracervical cutaneous head and neck region metastasis involvement is a relatively uncommon entity of which majority were Non FDG Avid. Few cases presented initially with the cutaneous lesions and on evaluation Primary carcinoma was detected, whereas in others developed metachronous lesions on follow up. Therefore, these metastases are not well studied in sufficiently large numbers to formulate evidence based recommendations regarding their optimal treatment. Objective: To present a case series of GI malignancies with NON FDG AVID Isolated synchronous or metachronous cutaneous metastases to head and neck region and analyse their clinic-pathological parameters and outcomes. Materials and Methods: We retrospectively analysed our data from August 2014- 2016. PET-CT was done as staging work-up in all patients. Cutaneous lesions were confirmed as metastasis by biopsy, histopathological examination by two pathologists and immunohistochemistry. Results: Two patients of carcinomas esophagus were found to have solitary face or scalp nodules as the only site of metastasis. Two patients had cheek metastasis, later developed upper alveolar metastasis from primary gastric carcinoma. One patient had suprasternal space metastasis from colon carcinoma. One patient of ca rectum had metachronous metastasis to oral cavity. One patient had nasopharyngeal metastasis from hepatocellular carcinoma. All patients were treated with palliative chemotherapy with average survival of 8-10 months, one patient survived for 2.5 years. S.No Primary GI Malignancy Head and Neck Metastatic Sites 1. Ca Esophagus Face and scalp 2. Ca Stomach Cheek ,upper alveolus 3. Ca colon Suprasternal space 4. Ca Rectum Oral cavity 5. Hepatocellular Ca Nasopharynx Key Words : GI malignancies, head and neck metastasis

Abstract Id: YUGP3891
Peripheral Primitive Neuroectoderm Tumour (Pnet) Of The Paravaginal Tissue
Presenter- Mr. Rajeev Rajeev
Co-author - Ayappan, Vikash Mahajan,
Peripheral primitive neuroectodermal tumour(PNET) of the female genital tract is extremely rare. We report a case of 38yrs old woman presented with retention of urine , after evaluation she underwent total abdominal hysterectomy with bilateral salpingo- oophorectomy with wide local excision of anterior vaginal wall, histopathology was reported as Ewings sarcoma/primitive neuroectodermal tumour(PNET) Patient received adjuvant chemotherapy.

Abstract Id: YUGP3894
Rosai Dorfman Disease Of Central Nervous System Without Lymphadenopathy Mimicking Tuberculosis : A Case Report And Review Of Literature
Presenter- Dr. Shashank Bansal
Co-author -
Abstract Introduction: Rosaiâ€“Dorman disease (RDD), also known as sinus histiocytosis is a distinct non-malignant, self-limiting, idiopathic, clinico-pathological disorder. We are reporting a case of CNS (Central Nervous System) RDD without any significant lymphadenopathy - a rare presentation. Materials & Methods: A 21-year old female presented with complain of focal seizures since 2
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Years. After evaluation at local hospital she received Anti Tubercular therapy for 1 year. Patient did not respond and had progressive hemiparesis with gait disturbance over past 3 months. MRI scan revealed a large extraaxial well defined rounded heterogeneously enhancing hyperintense lesion in right parietal region. Clinico-radiological examination didn’t reveal any significant lymphadenopathy. Right parietal craniotomy and excision of the tumor was done. Histopathology confirmed the diagnosis of RDD. Post-operative MRI revealed a residual lesion with additional lesion in Cerebellar region. The patient was started with Radiotherapy to brain and had significant improvement after radiotherapy. Literature review was done in view of rare presentation. Results and Discussion: On literature review CNS lesions of RDD are mostly dural based presenting clinico-radiologically like Meningiomas. Lesions mimicking lymphomas have also been reported. Fewer than 210 cases of RDD restricted to CNS without lymphadenopathy have been reported. The first line treatment in CNS RDD is currently surgical. Although debulking might be curative, approximately 14% of cases recur or relapse after surgery. Follow-up MRI is, therefore, recommended in order to evaluate the long-term outcome. In general, adjuvant therapy includes steroids, radiation and chemotherapy. Conclusions: RDD involving CNS without cervical lymphadenopathy is relatively rare. The clinical and radiological features mimic more common infectious or inflammatory conditions and should be considered in the differential diagnosis of any suspicious intracranial mass. Delay in the treatment can lead to inoperability or residual disease which may progress warranting adjuvant treatment, efficacy of which is yet not well established.

Abstract Id: YUGP3896
Streptococcus Gallolyticus (Bovis) Endocarditis – A Silent Indicator For occult Cancer
Presenter- Dr. Sriden MB
Co-author- SENTHIL KUMAR R, PIYUSH CHANDRA, DEEPTI JAIN

BACKGROUND: A well-recognized relationship has been established between atypical bacterial infections in infective endocarditis and neoplastic lesions of the gastrointestinal system. Although several bacteria have been reported in association with colonic cancer, the strongest and best documented relationship focuses on Streptococcus bovis, which is named as streptococcus gallolyticus. Although there is agreement in the literature that this relationship has important clinical implications, their relevance has not yet been widely received.
CASE: A 61 yr old female with a known h/o Mitral valve prolapse with severe mitral regurgitation with a recent h/o infective endocarditis. On evaluation the blood culture showed streptococcus gallolyticus ( bovis) and a low grade FDG uptake in PET scan noted in the rectosigmoid area. Colonoscopy revealed a rectal polyoidal growth which showed tubulo villous adenoma with adenocarcinomatous changes. After complete workup She underwent a low anterior resection. She had an uneventful post op period and no adjuvant planned due to favourable histology. She is on follow up for the past 6 months. She is now being planned for Mitral valve replacement.

CONCLUSION: This case report emphasises the importance of a complete gastrointestinal screening even in asymptomatic patients with atypical bacterial infections with infective endocarditis and if negative warrants an annual endoscopic follow up.

Abstract Id: YUGP3900
Pelvi-Glossectomy With Or Without Mandibulectomy In Locally Advanced Tongue Cancer: Institutional Experience
Presenter- Dr. NASEEM AKHTAR
Co-author- Arun Chaturvedi, Sanjeev Misra, Vijay Kumar

Background: Locally advanced tongue cancer is one of common problem in India. These cancers usually fail locally and come with unresectable local recurrence. In view to take a sufficiently wider margin especially towards floor and mandible we started doing pelvi-glossectomies in these tumours. This approach removes disease along with muscular, vascular, glandular and lymphatic pathways. This may translate in decreased chances of local recurrence Material and methods: From May 2015 to August 2016, twelve patients of locally advanced tongue cancer underwent pelvi-glossectomy with or without mandibulectomy. Approaches used were mandibular swing technique, pull through technique or along with segmental mandibulectomy depending upon requirement. Recurrence and Survival will be recorded. Results: Resection with this technique was done in 12 cases. Median age of patients was 39 year. Out of 12 three were female. All patients were having clinical T4 stage of primary. Approaches used were pull through technique in 5 patients, mandibular swing technique in 4 patients, and mandibulectomy in 3 patients. Pelvi-glossectomy alone was done in 7 patients, pelvigossectomy with sectional mandibulectomy in 4 patients , pelvi-glossectomy with marginal mandibulectomy in one patient. Reconstruction was done using pectoral major flaps (8), musculocutaneous platysmal flap (3), and nasolabial flap (1). After surgery one patient had partial flap loss, one had minor orocutaneous fistula and one patient had osteoradionecrosis. Till date eleven patients are patients are disease free. One patient died due to distant failure 2 month back. Conclusions: Pelvi-glossectomies may result in better local control especially for locally advanced tongue cancer. Larger studies with longer follow up are needed.

Abstract Id: YUGP3901
Versatility Of Latissimus Dorsi Flaps In Breast Reconstruction: An Institutional Experience.
Presenter- Dr. ULHAS PAGA
Co-author - DR SRINIVAS GOPINATH, DR NOOR MOHAMMED, DR SHIVANAND SWAMY

Introduction Breast cancer incidence is increasing rapidly in urban areas in India. Due to lack of any screening program, clinically palpable and locally advanced operable lesions are seen in large numbers. This necessitates adequate volume replacement, which can be achieved by the latissimus dorsi flap. In this article we present our experience in using this flap for breast reconstruction in the last 5 years. Materials and Methods We conducted a retrospective study by analyzing our medical records, all patients who underwent a LD flap for breast reconstruction from the period of January 2011- December 2016. Means and standard deviations for continuous variables, and frequencies of categorical variables were calculated. Since the objective of the study was to explore factors that might influence presence of donor site complications, a chi-square test was performed, comparing presence and absence of complications with the presence of diabetes, T-stage of the tumor after histopathological examination and increasing age of the patient. Results The average age was 48.41 years. 181 patients underwent quadrantectomy with axillary dissection, 6 patients underwent a total mastectomy. Seroma was the most common complication (65.17%), followed by hematoma (9.9%). Wound infection of the donor site was seen in 11 % of the patients. Total flap loss was in 3 patients (1.5%), 4 patients (1.9%) had a partial flap loss. No statistically significant association was found between development of donor site complications and presence of diabetes (p=0.3), T-stage of the tumor (p=0.184) and increasing age of the patient (p=0.266). Conclusion With this series of consecutively performed LD flaps, we would like to reiterate that breast reconstruction can be offered to patients in a low resource setting and satisfactory outcomes can be achieved, the mini LD flap serves as an ideal flap in such settings due to its short learning curve, cost effectiveness, low failure rate and satisfactory cosmetic outcomes.

Keywords Latissimus dorsi flap (LD flap), breast reconstruction, India, complications
Staging Bone Scintigraphy In Non-Metastatic Breast Cancers - A Necessity Or Overburden In Indian Scenario?
Presenter- ‘Dr. Hemendra Mangal
Co-author - Prasanth Penumadu, Pavneet Singh kohli, Biswajit Dubashi

Background: Despite recommended guidelines stating use of Bone scan (BS) in patients with early breast cancer as part of baseline staging depending on institute policies or physician preference. However, in the absence of symptomatic disease, the usefulness of this routine diagnostic work-up can prolong the waiting period to initiation of definite therapy and overburden the already crunch health resources in a country like India. The aim of this study was to document the prevalence of bone scan use in a tertiary health center in South India and to determine factors which will increase the yield of metastasis detection on bone scan.

Methods: We reviewed data retrospectively from a prospectively maintained registry of 980 consecutive patients with newly diagnosed invasive breast cancer between January 2015 and June 2017. We analyzed the prevalence of bone scan use in the cohort. The data was also analyzed to determine bone metastasis status at the time of initial treatment. Correlation between metastasis to bone and factors known before and after surgery was analyzed using logistic regression. Results: 27% of the cohort was diagnosed as early breast cancer while the rest was LABC or metastatic. At diagnosis 74.3% patients underwent a bone scan, which showed metastases in 1.8%. In patients diagnosed as Stage III incidence of overt bone metastasis was 7.4% of whom 65.9% were symptomatic with pain. There was no significant association between the presence of bone metastases and grade of tumors (P=0.219), hormone receptor status (P=0.125). T4 and N2 breast cancers had a significantly greater correlation with presence of bone metastasis. (p=.019 and p=0.027).

Conclusions: These findings indicate that a bone scan is unnecessary in the majority of patients with newly diagnosed breast cancer. Stage III tumors form a heterogeneous group and while the yield of bone metastasis is significant, further studies should be aimed at evaluating sub groups in Stage III where BS will not be beneficial and hence further avoid usage of Bone scan in developing countries.

Abstract Id: YUGP3903
Incidence, Clinical Outcomes, And Prognostic Significance Of FLT3 Mutations In De-Novo Non-Apl Acute Myeloid Leukemia
A Study From Western India.
Presenter- ‘Dr. Pushpak Chirmade
Co-author - Dr. Asha Anand madam, Dr. Sonia Parikh madam, Dr. Harsha Panchal madam

ABSTRACT Background: FMS-like tyrosine kinase 3 (FLT3) encodes a tyrosine kinase receptor in normal myeloid and lymphoid progenitors which play an important role in normal hematopoiesis. Internal tandem duplication (ITD) in the juxtamembrane domain and a point mutation, most commonly at asparagine 835 (D835), of the tyrosine kinase domain (TKD) have been identified as the two distinct forms of mutations leading to leukemogenesis. The presence of the FLT3-ITD mutation is associated with poor prognosis in AML patients. Methods: In this study, 59 patients, both adult and pediatric, de novo Acute Myeloid Leukemia (excluding AML-M3) were included. We evaluated them for FLT3-ITD and FLT3-D835 mutation with respect to incidence, distribution, correlation with clinical & lab features, cytogenetic findings and treatment outcomes and tried to identify certain corroborative markers correlating with outcomes. Median (range) was used for the quantitative variable. For continuous variables, Mann-Whitney U test was used. Qualitative data were summarized using frequencies and percentages. Chi square test/ Fischer’s exact test was used to compare discrete variable among patient subgroups. Survival analysis was done using Kaplan Meier Survival and assessed using the log rank test. A p

Abstract Id: YUGP3905
A Study On Treatment Outcome With Brachytherapy & Intensity Modulated Radiotherapy Boost In Stage II & III Carcinoma Cervix Patients
Presenter- ‘Dr. Gopal Pemmaraju
Co-author - Dr.Vandana Jain, Dr.Mahendra More, Dr.Chaitali Waghamre

A STUDY ON TREATMENT OUTCOME WITH BRACHYTHERAPY & INTENSITY MODULATED RADIOTHERAPY BOOST IN STAGE II & III CARCINOMA CERVIX PATIENTS Dr.Gopal Pemmaraju, Post Graduate Student Under the guidance of Dr. Vandana Jain, M.D,Professor &HOD Mr.Mahendra More,RSO,Dr.Chaitali Waghamre M.D,Dr.Shreyaj Dwivedi,Dr.Mayuresh Virkar Department of Radiotherapy & Oncology, Rural Medical College, Pravara Institute of Medical Sciences, Loni 413736, Dist. Ahmednagar (M.S.) E-mail : oncology@pmtips.org ABSTRACT Aim and Objectives: To study the treatment outcome with brachytherapy and intensity modulated radiotherapy boost in carcinoma cervix patients in stage II &III.To assess the local control and disease free survival in the above mentioned modalities of treatment, assess acute & late side effects. Materials and Methods: 100 patients were enrolled in this study. This included women who were histologically proven carcinoma cervix satisfying the inclusion criteria. Patients selected randomly until a sample size of 100 was attained. Patients was evaluated by detailed history, followed by general and systemic examination. They were then assessed by hematological and relevant radiological investigations. All selected patients were given External Beam Radiotherapy (EBRT) by 3-dimensional conformal radiotherapy (3D-CRT) up to 50 Gy in 25 fractions with concurrent weekly inj.cisplatin. Boost dose is planned with Intracavitary Brachytherapy (ICRT) 21 Gy in three weekly fractions (7Gy each fraction). Patients who were not fit for ICRT were planned for boost dose by Intensity Modulated Radiotherapy (IMRT) 2.5 gy/# for 10#. After this the patients were followed in both the two groups and then were assessed for response to treatment. On follow up; first after 1 month of treatment completion and then every 3 months (for a period of 6-months-1 year), patients undergone Per vaginal examapal along with radiological investigations. They were also be subjected to Pap smear and biopsy if needed(indicated (clinically). Results: 100 patients were studied of which 83 patients were given External RT plus chemotherapy followed by ICRT & 17 pts who were not fit for ICRT were considered for IMRT boost. At the end of the study, all the data collected will be compiled and subjected to statistical analysis to derive to a conclusion. Follow up analysis for loco regional control & radiation side effects will be presented at the time of presentation. Conclusion : EBRT with HDR brachytherapy is the standard treatment in carcinoma cervix. Patients who are not fit for ICRT brachytherapy can be very well planned for IMRT boost .Conclusions will be presented at the time of presentation as data analysis for final follow up not yet complete for some patients. REFERENCES- ? Marianne S. Assenholt,Jorgen B.Petersen,Soren K.Nielsen,Jacob C Lindegard & Karen Tanderup. ; A dose planning study on applicator guided stereotactic IMRT boost in comparison with 3D MRI based brachytherapy in locally advanced cervical cancer. Acta Oncologica,2008;47:1337-1343 . ? Mohammed Mahmoud,Hissen a.ELL Hossieng,Nashaat A.Diab,M. Shosha ; Dorsimetry study study comparison intensity modulated & conformal pelvic RT boost plans in locally advanced carcinoma cervix . Journal of solid tumours.2013.vol 3.no.4 . ? Patricia J.Eiffel, Intensity Modulated Radiation Therapy for carcinomas of uterine cervix & endometrium . Image guided IMRT ,Part-3,chapter-10 ? Christopher Loiselle,MD,Wui Jin Koh,MD.Emerging use of IMRT for treatment of cervical cancer: JNCC-Journal of the National Cancer Network ? Akila Viswanathan; Brachytherapy to treat cervical cancer declines in US,Treatment Associated with higher survival. The International Journal of Radiation Oncology

Abstract Id: YUGP3907
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**Abstract Id: YUGP3909**

**Histopathological Response Assessment In Advanced Epithelial Ovarian Cancer Patients Treated With Neoadjuvant Chemotherapy Followed By Interval Cytoreduction**

**Presenter:** Dr. Senthil Kumar P

**Co-author:** Subbiah Shanmugam, Gopu Govindasamy, Jagadeesan G Mani

**Objective:** The aim of this study was to evaluate the pathological response in patients treated with Neoadjuvant chemotherapy followed by interval cytoreduction for advanced stage epithelial ovarian cancer and its prognostic importance in relation with survival. Materials and methods: A retrospective study of prospectively maintained data was conducted in patients fulfilling following inclusion criterias : 1)patients with advanced stage epithelial ovarian cancer 2) atleast 3 cycles of platin and paclitaxel based neoadjuvant chemotherapy 3)patients who underwent interval cytoreduction after neoadjuvant chemotherapy and who were free of residual disease at the end of interval cytoreduction and 4) Histopathological analysis of surgical specimen performed in Govt. Royapettah oncology centre, Chennai. Based on histopathological analysis , patients were grouped into 1)with no residual disease and 2) residual disease in atleast one site(peritoneum or lymph nodes). Disease free survival and progression free survival was compared. Results: Totally 76 patients fulfilled (66 patients stage III and 10 patients stage IV) inclusion criteria studied between 2011 and 2015.the median age group was 62 years . the median duration of follow up was 29 months. Out of 76 patients, 11 patients showed pathological complete response and 65 patients showed residual disease. Disease free survival among two groups were compared in patients with complete response and in patients with residual disease. Conclusion: These results show that degree of pathological response has significant correlation with survival in patients when complete debulking surgery is achieved at interval cytoreduction and predicts time to death in advanced ovarian cancers. there is no need to change the chemotherapy regimen depends on residual disease.

**Key words:** Ovarian cancer, neoadjuvant chemotherapy, interval cytoreduction , pathological response

**Abstract Id: YUGP3920**

**End-To-Side Pancreatico-Jejunostomy â€“ Early Postoperative Outcomes In 65 Consecutive Cases Of Whipples Procedure**

**Presenter:** Dr. Vishnu Kurpad

**Co-author:** M VijayaKumar, C Ramachandra, C Srinivas

**Aim:** To evaluate the impact of Heidelberg technique of pancreatico jejunostomy in relation to early postoperative outcomes in 65 consecutive cases of Whipple procedure Materials and methods: 65 patients who underwent whipples procedure for the following indications Periampullary carcinoma -38 , carcinoma Head of pancreas-15 patients ,malignant Terminal CBD stricture -9 patients, Duodenal carcinoma-3 patients were evaluated for early postoperative complications. Classical Whippleâ€™s procedure was done in- 40 patients and pylorus preserving in 25 patients. The pancreatico â€“jejunal anastomosis was done by by surgeons trained at Heidelberg university, Germany . An End to side duct to mucosa anastomosis is being followed and the Sutures used were -4-0/5-0 PDS for all layers. The pancreatic remnant is handled gently and anastomosis is done with absence of tension and no distal obstruction after ensuring a good blood supply, the average time taken for Whippleâ€™s 250 minutes,average time taken for P-J 45 minutes. Conclusion: Pancreatic leak is a life threatening complication. A meticulous duct â€“mucosa anastomosis is more reliable in preventing post operative pancreatic fistula.In high volume centers pancreatic fistula rate have ranged from0- 17%. In our study pancreatic fistula rate is 3% and there is no mortality.Except for wound infection there is no significant difference in total complication rate in patients with pre-op biliary stents. The procedure has to be performed by experienced hands and the surgeon is the most important prognostic factor.
Abstract Id: YUGP3924

Quality-Of-Life And Self-Esteem Outcomes After Oncoplastic Breast-Conserving Surgery

Presenter- Dr. Ashutosh Chauhan
Co-author - Dr Naveen Sanchety, Anuradha Dhasmana,

BACKGROUND: This prospective trial was designed to assess the impact of oncoplastic surgery on quality of life and self-esteem of breast cancer patients undergoing breast-conserving treatment.

METHODS: Forty-five patients with primary breast cancer to be treated with oncoplastic breast surgery (OBS) were assessed with regard to quality-of-life and self-esteem outcomes preoperatively and 6 and 12 months postoperatively. Another 42 breast cancer patients, treated by conventional breast conservative surgery (BCS) at least 1 year previously, were assessed for the control group. Validated questionnaires (Short Form-36, and the Rosenberg-EPM Self-Esteem Scale) were used. Data were analyzed by using the Mann-Whitney and Friedman tests. RESULTS: Participation rates at the follow-up assessments were 95.5 percent at the 6-month follow-up and 88.9 percent at the 12-month follow-up. Conventional BCS and OBS were matched for age, body mass index, and demographic and oncologic aspects. At postoperative month 12, the OBS had significantly better health status than the control group with regard to physical functioning (p < 0.000), health perception (p < 0.002), vitality (p < 0.007), social functioning (p < 0.02), role emotional (p < 0.02), mental health (p < 0.000), and self-esteem (p < 0.02). Compared with preoperatively, OBS were significantly higher at 12 months postoperatively for seven of the eight dimensions of the Short Form-36: physical functioning (p < 0.01), role physical (p < 0.02), health perception (p < 0.02), vitality (p < 0.01), social functioning (p < 0.02), role emotional (p < 0.05), and mental health (p < 0.02). Self-esteem was also significantly better at 12 months (p < 0.02). CONCLUSION: Oncoplastic surgery had a positive impact on quality of life and self-esteem of patients undergoing breast-conserving treatment.

Abstract Id: YUGP3926

Fear Of Recurrence Among Cancer Survivors

Presenter- Ms. Shamili Kannan
Co-author - Anna Jacob, Surendran Veeraiah,

INTRODUCTION: An increase in the rate of cancer survivorship for most cancers has been recorded owing to the remarkable progress in the field of cancer in the 21st century. A variety of physical and psychosocial factors are found to directly or indirectly affect the quality of life (QOL) of cancer survivors. Recent literature demonstrates fear of cancer recurrence (FCR) as a major concern among survivors. FCR is recognized as a long term problem among survivors as it continues to be a reminder of their traumatic experiences associated with diagnosis and treatment. This article aims to systematically review existing literature on FCR, its prevalence and the variable factors associated with FCR like QOL, psychological distress, lifestyle & behavior changes. METHODS: Literature searches were conducted using databases including Wiley Online Library, PsychINFO and MEDLINE using specified search terms including â€œFear of recurrenceâ€œTM, â€œcooping with the fear of recurrenceâ€œTM and â€œquality of life of cancer survivorsâ€œTM. To obtain an in-depth understanding on FCR relevant theoretical frameworks including articles and research papers from the year 2007-2017 were critically reviewed and analyzed. RESEARCH FINDINGS: Critical review of literature provided evidence for the vast prevalence of FCR. According to The American Cancer Society at least 70% of survivors experience FCR. Research findings conclude FCR to be inversely proportional to the quality of life of survivors. Research evidence of the impact of FCR on the different aspects of an individualâ€™s life helped conceptualize the term and aided in the understanding of the various psychological interventions that can be provided for individuals suffering from FCR. CONCLUSION: The increased prevalence rate of FCR and its negative impacts on the quality of life of survivors suggests the need for improved education and quality interventions among cancer survivors and their care givers.

Abstract Id: YUGP3928

A Retrospective Study Comparing Outcomes Of Laparoscopic Versus Open Pelvic Exenteration Â“ A Single Institutional Experience Of 2 Years.

Presenter- Dr. Bharathiraja Kalyanam
Co-author - Dr. K Bharathiraja, Prof G Gopu, Dr P Senthil Kumar

AIM: Pelvic exenteration is associated with considerable morbidity but low mortality in an experienced centre. The aim of the study is to retrospectively compare the outcomes of laparoscopic and open pelvic exenterations for a period of 2 years in our centre. METHODS AND MATERIALS: Between June 2015 and June 2017, 31 cases underwent pelvic exenteration in any of the forms viz anterior, posterior and total pelvic exenteration for pelvic malignancies. Of the 31 cases, 15 patients underwent surgery laparoscopically and 16 patients by conventional open method. We retrospectively collected data about surgical technique and outcomes. RESULTS: Among the 31 cases, 7 were males and 24 females. The common primary was carcinoma cervix (n=23) followed by rectum (n=3), Urinary bladder (n=2) and carcinoma vagina, urethra and ovary one each (n=1). Anterior pelvic exenteration was done in 12 cases, of which 3 cases by laparoscopic method and 9 cases by open method. Total pelvic exenteration was done in 17 cases of which 11 cases by open method and 6 cases by laparoscopic method. Other 2 cases underwent open posterior pelvic exenteration. Laparoscopic exenteration had longer mean operative time (320.4 vs 244.2 min, p?=0.004) but less mean blood loss (547.3 vs 1033.0 ml, p?...
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**Survival with Disease Control Profile**

Neoadjuvant Chemo-Radiotherapy In Rectal Cancer: Short Term

**Abstract Id:** YUGP3932

**Presenter:** Dr. Namita Sharma
**Co-author:** Dr. Puja Sahai, Prof. Hanuman Prasad Yadav, Prof. Shiv Kumar Sarin

**OBJECTIVES:** To study the profile of patients registered in the oncology OPD at Institute of Liver and Biliary Sciences (ILBS), Delhi. METHODS AND MATERIALS: One hundred and seventy-eight patients registered at oncology OPD, ILBS, Delhi from March 2017 to July 2017, were analysed according to their diagnostic and epidemiologic profile. RESULTS: Of the 178 patients registered in oncology OPD, ILBS, Delhi from March 2017 to July 2017; 48 (26.9%) were diagnosed with carcinoma gall bladder, 22 (12.3%) with hepatocellular carcinoma (HCC), 16 (8.9%) with cholangiocarcinoma, 16 (8.9%) with colon-rectal carcinoma, 9 (5.0%) with pancreatic carcinoma, 8 (4.4%) with peri-ampullary carcinoma, 5 (2.8%) with gastric carcinoma, 3 (1.6%) with esophageal carcinoma and 17 (9.5%) with liver metastases of unknown origin. Of the 48 patients with carcinoma gall bladder, 30 (62.5%) patients were female, 24 (52%) patients had metastatic disease (data not available for 2 patients) and 19 (45.2%) patients had pre-existing cholelithiasis (data not available for 6 patients). CONCLUSIONS: At our oncology center, the most common malignancy encountered is carcinoma gall bladder, followed by HCC, cholangiocarcinoma, colon-rectal carcinoma, pancreatic carcinoma and peri-ampullary carcinoma. This study highlights the high incidence of carcinoma gall bladder in North India along with its higher incidence in females and patients with cholelithiasis. More than half the patients presented with metastatic disease.

**Abstract Id:** YUGP3938

**Less Than 12 Lymph Nodes Retrieval In Surgical Specimen After Neoadjuvant Chemo-Radiotherapy In Rectal Cancer: Short Term Results With Disease Control Profile**

**Presenter:** Dr. Vishnu Kurpad
**Co-author:** Kapil Dev, M Vijayakumar, K V V Kumar

Introduction The number of lymph node retrieved in the surgical specimen is important for tumour staging and has paramount impact on prognosis in colorectal cancer and imitates the adequacy of lymph node surgical clearance. The paucity of lymph node yields in patients undergoing resection after preoperative chemo radiotherapy (CRT) in rectal cancer is not sign of suboptimal surgery with poor survival, yet to be conclude. Methods We retrospectively reviewed the medical data of patients underwent excision for rectal cancer, who received neoadjuvant radiotherapy with or without chemotherapy in locally advanced rectal cancer. From 2010 to 2014, 346 patients underwent rectal cancer surgery, of which ninety-one received neoadjuvant therapy. Standard surgical and pathological protocols were followed. Patients were categorized into two groups based on the number of total harvested lymph nodes with Group 1, having 12 or more nodes harvested, and Group 2 including patients who had

**Abstract Id:** YUGP3942

**Metastatic Osteosarcoma**

**Presenter:** Dr. Sheela ML
**Co-author:** Dr. Sateesh S Kunigal, Dr. Yogesh ShivaKumar, Dr. Shekar Patil

Basis of the Study: BRCAm and other GRm testing in early diagnosed and/or metastatic breast cancer (BC) helps in the identification of both unambiguously defined deleterious mutations and sequence variants of unknown clinical significance (VUS). The early detection and identification of these mutations in the proband and the family members help in risk stratification and instituting effective monitoring, surveillance and disease management strategies. This study aimed to systematically review and perform next generation sequencing (NGS) to test for mutations in BRCA1/2 and in additional risk predisposition genes in breast cancer (BC). Methods: 200 unrelated BC patients (early diagnosed and/or advanced/metastatic) aged 26-75 yrs (median age 50.5yro) diagnosed and referred for genetic testing at HCG from April 2013-17 were consented to be profiled by NGS on MiSeq platform using TruSight Cancer panel (consisting of 94 genes including 13 genes highly associated with risk of inherited breast and/or ovarian cancer) in an IRB-approved, CLIA-compliant prospective study. Data was processed using STRAND software and interpreted using "Strand Omics"platform. The paired tumor samples

**Abstract Id:** YUGP3944

**Prognostic Significance Of Vascular Tumor Emboli In Non-Metastatic Osteosarcoma**

**Presenter:** Dr. Anand Raja
**Co-author:** Mayilvahanan Natarajan, M.Sivakumar,

Background: Histological variant of osteosarcoma, quality of resection, histologic response and presence of metastasis are known prognostic factors. Question/Purpose: Our primary purpose was to see if presence of vascular invasion as reported in pathology reports influenced survival. Hypothesis Presence of vascular invasion could predispose for development of distant metastasis. Methods: A single institution retrospective chart review of 150 consecutive patients . Inclusion criteria: Patients having non metastatic extremity osteosarcoma treated with curative intent. Exclusion criteria: Metastatic osteosarcoma. Results: 150 patients were included in the study. All patients received neoadjuvant chemotherapy. 80(53.33%) patients underwent surgery after 3 cycles of chemotherapy, 62(41.33%) underwent surgery after 4 cycles, 8 patients underwent surgery after 6 cycles of chemotherapy. The sites were distal femur(68%) followed by proximal tibia(29.33%) and the proximal humerus(26.6%). 139 patients (92.66%) patients underwent limb salvage surgery and the remaining underwent amputation (7.34%). On histopathology five patients were identified to have vascular invasion/vascular tumor emboli. All of them had histological response less than 90%. The overall and disease free survival of patients with response less than 90% was 42.5% and 58% compared to 31.5% and 45.4% and for patients with vascular invasion or vascular tumor emboli. (p

**Abstract Id:** YUGP3945

**Association In Breast Cancer**

**Presenter:** Dr. Sheela ML
**Co-author:** Dr. Sateesh S Kunigal, Dr. Yogesh ShivaKumar, Dr. Shekar Patil

Background: Breast cancer (BC) and ovarian cancer (OC) are two of the most common malignancies encountered in women. Both these cancers have strong familial associations and genetic predispositions. For BC, two main susceptibility genes, BRCA1 and BRCA2, have been definitively identified. Studies have shown that carriers of BRCA1 mutations have 50-85% lifetime risk of BC. A large number of high-risk women with breast cancer (BRCA1/2) have undergone genetic testing and several reports have focused on the predictive accuracy of such testing. However, the predictive accuracy of targeted genetic testing for ovarian cancer susceptibility genes is less explored. Despite the increased awareness and availability of genetic testing for BC, there are still many barriers to accurate testing and adequate counseling. These barriers include clinical unawareness, lack of patient knowledge, and availability/accessibility of genetic testing. In addition, the variability in the timing of genetic testing in relation to diagnosis and the complexity of managing patients with a positive result can be overwhelming for both patients and providers. The goal of this study is to review the available literature regarding the predictive accuracy of genetic testing for ovarian cancer susceptibility genes and to identify areas for improvement in clinical practice and policy. Methods: We conducted a systematic literature review of published studies that evaluated the predictive accuracy of genetic testing for ovarian cancer susceptibility genes. We included studies that used a rigorous methodology and reported accurate and complete data on the number of women tested, the number of positive results, and the number of cases that progressed to cancer. Results: Our review identified 26 studies that met our inclusion criteria. These studies were conducted in different countries and across different populations. The predictive accuracy of genetic testing for ovarian cancer susceptibility genes was variable and ranged from 46% to 93%. In general, the predictive accuracy was higher for BRCA1 than for BRCA2. The predictive accuracy was also higher for women with a family history of ovarian cancer. Although these studies provided valuable insights into the predictive accuracy of genetic testing for ovarian cancer susceptibility genes, there are several limitations that need to be addressed. First, the predictive accuracy of genetic testing for ovarian cancer susceptibility genes is not uniform across different populations and different genetic backgrounds. Second, the predictive accuracy of genetic testing for ovarian cancer susceptibility genes is not uniform across different clinical settings and different levels of genetic expertise. Finally, the predictive accuracy of genetic testing for ovarian cancer susceptibility genes is not uniform across different patient populations and different patient characteristics. These limitations highlight the need for further research to improve the predictive accuracy of genetic testing for ovarian cancer susceptibility genes and to optimize the clinical and policy implications of these findings. Conclusions: Our review found that the predictive accuracy of genetic testing for ovarian cancer susceptibility genes is variable and needs to be improved. The predictive accuracy of genetic testing for ovarian cancer susceptibility genes is not uniform across different populations and different genetic backgrounds. The predictive accuracy of genetic testing for ovarian cancer susceptibility genes is not uniform across different clinical settings and different levels of genetic expertise. The predictive accuracy of genetic testing for ovarian cancer susceptibility genes is not uniform across different patient populations and different patient characteristics. These limitations highlight the need for further research to improve the predictive accuracy of genetic testing for ovarian cancer susceptibility genes and to optimize the clinical and policy implications of these findings.
were analysed for pathological stage, histological type and hormonal status. Results: GRm was detected in 50% of the cases screened. Among all mutations detected, BRCA1/2 was found in 54% (31% in BRCA1, 23% in BRCA2) of cases with co mutation of both the genes in 5 cases. Mutation frequencies were higher among high grade H&E with HER2-ve tumors including TNBC (53%, p<0.001). ), BRCAm are higher in the age group of 25-50 vs. 50-75 yrs. Interestingly, 4 BRCA1 mutations including 3 nonsense and 1 frameshift mutation were found in two unrelated individuals suggesting them to be founder/recurrent mutations in Indian population. The other GRm frequency was also found to be significantly high (46%) and include BRIP1, CHEK2, ERCC2, CDH1, SDHB, APC, MSH6, TP53, PALB2 and RAD51C. Stratification based on age of diagnosis (dx) showed a detection rate of BRCAm and GRm to be significantly higher in the age group of 25-50 yrs (74%) as compared to the 50-75 yrs (26%). Also a strong association of BRCAm and GRm status with the family history (Hx) of BC in 1st or 2nd degree relatives was indicated. Conclusions: In summary, our results in a small cohort showed a high frequency of BRCA1/2 mutations. BRCAm frequency was found to be higher in high grade HER2-/-TNBC warranting expanded testing of this subtype to impact disease management with PARP inhibitors and/or platinum therapy. Identification of non BRCA mutations associated with hereditary BC clearly highlights the utility of germline testing and classifying the variants in larger cohort of BC cases. A strong association of BRCAm and non BRCAm was found with early onset of disease and family history.

Abstract Id: YUGP3946

Health-Related Quality Of Life In Patients With Metastatic Or Relapsed Squamous Cell Carcinoma Of The Head And Neck

Presenter- Dr. Ashutosh Chauhan
Co-author - Dr Naveen Sanetey, Dr Viren Suhag,

OBJECTIVE: The objective of this study was to evaluate changes in health related quality of life (HRQoL) in patients with metastatic head and neck (H&N) cancer randomized to receive metronomic (methotrexate and celecoxib) or cisplatin chemotherapy. METHODS: Patients older than 18 years, with a Karnofsky Performance score of ≥70, and diagnosed with metastatic, locally advanced inoperable or recurrent head and neck (H&N) cancer not amenable to surgery or radiation were randomized (1:1) to receive metronomic or cisplatin chemotherapy.. In addition to demographic and baseline clinical characteristics, patients were asked to rate their HRQoL using the EORTC QLQ-C30 and the EORTC QLQ-H&N35 questionnaires (Indian versions) at baseline and at the end of each chemotherapeutic cycle (every 3 weeks) till the end of study or early termination. RESULTS: Of the 110 patients screened, 87 agreed to participate in the study. Mean age of the study population was 47.5 years (S.D. ±10.04) for the metronomic group and 47.2 years (S.D. ±9.89) for the cisplatin group. Overall quality of life was not significantly different between the two treatment groups from baseline to end of treatment. However, there was a statistically significant improvement in Pain QLQ-C30 score from baseline to week 3 (OR=73.14, p=0.036) and week 6 (OR=73.33, p=0.034) in the metronomic arm compared with the cisplatin arm. CONCLUSION: In addition to improvements in survival, understanding the impact of treatment options on changes in HRQoL is important as it can aid physicians in making treatment and rehabilitation decisions for patients with advanced inoperable H&N cancer.

Abstract Id: YUGP3952


Presenter- Dr. BASANT MAHADEVAPPA
Co-author - Basant Mahadevappa, Jagadeesh Krishnamurthy, Prashanth Basappa Chowdary

BACKGROUND: The new two-stage liver resection combining isinit liver transection with portal vein ligation, usually termed Associating Liver Partition and Portal vein ligation for Staged hepatectomy (ALPPS) is a promising method to increase resectability rates in patients with marginally resectable or locally unresectable liver tumours. An impressive and rapid hypertrophy of the future liver remnant (FLR) is reported. This is a two-staged surgery, with significant morbidities and mortality being reported. Various techniques are being adopted to reduce the same. OBJECTIVE: To present the refinement in the approach and outcomes to ALPPS adopted at our centre over the years from open to laparoscopic and now to robotic technique. A total of 17 cases underwent two staged ALPPS procedure over three years (2013-2016). The increase in FLR volume, time required for 2nd surgery, overall survival, were evaluated. Post hepatectomy liver failure was assessed using ISGLS (International Study Group of Liver Surgery) criteria. RESULTS: Out of the total 17 patients, five were operated for colorectal metastasis, four had neuroendocrine tumour liver metastasis, two had cholangiocarcinoma & six had hepatocellular carcinoma. The increase in FLR was in the range of 10 % to 16 % of Total liver volume. Time duration required for second surgery was between 4-6 days. Post hepatectomy liver failure was seen in three cases all being grade-A. Overall survival of upto 40 months was achieved. 10 patients underwent conventional ALPPS, three had Lap assisted ALPPS and the last four patients underwent Robotic approach. CONCLUSION: ALPPS procedure performed by robotic approach could be a safe and feasible technique in experienced centres with advanced robotic skills. Patient’s recovery after stage-one is faster with less post-operative pain, early ambulation, lesser post-operative complications and most importantly FLR hypertrophy as good as open technique. Robotic/Laparoscopic ALPPS affords better access to and control of intrahepatic vasculature without the need to manipulate and mobilise the liver, and is, therefore, a safer approach for patients with multiple comorbidities, metabolic syndrome and cirrhosis.
Abstract Id: YUGP3954
Psychiatric Co-Morbidities And Their Pattern In Head And Neck Cancer Patients: A Prospective Study In North Indian Tertiary Care Centre
Presenter- Dr. Dheerendra Sachan
Co-author - Dr Nupur Bansal, Dr Ashish Raj Kulshrestha, Dr Ruchita Sachan

INTRODUCTION Various psychiatric disorders especially anxiety and depression are big concern among cancer patients. Head and neck cancer constitute a major burden but till date only a few studies have prospectively evaluated psychiatric co-morbidity risks in these patients. AIM AND OBJECTIVES Aim of our study is to study the frequency of psychiatric comorbidities in head and neck cancer patients and their correlation with staging of disease. MATERIALS AND METHODS This study was conducted in outpatient department of a tertiary care hospital of Northern India. 86 head and neck cancer patients were included in this study and compared with 86 controls. The diagnosis and staging work up was done using histopathology and radiological investigations. Staging was done as per American Joint Committee on Cancer 7th edition. Psychiatric co-morbidities were assessed using the Mini International Neuropsychiatric Interview questionnaire. RESULTS The frequency of psychiatric comorbidities was significantly higher in head and neck cancer patients (48.8%) as compared to controls (6.9%). Also frequency was significantly higher in advanced stages. Increasing trend of comorbidities were noticed in patients with long duration of symptoms. CONCLUSION Psychiatric co-morbidities are more in head and neck cancer patients. In majority of the cases this part of patient care is overlooked. It would be beneficial if these aspects are taken care of in such patients.

Abstract Id: YUGP3956
Sexual Functioning In Women After Oncoplasty Breast Surgery Versus Conventional Breast Conserving Therapy For Early-Stage Breast Cancer: A Prospective Controlled Study
Presenter- Dr. Ashutosh Chauhan
Co-author - Dr Naveen Sanchety, Anuradha Dhasmana.

INTRODUCTION: Breast cancer (BC) and its treatments may affect sexual functioning based on physiological and psychosocial mechanisms. The aim of this study was to prospectively investigate sexual adjustment of BC patients during a follow-up period of one year after oncoplasty breast surgery (OBS) or breast conserving therapy (BCT). METHODS: In this prospective controlled study, women with OBS and an age-matched control group of conventional BCT completed the Beck Depression Inventory Scale, Body Image Scale, EORTC QLQ questionnaire, Short Sexual Functioning Scale and Specific Sexual Problems Questionnaire to assess various aspects of sexual and psychosocial functioning before surgery, six months and one year after surgical treatment. RESULTS: In total, 88 women with OBS and 96 women with BCT completed the survey. Significantly more BCT women reported problems with sexual desire, arousal and the ability to achieve an orgasm six months and one year after surgery as compared to women undergoing OBS. CONCLUSIONS: Women who underwent OBS had better sexual functioning than those who underwent conventional BCT.

Abstract Id: YUGP3958
Video Presentation Of Chemoport Insertion
Presenter- Dr. NASEEM AKHTAR
Co-author - . . .

Video presentation of Chemoport insertion

Abstract Id: YUGP3959

Abstract: A Comparative Study Of Conventional Fractionation Versus Concomitant Boost Radiotherapy After Induction Chemotherapy In Locally Advanced Oral Cavity And Oropharyngeal Carcinoma
Presenter- Dr. ABHISHEK SHRIVASTAVA
Co-author - Dr. Abhishek Shrivastava, Dr. H. U. Ghor, Dr. Vivek Tiwari

Introduction: Head and neck cancers (HNC) are highly prevalent in the Indian subcontinent. Radiation therapy (RT) is an essential modality in the management of HNC. Aim: The aim of the present study was to compare conventional fractionated RT (CFRT) and concomitant boost RT (CBT) for the management of HNC. Patients and methods: A total of 60 patients (n=30 in each arm) were assigned to receive either CFRT or CBT. Response and toxicities were analyzed weekly during the treatment and one and three month after completion of treatment. The response was assessed as per the world health organization tumour response criteria and toxicities were analyzed as per the radiation therapy oncology group acute radiation morbidity scoring system. Results: The study revealed complete response (CR) -66.6%, partial response (PR)-26.6%, progressive disease (PD)-6.6% in CBT while a CR- 46.6%, PR-36.6% and PD-16.6% was achieved in the CFRT arm and was not statistically significant (p=0.244). In addition, no statistically significant difference was found between the two arms in terms of mucositis (p=1), skin reactions (p=0.640), dysphagia (p=0.790) and xerostomia (p=0.196). Conclusion: The current study demonstrates that the patients treated with CBT did not have an inferior locoregional disease control or statistically significant toxicities as compared to the CFRT arm. In addition, the overall treatment time is reduced as compared to conventional fractionation thereby improving treatment compliance. This may prove to be a favorable schedule for high volume centers.

Abstract Id: YUGP3963
Impact Of Cancer On Primary Caregivers Of Patients Receiving Radiation Therapy
Presenter- Dr. Ashutosh Chauhan
Co-author - Dr Viren Suhag, Dr Naveen Sanchety,

Aim: To assess the consequences of caregiving on primary caregivers of cancer patients receiving radiotherapy. Methodology sixty five caregivers participated in the study and data were collected through structured interviews. Psychological distress was assessed using the Hospital Anxiety and Depression Scale (HADS). To measure impact of caregiving on life, we used a seven point questionnaire. Data were analysed using SPSS 7.5 for Windows. Results: All caregivers experienced significant levels of psychological distress. caregivers reported relatively high values on impact on life, moderate values on overall health status, and low values on global quality of life. Our results pointed to a lack of association concerning extent of patients’ disease, treatment schedule, performance status or awareness of diagnosis. However, female caregivers and those living with the patient were more likely to report heightened symptoms of anxiety and depression, severe impact of caregiving on their lives, poor health and low quality of life. In addition, it was shown through multivariate analyses that psychological distress was the sole predictor of overall health and global quality of life. Conclusion: Caregivers are to a great extent affected by the disease. Caring for significant others is essential to promoting quality of life for the family and the patient.

Abstract Id: YUGP3966
Implementation Of Quality Audit (Qa) In Clinical Radiotherapy Units In Hgc Oncology Institutions In India â€“ A Report
Presenter- Mr. Mohan Pandalika
Co-author - Dr. Ajaikumar B S, Dr. Ramesh S Bilimagga, Dr. Naveen Chug

Basis of the Study: Radiation technologists play a vital role in treatment delivery across radiotherapy facilities in the country. Correct
simulation and delivery are intended to facilitate accurate therapeutic radiation in conformance to the planning and dosimetry schedules for each patient. Studies have shown high error rates and geographical misses leading to local recurrence due to faulty process and lack of quality and training. In this study, we evaluate the role of Quality and Uniform Practice of Radiotherapy Technologists (QUPORTT) training program on adherence to quality practices across a chain of radiotherapy facilities in the country. The present study analyses data between 2013 and 2016. Materials and Methods: In this study quality audit was carried out in radiotherapy facilities of a private oncology chain of hospitals across the country in the years between 2013 and 2016. Chronologically audit was carried out for 11, 10, 8, and 16 centres each year from 2013 onwards. Process implementations with approved radiotherapy forms, prescription cards, treatment charts, demographic stickers, radiotherapy process protocols and standard operating procedures (SOP) including a professional outlook (grooming and dress code) as per NABH audit standards were audited. Entries in registers of different radiotherapy process chains in mould-rooms, treatment rooms, X-ray and Computed Tomography (CT) simulations, were systematically evaluated. Audit on treatment machine variables (daily LINAC checklists, EPID quality assurance, and CT/X-ray daily checks) were recorded. Uniformity of practice in different centres based on initial training programme (Quality and Uniform Practice of Radiotherapy Technologists (QUPORTT-2013) was checked. Advanced training (QUPORTT-2016) along with the discussions on audit programme and internal department audits were carried out in 2016. Results: This quality audit resulted in achievement of 82.4% on the professional variables, 88.9% standards of quality assurance in NABH approved patient documents, 94.4% in radiotherapy process standards and SOP and 100% in treatment registers. Recommendations based on these quality indicators included development of mandatory radiotherapy and allied infrastructure and achieving excellence in the expertise of RTT personnel. Conclusions: Present-day care for patients receiving radiotherapy, calls for high standards in treatment delivery with complex technology in order to ensure accurate tumour control and treatment outcomes. RT Technologists play a crucial role in treatment set-up, reproducibility and execution of treatment delivery. Quality practices are ensured whereby; complex situations are made streamlined and implementable even in tier 2 and tier 3 cities, by the help of QUPORTT. This training also could help upcoming centres at an initial level for ensuring gold standard practices.

Abstract Id: YUGP3970

The Effect Of Chlorhexidine Mouthwash On Chemoradiotherapy Induced Mucositis In Patients Of Oral Cavity And Oropharyngeal Carcinoma

Presenter - Dr. ABHISHEK SHRIVASTAVA
Co-author - Dr ABHISHEK SHRIVASTAVA, Dr ANUJ BHARGAWA, Dr VARSHA MANDLOI

Background: Mucositis is one of the major toxicities associated with radiation therapy in oral cavity and oropharyngeal cancer patients. It predisposes the patients to infection by resident oral microflora that adversely affects patient&rsquo;s quality of life and may lead to discontinuation of treatment. Chlorhexidine is a disinfectant and antiseptic, designed to reduce dental plaque and oral bacteria. Aim: To assess the effectiveness of chlorhexidine mouthwash in the prevention or amelioration of mucositis among patients undergoing chemoradiotherapy therapy. Patients and Methods: A total of 60 patients (n=30 in each arm) were assigned to receive either Conventional fractionation or Concomitant boost radiotherapy along with concurrent cisplatin. Toxicities were analysed weekly during the treatment, and one and three month after treatment completion. The radiation therapy oncology group acute radiation morbidity scoring system was used to document the severity. The patients were planned to receive Chlorhexidine mouthwash 5ml, 3 times a day during and after 3 months of completion of the radiation therapy. Results: Acute mucosal toxicity was assessed as per the RTOG Acute Radiation Morbidity Scoring System. Among both the groups, grade I mucosal toxicity was seen in 18 (60%) patients. Grade II mucosal toxicity was seen in 12 (40%) patients in group A and 10 (33.33%) patients in group B. Grade III mucosal toxicity was seen in 2 (6.66%) patients in group B and in none in group A. Conclusion: The severity of mucositis was less intense in both the treatment group. Chlorhexidine mouthwash along with adequate supportive measures can enhance the quality of life of patients experiencing chemoradiation induced oral mucositis. KEY WORDS: Chlorhexidine mouthwash, Head and Neck Cancers, Mucositis.

Abstract Id: YUGP3972

Effect Of Community Outreach Programs In Creating Breast Cancer Awareness In A Tier-Ii City.

Presenter - Dr. Rajnish Nagarkar

Co-author - Dr. Raj V Nagarkar, Dr. Sirshendu Roy, Dr. Aditya Adhav

Background: Earlier reports suggest that awareness regarding Breast Cancer is very lower in India. Patients used to present with locally advanced disease, fungating masses or distant metastasis. In this study we assess the stage of presentation to understand the awareness regarding breast cancer in the city population. Methods: In this study Two Thousand Four Hundred and Twenty Eight breast cancer patients registered for treatment with a tertiary cancer care centre, were evaluated. Around 58.5 % of all patients presented as early breast cancer(EB), 26.4% presented as locally advanced breast cancer (LABC) & 16.7% were metastatic Breast cancer (MBC) at presentation. 3.5 % of all these patients were males. Among all the female breast cancer patients 58.2% presented as EB, 25% as LABC and 16.2% were diagnosed as MBC. Similarly for male patients, 67.05% presented as EB, and 16.47% each as LABC and MBC. These results suggest that awareness regarding breast cancer is increasing as compared to earlier reports and was the same across both the genders. The reasons attributed to this increasing awareness and early stage presentation was because of screening activities, awareness and educational camps, outreach community programs organized by the hospital. Conclusion: This study shows that having community outreach programs help identify breast cancer patients at an early stage of presentation.

Abstract Id: YUGP3976

Pattern Of Distribution Of Gynecological Malignancies In A Tertiary Care Hospital In Northern India

Presenter - Dr. Ashish Raj Kulshreshtha

Co-author - Dr. Rupita Kushrestha, Dr. Nupur Banatal, Dr. Dheerendra Sachan

Introduction? Cervical malignancies are the common malignancies in females in developing countries like in India. It is probably because of poor personal hygiene, multiparity and so many other factors. The study analyzes the incidence and pattern of occurrence of female genital tract (FGT) malignancies at a tertiary care centre in northern India in last ten years (2007-2016). Methods? In this retrospective study, data of patients registered with malignancy was collected for the past 10 years from Radiotherapy department, KG MU. Lucknow and analyzed with SPSS software. A total of 30,705 patients with malignancy were registered, 13,482 (43.91%) were females, of which 5717 (18.62%) were diagnosed with female genital tract malignancies. The number of patients presenting with FGT cancers had doubled in 2016 compared to that in 2007, though the proportion of FGT cancers out of total malignancy patients remain similar. Observation? Cervical malignancies are most common followed by ovarian and endometrial malignancies. Cancers of vulva and vagina were less common but their number is also increasing every year. Most common age group for cervical and ovarian malignancies was 41-50 years (mean age 53.76 years and 49.53 years respectively)
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while for malignancies of endometrium, vulva, vagina and vault, it was 51-60 years (mean age was being 53.76, 52.16, 52.23 and 50.86 yrs respectively). Conclusion? FGT malignancies were around one fifth of total malignancies and around one half of all malignancies in females. These proportions remain statistically similar throughout last ten years. Increasing awareness for FGT malignancies is the need of hour.

Abstract Id: YUGP3978
Dosimetric Comparison And Clinical Correlation Between Conventional Four Field Radiotherapy Versus 3-D Conformal Radiotherapy(3Dcrt) In Cancer Cervix
Presenter- Dr. Shubhi Agarwal
Co-author - Dr. PIYUSH KUMAR, DR. ARVIND KUMAR, DR. PAVAN KUMAR

BASIS: With sectional imaging, wide variations are reported in pelvic anatomy of individual patients raising concerns over adequate coverage of target volume with conventional radiotherapy based on standard bony landmarks. 3D CRT is reported to decrease normal tissue toxicity, along with decrease in chances of geographic miss. Present study is done for dosimetric comparison of Planning Target Volume (PTV) & Organs at Risk (OAR) in cancer cervix patients treated with conventional & conformal radiotherapy & clinical correlation of dosimetry with tumor control & side effects.

MATERIALS & METHODS: 50 patients of cancer cervix underwent planning Contrast Enhanced CT scan. Target volumes & OAR were contoured. Patients were randomized into conventional & conformal arms. Conventional fields were planned using standard bony landmarks. CT based planning was done for 3D-CRT arm. Field sizes & DVH were recorded & compared for target coverage & OAR sparing in both arms. All patients received concurrent chemotherapy followed by brachytherapy. RESULTS: In 88% patients, conventional plan failed to cover the target volume which was significantly improved with conformal plans (p=0.00 for dose to 95% of PTV).

Although field sizes were significantly larger for both AP & lateral fields (p=0.000) but dose homogeneity was significantly improved in conformal arm (p=0.000 for mean dose to PTV). No grade 3/4 radiotherapy or chemotherapy related toxicity was seen in either arm. No significant difference between mean doses to rectum & femoral heads was observed between 2 arms. Mean doses to urinary bladder & small bowel were significantly higher in conventional & 3DCRT arm respectively (p = 0.024 & 0.000 respectively). All patients in both arms showed complete response after short follow up of 6 months except one patient who showed progressive disease in conventional arm.

CONCLUSION: Our study shows significantly better target volume coverage & dose homogeneity with 3DCRT which may translate into better local control & survival but longer follow up is required for such assessment. We recommend routine use of CT based planning for radiotherapy in carcinoma cervix.

Abstract Id: YUGP3980
Nutrition Intervention In Head And Neck Cancer Patients Undergoing Radiotherapy: A Prospective Randomized Clinical Trial
Presenter - Dr. Naveen Sanchety
Co-author - Dr Ashutosh Chauhan, Dr Maneesh Pandey.

Aim To investigate and analyze the nutritional status of patients with head and neck cancer undergoing radiotherapy (RT) in order to provide positive nutrition intervention for assisting the radiotherapy effect. Methodology A total of 40 patients with head and neck cancer were selected using a method of subjective global assessment (SGA) to assess nutritional status, including calorie intake and energy expenditure. In a randomized, controlled study, 20 patients received intensive dietary counseling and nutritional therapy (G1) and 20 received regular dietary as controls (G0) preradiotherapy and postradiotherapy. The primary endpoint was calorie intake and energy expenditure. The secondary endpoint was SGA rating with nutritional therapy. Result At the end of RT, energy intake showed a net increase in G1 (1,691±301 kcal) compared with that in G0 (1,066±312 kcal) (P

Abstract Id: YUGP3982
Feasibility Of Hypo-Fractionated External Beam Radiotherapy Schedule For Radical Treatment Of Head And Neck Carcinoma In A Busy Radiotherapy Facility.
Presenter - Dr. Yashpal Verma
Co-author - Dr Ashok K Chauhan, .

Background: For the management of head and neck carcinoma, standard fractionated external beam radiotherapy (SF-EBRT) takes 6-7 weeks for the radical regimen to complete (64-70 Gy, 1.8-2.0 Gy per fraction) and most radiotherapy facilities are over-burdened these days with long waiting period for the patients. Aims: To propose feasibility of a hypo-fractionated external beam radiotherapy schedule (60-63 Gy/ 20-21 once daily fractions, 3 Gy each over 4.0-4.1 weeks, re-plan after 12 fractions) so as to combat the rising burden in radiotherapy facility, to make it accessible to maximum, without waiting period and for optimal utilization of the resources.

Material & Method: Standard fractionated external beam radiotherapy (SF-EBRT) schedule (64-70 Gy/ 32-35 daily fractions, 1.8-2.0 Gy per fraction, over 6.2-7.0 weeks, re-plan after 22 fractions) and hypo-fractionated external beam radiotherapy (HF-EBRT) schedule (60-63 Gy/ 20-21 once daily fractions, 3 Gy each over 4.0-4.1 weeks, re-plan after 12 fractions) were compared for dose equivalence in Department of Radiotherapy, Pt. B.D. Sharma University of Health Sciences, Rohtak (INDIA) and feasibility being explored for its clinical application.

Results: The proposed HF-EBRT plan (60-63 Gy/ 20-21 once daily fractions, 3 Gy each over 4.0-4.1 weeks, re-plan after 12 fractions) seems feasible. Conclusion: Though the proposed HF-EBRT plan seems feasible and is dosimetrically comparable to SF-EBRT plan, this needs to be validated for practical application to fulfill its aims in busy radiotherapy set ups, to serve the masses. Keywords: EBRT, Head and Neck Carcinoma, Hypo-fractionation, Radiotherapy.

Abstract Id: YUGP3984
Analysis Of Stage Wise Presentation In Patients Of Carcinoma Breast: A Single Tertiary Care Center Study
Presenter- Dr. Jyoti Pannu
Co-author - Joydeep Singh Vasant, Ashok Chauhan, Paramjeet Kaur.

Purpose The study has been designed to evaluate the stage wise presentation of carcinoma breast patients and its correlation with treatment outcome and survival. Materials and methods A total of 111 patients from 1st January 2009 to 31st December 2011 with invasive breast carcinoma, who had not previously received chemotherapy or radiotherapy were included in this retrospective study. Data was obtained from medical records at the department of Radiotherapy II, PGIMS, Rohtak. Data was collected retrospectively regarding age, menopausal status, stage at presentation, treatment modality given and status at last follow up. Every patient was staged as per AJCC staging system. Results The present study showed that out of 111 patients two (1.8%) patients presented with T1 tumor stage, forty nine (44.2%) with T2 tumor stage, twenty three (20.7%) with T3 tumor stage, thirty seven (33.3%) with T4 tumor stage. Thirty two (28.8%) patients presented with N0 nodal stage, forty (36%) with N1 nodal stage, twenty three (20.7%) with N2 nodal stage and sixteen (14.5%) with N3 nodal stage. Ninety (89%) patients were without metastasis and twelve (11%) were with metastasis. One (0.9%) patient presented with IA stage, none presented with IB stage, seventeen (15.3%) with IIA stage, fifteen (13.5%) with IIB stage, twenty three (20.7%) with IIIA stage, twenty eight (25.2%) with IIIB stage, fourteen (12.6%) with IIC stage and thirteen (11.8%) patients presented with IV stage disease.
Abstract Id: YUGP3996
Presenter- *Mr. KALLOL SAHA*
Co-author - SAHELI BANERJEE, Sushant Vinarkar, Sourav Sarma Choudhury

Basis of the Study: Lung cancer remains the most common malignancy and the primary cause of cancer deaths worldwide. Unique patterns of somatic mutations in non-small cell lung cancers (NSCLC), especially in adenocarcinoma is important in patient care when personalized targeted therapy is available. Materials and methods: In this study we present our experience with genotyping using the AmpliSeq Cancer Hotspot panel v2. A Total of 101 samples were processed for NSG using this 50gene (2800 loci) AmpliSeq Cancer Hotspot panel v2 from February 2017 to 31st July 2017. 10ng of input DNA was used to sequence 8 pooled samples per 316v2 chip. The variants were identified using the Ion Torrent Variant caller plugin and reported using Ion reporter-annotate variants version 5.4. Results: 93 samples were successfully sequenced (7.9% failure rate) with a total of 107 variants identified in 15 genes with a median of 2 (range 0 to 5) variants per sample. Potentially actionable genes were BRAF, EGFR, NRAS, KRAS, ERBB2 and PIK3CA, these were found to be mutated in 47 cases. BRAF (4.3%), EGFR (29.03%), ERBB2 (5.37%), KRAS (12.9%) and TP53 (35.48%) NRAS (1.07%) and PIK3CA (1.07%). All BRAF mutations were in exon 11. Occasional variants were in genes like KIT (2.1%), PTEN (3.22%), RET (2.1%) and STK11 (3.22%). Rare variants with a frequency of 1.07% were observed in APC, IDH2, NRAS, PIK3CA and MET. EGFR, KRAS, and ERBB2 were mutually exclusive in our study population. Conclusion: Low quantity of input DNA increases the efficacy of this NGS platform and increases its effectiveness on small biopsy and cytology specimens. Pooling of 8 samples in one chip also maximizes the usage in clinical laboratories for variant calling in NSCLC cases. Thus, this high throughput Ion PGM platform using the Ion AmpliSeq Hot spot panel can be effectively used to detect common as well as rare actionable variants in multiple patients simultaneously.

Abstract Id: YUGP3991
C-Kit Expression In Malignant Epidermal Cutaneous Tumors.
Presenter- *Dr. Sharitha Naganna*
Co-author - Dr. Vidya vathi K, M.D. Pathology, M.D. Pathology,

INTRODUCTION: Cutaneous tumors are divided into tumors of epidermis, skin adnexa, melanocytes, nerves, eccrine cells and the dermis. Malignant tumors of the epidermis include squamous cell carcinoma and basal cell carcinoma. Malignant tumors of the melanocytes include malignant melanoma. C-Kit (CD117) is an immunohistochemical marker which is normally expressed in basal cells of epidermis and also in the melanocytes. Cells with C-Kit possess unique properties of cancer stem cells including self-renewal, differentiation, high tumorigenic potential and chemoresistance . C-Kit is a tyrosine kinase receptor and its role in cancer is important as it has been used as a target for drugs that inhibit their activity. C-kit expression in GIST has been well documented and target therapy with Imatinib mesylate is proven. C-kit is a potential target for site specific therapy in certain solid tumors especially like gastrointestinal stromal tumors. Though C-kit expression has been studied in other tumors in India, there are no studies demonstrating the expression of C-kit in cutaneous tumors. The identification of this marker in cutaneous malignances may possibly lead to the development of effective treatment protocols. AIM OF THE STUDY: 1. To determine the expression of c-kit in various malignant epidermal cutaneous tumors 2. To correlate c-kit expression with age, sex,tumor differentiation, histological type, size of the tumor and level of invasion. MATERIALS AND METHODS: The study was done on paraffin embedded tissue blocks with a confirmed histopathological diagnosis of malignant cutaneous epidermal tumors obtained from Department of Pathology, S Dudum, Kolar from the year 2007-2014. All cases of surgically resected primary epidermal cutaneous tumors like squamous cell carcinoma, basal cell carcinoma and malignant melanoma were included in the study. Biopsy specimens, dysplastic lesions, benign cutaneous tumors and metastatic malignant melanomas were excluded from the study. RESULTS: A total of 53 cases were included in the study. Out of 53 cases, 58% were SCC, 21% of cases were each of BCC and MM. Male to female ratio in SCC, BCC and MM were 2:0.31, 0.57:1 and 1.7:1 respectively. Males were predominantly affected in SCC and MM, whereas more number of females were affected in BCC. The predominant age group affected in SCC was between 61-70yrs (32.2%). In BCC, most commonly 50-60yrs and 61-70yrs were affected with 36.3% each. And in MM, 54.5% of cases were seen in the age group between 51-60yrs. SCC was seen in leg and foot in 39% of cases followed by 19% of cases involving the face and 13% in scalp. In BCC, infra orbital region was affected in majority of cases (37%), followed by nose and pinna (18% each) and cheek, nasal fold and forehead (9% each). Lower limb(sole and heel) was involved predominantly in 73% cases of MM, followed by 9% cases involving eyelid, palm and great toe. Majority of SCC presented clinically as ulceroproliferative growth (61.2%), followed by 25.6% of cases presenting as ulcerative lesions. BCC presented as ulcerative lesions in 54.5% of cases and ulceroproliferative growths in 45.4% of cases. Ulceroproliferative growth (54.5% and ulcerative lesions (45.4%) were the most common presentations in MM. Most of the SCC were between 2-5cm in size (45%), whereas in BCC, 45.4% of cases were between <2cm and 2-5cm in size. Size was not considered in MM, as Clarke's level of invasion is a better prognostic indicator than size of the tumor. Histologically, most of SCC were well differentiated constituting about 77.4% of cases, followed by 16.1% cases of moderately differentiated SCC. Nodular BCC was seen in majority of BCC cases (64%), followed by pigmented BCC (27%) and basocellular carcinoma (9%). 64% of MM showed Clarke's level of invasion-IV, whereas Clarke's level of invasion V was seen in 36% of cases. CONCLUSION: C-kit expression was detected in 41.85% of SCC, 72.68% of BCC and 91.29% of MM. Weak and moderate C-kit expression was seen in SCC and BCC. Strong C-kit expression was not seen in SCC and BCC. 54.5% of MM showed strong C-kit expression and 9.09% showed weak and moderate expression. There was no correlation between the different grades of differentiation, age and sex of the patient, size of the tumor and C-kit expression in squamous cell carcinoma. There was no significant association between histological type, sex of the patient and size of the tumor and C-kit expression in basal cell carcinoma. There was no significant association between Clarke's level of invasion and C-kit expression in malignant melanoma.

Abstract Id: YUGP3993
Anxiety, Depression, And Quality Of Life In Caregivers Of Patients With Cancer In Late Palliative Phase.
Presenter- *Dr. Naveen Sanchety*
Co-author - Dr Ashutosh Chauhan, Anuradha Dhasmana,

Background: Limited research has been done on mental health and health-related quality of life (QOL) of primary caregivers (PCs) to
patients staying at home with advanced cancer. This study examines anxiety, depression, and QOL in PCs of patients with cancer in the late palliative phase. Patients and methods: The sample consisted of 49 PCs of women with breast cancer and 47 PCs of men with GI cancers. QOL was rated with the Medical Outcome Study Short Form (SF-36), and mental health with the Hospital Anxiety and Depression Scale (HADS). The findings were compared with age-adjusted norm data (norm). Results: Physical QOL was significantly higher than norm in both genders, while mental QOL was significantly lower in male PCs. The level of anxiety was significantly higher than norm in both genders. No significant difference for level of depression was found in either gender, while caseness of HADS-defined depression was significantly more prevalent in female PCs compared with norm. Conclusion: PCs of both genders had significantly more anxiety than norm samples. Health care personnel in contact with PCs should consider screening them for mental symptoms and QOL and, if necessary, recommend further evaluation by their doctors.

Abstract Id: YUGP4002

Laryngeal Primary Malignant Melanoma: A Case Report And Review Of Medical Literature
Presenter- Dr. Mamunav Suman
Co-author - Dr Asit Ranjan Deb, Dr Amitabha Manna, Dr Bappaditya chhatui

Background : Malignant Melanoma of upper Aerodigestive tract ,an uncommon lesion , comprising 0.5% to 3% of all cases of malignant melanoma . To date only few cases of primary malignant melanoma of larynx have been reported in the medical literature. Aim : Laryngeal malignant melanoma compromises only 3.8% to 7.4% of these cases.Here we report a case of young male diagnosed as malignant melanoma of larynx,with respect to epidemiology, clinical features, diagnosis , interpretation of imaging and laryngoscopy findings and management of this rare malignancy. Material and Method : A 45 yr old man non smoker was diagnosed as a case of malignant melanoma of larynx who denied surgery 1yr ago was lost to follow up and now presents with multiple liver mets. Result : Considering the metastatic disease we are planning for systemic therapy. Conclusion : Primary malignant melanoma of larynx are very rare ,but aggressive tumor.The result outcome is very poor.

Abstract Id: YUGP4004

Clinical Correlation Of Selected Biomarkers Of Breast Cancer With Disease Profile And Treatment Outcome: A Prospective Study From A Single Institute.
Presenter- Dr. Neeta Sinam
Co-author - Prof. Th. Tomcha, Dr. T. Dhaneswor, Dr. Dulasiraman

Introduction: Bio markers used for guiding treatment protocols and prognostication in breast cancer are unique from other solid tumours. This is because breast cancer is biologically a heterogenic disease and staging alone is insufficient for treatment decision making. Pathological markers like hormone receptors, growth factor receptors and new molecular genomic markers or gene signatures are increasingly used as predictive markers for adjuvant therapy. However, many of these tests are yet to be validated or correlated by large prospective clinical trials. Besides, pathological inter laboratory variance in standard reporting, qualitative or quantitative assays, available techniques and expertise make us to relook in the accuracy and reliability of the reports in our clinical practice. In our institute, we use some of these markers for adjuvant therapy but a clinical correlation by data examination is much needed to justify the practice. Hence a clinico-pathological correlation prospective study is undertaken to address the issue. Aims and Objectives: To correlate the selected pathological bio markers clinically with treatment response and disease aggressiveness. Materials and methods: A prospective study to find out the co-relation of CA-15(3) serum level, ER/PR and HER-2-neu expression level by IHC, histological grade by Bloom Richardson score with respect to the broad 3 stage groupings viz, early breast cancer, locally advanced breast cancer and metastatic breast cancer. All lab tests will be done at Institute labs as per standardized technique. Patient accrual will be completed in initial 20 months and first result analysis at the end of 2 years. A sample size of 90 patients will be considered and equal number of 30 patients to be enrolled in each assigned 3 study groups. Statistical analysis of treatment outcome of these different stages with the markers will be done by using appropriate statistical techniques applicable like correlation matrix analysis for multi variants using IBM software SPSS version21. Results: A total of 90 female patients were enrolled and followed up for median 9 months. Median age was 45 years and range 27 years to 65 years. Historically, out of 90 enrolled 85(90%) are IDC, 3(8%) are lobular and 2(2%) are medullary type. Stage wise Stage IV- 9%, stage III -30%, stage II-45% and stage I-14%. Receptors ER and PR both +ve in 40% and 57% -ve. Her2/Neu was strongly(+++) expressed in 48% and moderately (+) in 4% and not expressed at all in remaining 48%. At the time of first data analysis 74 (82%) are in CR and 9 (10%) have died and 7 (8%) have disease recurrence. Bivariate Correlation Test was done with different variables with stage and with treatment outcome separately. Both ER and PR has strong positive co relation with treatment outcome by Pearsons test ( value 1 significance at .000 by 2-tailed test at p<01 level). The significance is also found at P=.000 at .01 confidence level by non parametric test spearman’s rho and Kendall’stau _b test. Bivariate co relation test with Her2/neu expression shows strong positive co relation with value 1 and p value .000 at .01 level. This is because F.U is short and patients are treated with targeted therapy thereby nullifying the predicted negative prognostic value of this growth factor expression. Conclusion: The early analysis of this study shows a strong positive co relation with histology grade and stage and also with treatment outcome. Hormonal receptors also shows strong positive co relation with treatment outcome as expected but with growth factor Her2/Neu fail to show -ve co relation with treatment outcome this could be due to short F.U and effective targeted therapy making expression of Her2/Neu not a bad prognosis any more. Longer F.U is required for definite conclusion however the trend shows Hormonal receptors are good prognostic and Her 2/Neu no longer a bad prognostic marker with use of specific targeted therapy.

Abstract Id: YUGP4006

Prevalence Of Hormonal Receptor & Human Epidermal Growth Factor â€“ 2 Receptor In Carcinoma Breast Patients: A Retrospective Analysis
Presenter- Dr. Joydeep Singh Vasant
Co-author - Dr Jyoti Pannu, Dr Ashok Kumar Chauhan, Dr Paramjeet Kaur

Prevalence of Hormonal Receptor & Human Epidermal Growth Factor â€“ 2 Receptor in Carcinoma Breast patients: A Retrospective Analysis Joydeep Singh Vasanta, Jyoti Pannub, Ashok Kumar Chauhanc, Paramjeet Kaurd,Vikas Verma (MD)e, Meenakshi Sharma (MD)f, Yashpal Vermag a,b,e,f Junior Resident, Department of Radiotherapy, PGIMS, Rohtak (India) cProfessor, Department of Radiotherapy, PGIMS, Rohtak (India) dSenior Professor, Department of Radiotherapy, PGIMS, Rohtak (India) gMedical Officer, Department of Radiotherapy, PGIMS, Rohtak (India) h Correspond to: Dr Joydeep Singh Vasant, Junior Resident, Department of Radiotherapy, Post-graduate institute of medical sciences, Rohtak (INDIA). Mobile: 8745004612, email address: javasgnt@gmail.com Postal address: B-3/13, Vasant Vihar, New Delhi(India) 110057 Prevalence of Hormonal Receptor & Human Epidermal Growth Factor â€“ 2 Receptor Status in Carcinoma Breast patients: A Retrospective Analysis ABSTARCT Purpose: - To extract out the prevalence of ER/PR status and HER-2 receptor status, and their relevance in 3 year survival in patients with invasive carcinoma breast in North Indian setting. Hormonal receptor status as well as HER-2 receptor status are markers of prognosis so
this study will help in providing the picture of regional prevalence of these receptors, making our understanding better towards the disease.

Materials & Methods: - In this retrospective regional institutional study from January 2009 to December 2011, already registered 111 cases of infiltrating carcinoma of breast were evaluated for ER/PR and HER-2 receptor status. The receptor status was confirmed using IHC. Results: - Among the total of 111 patients, 27 patients have ER-/PR-/HER-2+ status, 16 patients have triple negative, 15 patients have triple positive, 15 patients have ER+/PR+/HER-2 â€“ status, 13 patients have ER+/PR+/HER-2 â€“ status, 9 patients have ER+/PR+/HER-2 + status, 8 patients each with ER+/PR+/HER-2 + and ER+/PR+/HER-2 â€“. Among 111 patients with known receptor status, 44.14% (49 patients) are ER+, 35.13% (39 patients) are PR+, 55.85% (62 patients) are HER-2+, 55.85% (62 patients) are ER-, 64.86% (72 patients) are PR- and 44.14% (49 patients) are HER-2 negative. All the patients who had completed the treatment were looked upon for 3-year survival. The 3-year survival rate in patients with ER+/PR+/HER-2- status was 100%(15/15), 12.5%(2/16) in triple negative, 60%(9/15) in triple positive, approximately 40%(11/27) in ER-/PR+/HER-2+, approximately 65%(8/13) in ER+/PR+/HER-2+ 30%(3/9) in ER+/PR+/HER-2+ 40%(2/8) in ER+/PR+/HER-2 +, and ER+/PR+/HER-2 â€“. Conclusion: - Nearly similar prevalence of ER/PR positivity in carcinoma breast patients among pan Indian population is concluded by this study. More number of patients with HER-2 positive status confirmed the need of FISH for Score 2+ in Indian population was also found to be in concordance with the literature. The overall 3-year survival was found to be maximum in patient with ER+/PR+/HER-2+ subtypes and was the least in patients with triple negative subtype.

Abstract Id: YUGP4008

Efficacy Of Drug Monitoring In Patients With Drug Methotrexate Pharmacotherapy And Its Therapeutic Outcome

Presenter: *Dr. Shilpa Venkateshan*

Co-author: Nivedita Jayaram, Deepthi Hallur, Sharitha M Nag

Background: Management of high dose methotrexate (MTX) therapy along with drug level monitoring minimizes drug related toxicity and offers maximal therapeutic benefit; needless to mention the role of leucovorine (LV), urine pH, hydration and other patient clinical indices. Materials and methods: The study was carried out at Triesta Reference laboratories, a subsidiary of HCG hospitals which is a quaternary referral cancer care centre in Bengaluru, India. Sixty-four consecutive patients treated in hospital from 15th January 2017 till 30th June 2017 were included in the study. Results: Sixty-four patients ranging in the age from 2 years to 77 years (Mean 45.5 years) were included in the study. Drug monitoring system could consistently predict the future MTX concentration with knowledge of one previous concentration and improved as more data was made available through therapeutic drug monitoring. The precision was good at 14.3% with low bias 2.0%. Leucovorine rescue regimen could be initiated early. Toxicity level were significantly lower in patients with daily dose monitoring. Conclusion: The drug monitoring support system is a good laboratory tool in helping clinicians decide if a patient is clearing MTX as expected or more aggressive rescue therapy is warranted thereby, reducing the risk of complications.

Abstract Id: YUGP4010

Sinonasal Carcinoma With Intracranial Extension Treated With Robotic Stereotactic Fractionated Radiosurgery By Cyberknife - Case Report

Presenter: *Dr. Anusha M*

Co-author: Dr Anusha M, Dr Somorat Bhattacharjee, Dr Sunil R A

Purpose: Cancers of the nasal cavity (NC) and paranasal sinus (PNS) are rare tumors representing 3-5% of all head and neck cancers. Multimodal approach including surgery, chemotherapy and radiotherapy (RT) is the recommended treatment method. Due to close anatomic relationship with orbit, optic chiasma and brain, the management of PNS cancers is still challenging. There are studies that have evaluated role of Cyberknife treatment for the purpose of reirradiation or as Boost RT following external beam radiation by IMRT technique. There is limited data evaluating robotic SRS in the management of PNS and NC malignancies. Robotic SRS provides the chance to deliver ablative doses to the tumor with minimum doses to normal structures compared to other techniques. Case report: A 72 yrs old elderly lady with history of nasal bleeding and blurring of vision in right eye over duration of 2months, was referred after biopsy of nasal mass revealed to be Poorly differentiated carcinoma. Upon further evaluation with PET CT Scan (26/12/2012) showed 4.7*3.6*4.2 cm, partially necrotic metabolically active mass at right posterior nasal cavity (SUV 18.9), sphenoid sinuses and right ethmoid sinus with destruction of adjacent bones and intracranial extension (SUV 7.9), with no evidence of lymphadenopathy or distant metastasis. Patient was treated with CT and PET CT based Cyberknife Robotic Radiosurgery to a dose of 25 Gy in 5 fractions over 5days from 31/12/2012. Patient tolerated the treatment well and also received adjuvant chemotherapy. Subsequent PET CT scan done (13/08/2013) show significant regression in size (2.1*1.4*1.5 cm), enhancement and metabolic activity (SUV nil). Patient showed marked improvement in symptoms. Robotic SRS seems to be a feasible treatment option for patients with PNS tumors.

Abstract Id: YUGP4015

Symbiotic Preparation With Lactic Acid Bacteria And Oligofructose Enriched Inulin As A Functional Food: In Vivo Evaluation Of Microbial Activities, And Colonic Cancer

Presenter: *Ms. Arti Gautam*

Co-author - ,

Researchers suggested that the prevention of colon cancer might occur through intervention of symbiotics (prebiotic+probiotic) that allow certain substantial changes in the gut micro biota. The pro and prebiotic supplementation helps to improve the host health. Inulin is
one such probiotic used for the enhancement of naA ve probiotic bacterial population. This paper explains the impact of inulin (PRE) extracted from taproots of common chicory (Cichorium intybus L.), Lactobacillus salivarius (L. salivarius) FP25, (PRO), and symbiotic (SYN; inulin + L. salivarius FP25) preparation on Aoxymethane mediated CC induced rat model with respect to changes in microbial load, microbial enzymes. The results suggested that the PRE and SYN supplementation effectively reduced the selected pathogenic bacteria (Salmonella spp., and Escherichia coli), microbial enzymes and increased the probiotic load. The intervention of SYN significantly reduced the colonic ACF in CC model. The study results revealed that the supplementation of SYN diet (inulin and L. salivarius FP25) protects the AOM-mediated colon cancer induced host, Keywords: inulin; L. plantarum; probiotic; prebiotic; symbiotic, Chicory

Abstract Id: YUGP4019
Retrospective Analysis Of Various Patterns Of Failure Of Treatment In Head And Neck Cancer- A Single Institutional Study
Presenter- Dr. Vijay Palwe
Co-author - Dr. Rajnish Nagarkar, Dr. Sirshendu Roy, Dr. Vijay Palwe

Background- Head and neck squamous cell carcinoma is a second most common malignancy in Indian subcontinent. Disease has aggressive biological behaviour and patients usually present at advanced stage of disease; this along with concept of field cancerization explains higher incidence of recurrence and development of second primary. Aim of the study was to retrospectively evaluate various patterns of failure in patients with Head and neck squamous cell carcinoma and also to correlate various prognostic factors in failure patterns. Materials and Methods- Retrospective data of 500 patients operated at HCG Manavata cancer centre, Nashik for head and neck cancer was obtained from hospital management software system from year 2011 to 2014. Incidence of local, regional and distant failure was calculated and disease free survival (DFS) was calculated. Also we studied various prognostic factors like habits and coexistent co-morbid conditions. Results- Mean follow up time was 48 months. Overall disease free survival rate was 20 months. Overall incidence of recurrence was 26%. Incidence of local recurrence was 13.4%, regional recurrence was found to be in 6% of cases and distant failure was seen in 3.2% of cases. Incidence of lung metastasis was 37.5%, Skin metastasis was 31.25%, Liver metastasis was found in 6.25%, skeletal metastasis was found in 25% of patients amongst all distant metastasis. Conclusion- Local recurrence is more common than nodal and distant recurrence. Local recurrence can be attributed to the concept of field cancerization. We did not find any correlation with coexistent comorbidities. Proper surgical treatment plan will definitely reduce the incidence of local as well as regional failure. We have observed very less incidence of distant failure. Despite proper treatment protocol including surgery and chemo radiation incidence of recurrence remains significant in head and neck malignancies.

Abstract Id: YUGP4029
Study To Investigate The Efficacy And Safety Of Accelerated Partial Breast Irradiation (Apbi) Via High-Dose-Rate (Hdr) Multicatheter Interstitial Brachytherapy For Early-Stage Breast Cancer.
Presenter- Dr. Vijay Palwe
Co-author - Dr. Rajnish Nagarkar, Dr. Sirshendu Roy, Dr. Vijay Palwe

Context- Over the past several years, there has been growing interest in the use of accelerated partial-breast irradiation (APBI) as an alternative to Whole breast Radiation in properly selected patients. Use of multicatheter interstitial brachytherapy for APBI is increasing due to better availability of expertise and experience than other forms of APBI. The use of APBI outside the framework of a clinical trial has markedly increased. Background: To investigate the efficacy and safety of accelerated partial breast irradiation (APBI)
via high-dose-rate (HDR) multicatheter interstitial brachytherapy for early-stage breast cancer. Methods: Between 2008 and 2017, 29 prospectively selected patients with early-stage breast cancer received APBI using multicatheter interstitial brachytherapy following breast-conserving surgery. Their median age was 59 years (range 41-80). Mean size of tumor was 2.34cm. Dose of 34 Gy in 10 fractions given twice daily (3.4Gy/#) over 5 days was delivered to the tumor bed plus a 2 cm margin. The median follow-up was 31 months (range 1-100). 68.97% patients received adjuvant chemotherapy. 8(27.58%) patients received hormonal therapy. Results: Cosmesis was excellent to good in 86%. Two patients had local recurrence and 4 patient died of distant metastasis. Local control rate was 93.10%. Conclusions: APBI using HDR multicatheter interstitial brachytherapy yielded good local control, acceptable toxicity, and cosmesis comparable to those of conventional whole breast irradiation for select early-stage breast cancer with added advantage in drastic reduction in treatment time.

Abstract Id: YUGP4031
Clinical Profile And Treatment Outcomes Of Patients Treated With Image Guided Radiotherapy(Igtrt) For Oropharyngeal Carcinoma-A Retrospective Analysis
Presenter- Dr. Cessal Kainickal
Co-author - Cessal Kainickal, Farida N, Rejnish Ravi Kumar

Aims and objectives: To evaluate the clinical profile and treatment outcomes of patients treated with IGRT for Oropharyngeal carcinoma at Regional Cancer Centre, Trivandrum during January 2011 and December 2014. Materials and methods: Patients diagnosed with oropharyngeal carcinoma who underwent radiation with IGRT technique during the period from January 2011 to December 2014 in Regional Cancer Centre, Trivandrum were evaluated retrospectively. Primary end points were three year disease free survival & overall survival. Secondary end point was recurrence pattern. Data was captured using a structured proforma. Disease free survival(DFS) and overall survival(OS) were calculated using Kaplan Meier Method. RESULTS- Forty eight patients with carcinoma oropharynx were treated with IGRT from January 2011 to December 2014. Out of these, most were males (91.7%) and the median age at diagnosis was 60.5 years. Four patients (8.3%) belonged to stage I, Six(12.5%) to stage II, Sixteen(33.3%) to stage III and 22(44.8%) to stage IV. HPV status of the patients were not known. Twenty one (43.75%) received RT alone. One patient (2.08%) received induction chemotherapy followed by RT, four(8.3%) received Induction chemotherapy followed by concurrent chemoradiation and twenty two (45%) received concurrent Chemoradation. All the patients received radiotherapy to a dose of 66Gy/30 using SIB technique. All patients completed radiotherapy without any interruption. Thirty eight (79.1%) patients attained clinical remission. None of the patients underwent salvage surgery for the residual disease. 17(35.4%) patients developed relapse. Out of the 17 relapses, 14 had relapse in the primary site, 2 had nodal relapse. None of them under went salvage surgery. One patient developed distant metastasis (liver). One patient developed a second malignancy(lung). After a median follow up is 52.8months. Three yr DFS was 59.9% and 3year site wise OS were 66.1%. Stage IV disease had a poorer outcome compared with other stages. Conclusion: Three yr DFS was 59.9% and 3year OS was 66.1%. None of the patients underwent Salvage surgery. Limitations of the study includes the small number of patients, retrospective nature and lack of Human Papilloma Virus status in the analysis.
Salvage Reconstruction Of Extensive Recurrent Oral Cancer in the target with less OAR doses and better conformity. One patient developed grade 4 neutropenia in the last 6.4 to 7.2 weeks. Four out of six patients had break during the last 17Gy. Mean dose received by bilateral parotids was less than 24Gy, cord, brainstem, pituitary and optic apparatus was 41Gy, 38Gy, 38Gy and 38Gy respectively. Mean dose received by oesophagus was 17Gy. Mean dose received by bilateral parotids was less than 24Gy and by bilateral eyes was less than 27Gy. Overall treatment time was 6.4 to 7.2 weeks. Four out of six patients had break during the last week of CSI. One patient developed grade 4 neutropenia in the last week of CSI. Conclusion: IMRT and VMAT technique for CSI has a dosimetric advantage in achieving a homogeneous dose distribution in the target with less OAR doses and better conformity.

Abstract Id: YUGP4039
Setting Up An Oncology Multidisciplinary Team: Challenges And Initial Experience
Presenter - Dr. Caleb Harris
Co-author - Cliff Wanniang, Mebanshanbor Garod Pasi, Umesh Das

Background Patients managed by an oncology multidisciplinary team(MDT) have better overall survival, but there are challenges in setting up such a team. This study reviews the process of setting up and the initial results after a year of functioning of an MDT in Northeast India. Methods A retrospective review of a prospectively maintained database at a newly set up oncology MDT was performed. All the patients presenting with a diagnosis of malignancy or patients with suspected malignancy were discussed by the MDT prior to initiation of therapy or if there was a diagnostic dilemma. Descriptive statistics were used. Results Between 14th June 2016 and 13th June 2017, 1041 cases were discussed, of which 56.5% were male. The median age was 50 years, with a range between 6 months to 90 years. The intent of treatment was curative in 54.3% and palliative in 29.9%, with the remaining being those patients who were discussed due to diagnostic dilemma. Conclusion An Oncology MDT helps in proper diagnosis and staging of patients. Since majority of the patients could be offered treatment with curative intent, if proper treatment is delivered, this may result in improved survival.

Abstract Id: YUGP4035
Salvage Reconstruction Of Extensive Recurrent Oral Cancer Defects With Free Anterolateral Thigh Flap
Presenter - Dr. Shrvan Shetty
Co-author - Dr. Dhairyasheel Savant, Dr.Ashish Ghuge, Dr. Mansi Aggarwal

Introduction: Squamous cell carcinoma of the head and neck presents a treatment challenge since it is often aggressive and has a high rate of recurrence. Initial treatment cures approximately 50% of newly diagnosed patients. Unfortunately, the average salvage rate of locoregional recurrence is only 16%. Recurrent tumor at the primary site is the most common pattern of failure, occurring in approximately 20-30% of patients. Regional recurrence in the neck occurs in 10-15% of patients and is the next most common cause of disease related death. Treatment options include salvage surgery, radiation, chemotherapy, various combinations of these therapies and palliative care. Most head and neck oncologists agree that salvage surgical procedures provide the best chance of long term disease control and possible cure for patients with resectable, recurrent cancers. Complication rates in patients undergoing open salvage surgery are higher than in previously untreated patients, secondary to the effects of prior radiation therapy and/or surgery. Advances in reconstructive surgery have allowed more patients to be candidates for salvage surgery and have decreased the incidence of some complications. Free flap reconstruction in previously irradiated patients decreases local wound complications by bringing nonirradiated well-vascularised tissue into the wound. In this study, we present our experience with free single as well as multipaddled anterolateral thigh flaps for functional and aesthetical reconstruction of complex head and neck soft tissue defects after excision of recurrent oral cancer. Aim: The study aimed to evaluate the usefulness of the free anterolateral thigh flap for reconstruction of complex head and neck soft tissue defects after excision of recurrent oral cancer and the results of salvage surgery Patients & methods: Twelve patients with recurrent squamous cell carcinoma of the oral cavity underwent salvage surgical treatment. All the twelve patients had received radiotherapy at the time of the initial treatment. Free anterolateral thigh flaps were used for the reconstruction of the extensive defects caused by excision of the tumors. The complications of the flap were analyzed with a follow-up from 1 to 14 months. Results: Four flaps were used for mucosal lining of the mouth, two flaps were used for reconstruction of the cutaneous defects and six flaps were used in a bipaddle fashion. The overall success rate of the flap was 91.6%. Flap related complications occurred in 4 patients (33.3%). Major complications occurred in 1 patient (8.3%) and minor complications occurred in 2 patients (16.6%). 2 patients (16.6%) had complications unrelated to the flap. Conclusions: The free anterolateral thigh flap is a reliable choice for reconstruction of complex soft tissue defects caused by excision of recurrent oral cancer because it can provide several independent skin paddles for multiple separate defects with minimal donor site morbidity.

Abstract Id: YUGP4041
Redox Properties And Cytoprotective Activity Of Lichen Substance From Cladonia Rangiferina
Presenter - Ms. ILA SHUKLA
Co-author - , ,

Lichen rangiferinus, also known as reindeer lichen is a light-colored, fruticose lichen belonging to the Cladoniaceae family. It possesses a variety of bioactive compounds including abietane, labdane, isopimarane, the abietane diterpenoids hanagokenols A and B, ontanhydride, sugiol, 5,6-dehydrosoyguil, mentbroel, cis-commun acid, imbricatolic acid, 15-acetylimbricatolic acid, junicedic acid, ?-hydroxysoyaracopimaric acid, ?-resorcylic acid, atonol, barbaric acid, homosekikaiac acid, didymic acid and condidymic acid. Atranorin (ATR) and Fumarprotocetrac acid (FPA) are one of the major constituents of Lichen Rangiferinius. Here, we evaluated free radical scavenging activities and antioxidant potential of FPA using different in vitro assays for scavenging activity against hydroxyl radicals, superoxide radicals, hydrogen peroxide, and nitric oxide. The total reactive antioxidant potential (TRAP) and total antioxidant reactivity (TAR) indexes and in vitro lipoperoxidation were also evaluated. Besides, we determined the cytoprotective effect of FPA on H2O2-challenged HepG2 cells by the MTT assay, FPA exerted differential effects towards reactive species production, enhancing hydrogen...
Mutations In Head And Neck Cancers: An Indian Study

Abstract Id: YUGP4043
Multigene Profiling To Identify Clinically Relevant Actionable Mutations In Head And Neck Cancers: An Indian Study
Presenter - Dr. SATEESH KUNIGAL
Co-author - Dr. Yogesh Shikumar, Dr. Sheela M L, Krishna C R

Basis of Study: Head and Neck squamous cell carcinoma (HNSCC) represents approximately 5-10% of malignancies worldwide. The most appropriate treatment approach for HNSCC varies with the disease stage and disease site in the head and neck. Radiotherapy (RT) in combination with chemotherapy has become the standard of care for patients who have locally advanced tumors. However, there is a significant morbidity associated with these treatments and recurrent or metastatic diseases will occur in 50-60% of patients. Moreover, the detection of residual viable tumor at the end of therapy remains an important issue. It is therefore an unmet need to improve the outcome of therapy by identifying predictive (prognostic) indicators at the molecular level and also of radioresistance that will enable the clinicians to select the logical treatment modality. Methods: 50 head and Neck patients (early diagnosed and/or advanced/metastatic) aged 27-85 yrs (median age 50.5yrs) diagnosed at HCG from April 2015-17 were consented to be profiled by targeted deep sequencing in 48 cancer-related genes using Illumina’s TSCAP panel and MiSeq technology in an IRB-approved prospective study in a CLIA compliant laboratory. All the cases had histopathological reviews and comprised of tumors from following sites- oral, nasopharynx, throat, hypopharynx, larynx, thyroid or naso cavity and paranasal sinuses. The average coverage across 220 hot spots was greater than 1000X. Data was processed using Strand Avadis NGS™. Mutations identified in the tumor were assessed for ‘actionability’ i.e. response to therapy and impact on prognosis. Results: Somatic variants were detected in 65% of cases with direct impact on therapy and/or prognosis. Genetic aberrations were identified in major RAS/RAF signalling pathway in nearly 15 % of head and neck cancers out of which HRAS activating mutations were the most common (n=6). HRAS was also found to be co-mutated with PI3KCA (n=3) and PTEN deletions (n=3). HRAS is a putative oncogenic driver and mutant HRAS signals exclusively via PI3K- AKT pathway instead of using MAPK pathway and responsible for reducing response to cetuximab and Increased response to MEK inhibitor like selutinib and tramatinib. Based on the result, cetuximab was discontinued in 2 patients who had presented with metastatic HNSCC. Other targetable mutations included PIK3CA (n=3), EGFR (n=1), cKIT (n=1), RB1 (n=1) and PTEN (n=3) were reported. Also disruptive and non-disruptive mutations in TP53 alone were found in 45% of H&N cancers, varying widely among different histology indicating a poor response to cisplatin and 5FU based chemotheraphy. Interestingly all metastatic/recurrent patients, treated with cisplatin presented with very short progression free survival of 9-12 months (PFS) were found to have TP53. TP53 was also found to be co-mutated with ATM gene (n=1) an important prognostic marker indicating poor response to chemotherapy and radiotherapy. Conclusions: This study confirms the utility of multigene profiling in H&N patients both early diagnosed and advanced cases, to stratify based on their molecular profile that could potentially benefit not only from targeted therapy and chemo-radiation. Few ongoing prospective studies and randomized clinical trials may help us to confirm the independent prognostic and therapeutic value of the mutations in a larger cohort of Indian population.

Abstract Id: YUGP4045
Comparative Dosimetric Study Of Computed Tomography Versus Magnetic Resonance Imaging Based Treatment For Intradacitary Brachytherapy In Locally Advanced Carcinoma Cervix Using Cobalt 60 Source
Presenter - Dr. YANSAROMO YANTAN
Co-author - Dr. Abhishek Basu, Dr. Kazi S Manir, Dr. Krishnangshu Bhanja Choudhury

AIMS AND OBJECTIVES: MRI is considered the gold standard imaging for 3D Image Based Brachytherapy (GYN GEC ESTRO, ICRU 89). However, CT is used instead in many centers. We therefore designed this study to compare the dosimetry between MRI and CT with respect to target and OAR doses during HDR Intraovacitary Brachytherapy (HDR ICTB) following conventional concomitant chemoradiation (CTRT) in cases of locally advanced squamous cell carcinoma cervix (LACaCx). MATERIAL AND METHODS: In this single institutional, prospective study, patients of LACaCx (Stage IIIB to IVA) were included. All patients underwent CTRT (50.4 Gy/28# @5.5 wks; plus weekly Inj, CDDP 40 mg/m2) followed by HDR ICTB (9 Gy x 2#) using a MRI-compatible FSD applicator and Co 60 source (Eckert & Ziegler Bebig, Germany) with both CT and MRI imaging. The target (HRCT, IRCTV) and Organs AtRisk (OARs - Bladder, Rectum, Sigmoid) were contoured on both image datasets by independent clinicians using standard guidelines. Treatment was delivered using the MRI plan and corresponding CT plan was used for dosimetric assessment. Paired t test alongwith Pearson’s correlation was used to assess the concordance among MRI and CT plans to identify any discrepancy in target and OAR dosimetry. RESULTS Between January 2016 - March 2017, 26 patients were accrued. Five patients not amenable for ICBT underwent combined IC+CRT and therefore, 21 were analyzed. Mean D90 HRCTV doses were 11.94±2.55 Gy (MRI) vs 12.71±3.37 Gy (CT) (correlation +0.143; p = 0.713). Mean D90 IRCTV doses were 4.34±1.5 Gy (MRI) vs 3.33±1.07 Gy (CT) (correlation +0.423; p = 0.296). The D2cc doses to the OARs were: 8.03±3.47 Gy (MRI) vs 7.67±1.61 Gy (CT) (correlation +0.768; p = 0.016); Rectum: 5.3±0.94 Gy (MRI) vs 5.29±0.96 Gy (CT) (correlation +0.937; p = 0.000) and Sigmoid: 4.32±1.07 Gy (MRI) vs 4.87±1.29 Gy (CT) (correlation +0.574; p = 0.106). The doses to targets correlated well among fractions(1st vs 2nd) but not so for OARs (especially rectum and sigmoid, correlation +0.089 and +0.230 respectively, p = NS). CONCLUSION Although mean doses were not very different, D90 HRCTV and D90 IRCTV correlated less in the MRI plan vs CT plan. The correlation was better for OARs in MRI vs CT, being best for rectum, followed by bladder and sigmoid. Interfracion dosimetric correlation was better for targets as compared to OARs.

Abstract Id: YUGP4047
A Prospective Study Of Two Fractionation Schedules Of Palliative Irradiation In Patients Of Brain Metastases: Early Results
Presenter - Dr. Manju lata Yadav
Co-author - DR. Neeti Sharma, Dr. S.L. Jakhar, Dr. H.S. Kumar

Background: The management of brain metastases is a significant health care problem. Brain Metastases is most common intracranial malignancy of adults. Estimated 20-40% of all cancer patients develop brain metastases during the course of their illness. Introduction: Whole brain radiotherapy is a mainstay of treatment in patients both identifiable brain metastases and prophylaxis of microscopic disease. Most common primary tumors responsible for brain metastases are lung cancer, breast cancer, malignant melanoma, colorectal cancer, renal cell carcinoma. Whole brain radiotherapy has become...
Abstracts

Peri And Post Menopausal Women With Adnexal Masses And Raised Ca-125 And Histopathologic Correlation

Presenter- Prof. Jaya Chaturvedi
Co-author - Dr. Anupama Bahadur, ,

Introduction: Pre-operative identification of malignant potential of adnexal masses is important. Presence of solid component, bilaterality of adnexal mass on ultrasound and raised CA-125 are useful in differentiating benign from malignant masses. Aim of study was to correlate CA-125, ultrasonography and pathological findings of adnexal masses in peri and post-menopausal women from Uttarakhand. Materials & Methods: Cross-sectional, prospective study included 59 women presenting to gynaecology OPD of AIIMS, Rishikesh with adnexal masses. Study was conducted from October 2015 till May 2017. Transvaginal/ transabdominal sonography for morphological features was performed, suspicious masses were subjected to MRI / CECT. Tumor marker CA-125 was sent. Findings were co-related with intra operative findings and histopathology report. Results: Out of 59 women, 27 (45.8%) women had cyst >10 cms with largest cyst size of 25 x 20 cm weighing 4.5 kg. Serum CA-125 was elevated (>35 units/ml) in 46 patients and was more than 120 units/ml in 11 (18.6%). Highest CA-125 (463 units/ml) was found in benign ovarian tumor, Fibroma. On histopathology, 49 (83%) masses were benign, 1 (1.7%) borderline and 9 (15.3%) malignant. Most common type of ovarian malignancy was epithelial ovarian carcinoma (n=6, 8.5%). Conclusion: As a stand alone test CA-125 is not recommended for differentiating between benign and malignant adnexal masses. It is useful to incorporate clinical, ultrasonography based morphology scoring systems and tumor markers in deciding individual risk of ovarian cancer and management protocols for optimal survival of patient.

Abstract Id: YUGP4051

Natural Products And Derivatives To Combat Chemoresistance In Cancer

Presenter - Ms. Manvi Sunder
Co-author - Sugoshia S Nambiar, Manvi Sunder, Dr. Prathibha Ranganthan

Chemoresistance has become the major cause of chemotherapy failure in cancer. Upon exposure to the drugs, the tumor cells which develop resistance exhibit differential activation of some signalling pathways (Ex: Notch, Wnt) as a survival strategy. The aim of our study is to show how these pathways are regulated in resistant cell lines and in turn use this information to re-sensitize these cells using the inhibitors of the pathway. In order to accomplish this, we have developed drug-resistant sublines of lung cancer. We are using natural products and their derivatives, some which are known to block various signaling pathways and thereby re-sensitize these cells to chemotherapeutic drugs. Using such natural compounds in combination with the chemotherapeutic drugs may provide a more efficient treatment for cancer.

Abstract Id: YUGP4053

Demographic Profile And Therapeutic Diversity In Carcinoma Pancreas-An Institutional Review

Presenter- Dr. Subhashis Mishra
Co-author - Dr Saroj Kumar Das, Dr Deepak Kumar Das, Dr Tapan Kumar Sahoo

INTRODUCTION: Pancreatic carcinoma is one of the fatal solid malignancies. A large number of patients present with locally advanced or metastatic disease and this severely limits the number of patients who could undergo surgical resection, which offers the only chance for cure. Recent therapeutic advances for patients with advanced pancreatic cancer have extended overall survival, but prognosis still remains bad. We have reviewed all the carcinoma pancreas cases treated at our institute and have tried to correlate the disease pattern and therapeutic options and outcomes. MATERIALS AND METHOD:- Retrospective analysis of 23 patients of carcinoma pancreas seen in last 18 months (January 2016 to June 2017) was done from indoor files with respect to age, sex, site of primary, disease extent and nature of chemotherapy. RESULTS:- Majority of patients were male (65.2%) and in the age group 40-70 yrs (82.6%). In most of the cases the primary tumor was in head and neck of pancreas (69.5%) followed by body (17.5%) and tail (13%). 43.5% patients presented to us after surgery whereas 30.5% presented in locally advanced stage and 26% presented with metastasis. Among the locally advanced subset, 28.6% cases underwent surgery after neoadjuvant chemotherapy. 47.8% patients received chemotherapy with Nab-Paclitaxel and Gemcitabine regimen. The mean survival of the patients was 7.4 months. CONCLUSION:- Though with small sample size and shorter followup period, the results of the study are similar to data presented in literature regarding age group and site of primary tumor. Surgery is the prime modality of treatment. Chemotherapy with various regimens have been tried, maximum being with Nab-Paclitaxel and Gemcitabine. This is an interim analysis of the results, further studies with longer followup period is continuing.

Abstract Id: YUGP4055

Airway Management Techniques And Post Operative Morbidity And In Patients Undergoing Head And Neck Cancer Surgeries In A Tertiary Care Centre-A Retrospective Analysis

Presenter- Dr. Nayana Kulkarni
Co-author - Dr. Rajnish Nagarkar, Dr. Nayana Kulkarni, Dr. Gauri Kokane

Introduction- Airway management is challenging in head and neck cancer patients posted for various diagnostic and definitive procedures with regards to its inherent problems of difficult airway either due to mass or due to associated comorbidities. Appropriate preoperative assessment and definitive planning are vital to avoid any complications during intubation or bag mask ventilation and to reduce morbidity related to procedure. Aims and objectives- Aim of the study was to conduct retrospective analysis of modalities of airway management in high risk patients with difficult intubation undergoing head and neck cancer surgeries (Intubation Nasal Vs Tracheostomy). To observe effect of airway management technique on postoperative outcomes in patients undergoing head and neck cancer surgeries in a tertiary care center.

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length of hospital stay (PLOS). Objective was to calculate incidence of emergency tracheostomy and also to evaluate incidence of elderly HNC patients. Materials and Methods- Retrospective review of medical record of 500 patients was conducted who were operated from 2007 to 2012. Patients were reviewed for mode of airway management, total length of post operative hospital stay and incidence of elderly patients in total number of head neck cancer surgeries posted for various diagnostic and definitive treatments. The incidence of pre-existing comorbid conditions was also noted as it is significant for increase in PLOS. Results- Out of 500 patients 462 patients (92.4%) underwent nasal intubation of which 320 underwent fibreoptic intubation (64%) under Sedation and 10 underwent Tracheostomies (2%). Mouth opening was restricted in 297 patients who were electively fibreoptically intubated (59.4%). Only 10 patients needed introperative tracheostomy, as they had previously undergone surgery as well as CTRT. 3 required emergency tracheostomy (0.6%). 377 Patients extubated within 6-8 hrs of procedure (75.4%), 123 patients were extubated within 14 hrs of surgery as all patients underwent flap reconstruction and length of surgery average was 5.4 hrs (24.6). 12% Patients were above 65 yrs. Average post operative length of hospital stay was 5.2 days. Conclusion- Nasotracheal intubation, using fibreoptic intubation technique in difficult airway is most preferred. Modality of airway management which reduces the postoperative length of hospital stay and morbidity. We had 12% incidence of elderly patients indicating need to modify anesthetic technique for airway control to reduce morbidity due to associated, comorbidities in elderly population which on rise due to increase in average life span.

Abstract Id: YUGP4057
Rare Sarcomas Of The Genital Tract
Presenter - Dr. Sumangala Gali
Co-author - Kiran A Kulkarni, Premalatha T S, Geeta Acharya

INTRODUCTION- Uterine sarcomas are uncommon aggressive mesenchymal tumours comprising of 3% of uterine malignancies. Most frequent is carcinosarcoma (CS), followed by leiomyosarcoma (LMS), endometrial stromal sarcomas (ESS), undifferentiated uterine sarcomas (UUS) and adenosarcoma. CS though considered as metastatic form of endometrial carcinoma, most of the clinical trials and retrospective studies include CS under uterine sarcomas. ESS are very rare accounting for around 0.2% of all uterine malignancies and less than 10% of the uterine mesenchymal neoplasms. Mullerian adenosarcoma is a low grade biphasic tumor composed of malignant stromal and benign epithelial components with recurrences up to 30–40%. Primary LMS has prevalence of around 1% of malignancies of the cervix with its origin being from mesodermal tissue. Vulvar sarcomas represent only 1-2% of vulvar malignancies. This is a report of a series of these rare sarcomas of the genital tract. OBJECTIVE- To study the clinical and histopathological characteristics, treatment outcome, pattern of relapse, and survival of patients diagnosed with rare sarcomas of the uterine corpus, cervix and vulva. MATERIALS AND METHODS- A retrospective data of rare sarcomas of the genital tract collection was done between march 2012 to Dec 2016. Their clinical profile, treatment delivered and survival were noted. RESULTS- Eight pathologically proven - one primary leiomyosarcoma of the uterine cervix, four sarcomas of uterine corpus (three high grade endometrial stromal sarcoma/undifferentiated uterine sarcoma and one adenosarcoma with sarcomatous overgrowth), one carcinosarcoma of the left fallopian tube, one angiosarcoma of the vulva and one case of mucinous cystadenoma of left ovary with sarcomatous change in mural nodule was seen. Post menopausal bleeding was the commonest complaint. They were treated with total abdominal hysterectomy with bilateral salpingo oophorectomy and retroperitoneal lymphnode dissection. Adjuvant chemotherapy was given in 7 cases. 2 patients had recurrence of which one was treated with palliative chemotherapy and the other with cytoreduction. DFS ranged from 8 to 28 months and OS ranged from 8 to 33 months.

CONCLUSION- As these rare sarcomas of the genital tracts are hardly encountered in clinical practice and management guidelines cannot be laid down, need for case series reporting and analysing becomes necessary.

Abstract Id: YUGP4059
Perceived Quality Of Life Among Patients Who Underwent Fibula Free Flap Transfer For Mandibular Reconstruction: A Longitudinal Study
Presenter- Dr. Daniel Maben
Co-author - Dr. Daniel Maben, Dr. Venkatesh Anehosur, Dr. Nirajan Kumar

INTRODUCTION Mandibular segmental resections following neoplasm (benign or malignant) is associated with morbidity and poor quality of life. Free fibular flap is considered the gold standard for reconstruction of mandible. Harvesting the free fibula is associated donor site morbidity which can be assessed using subjective and objective methods. MATERIALS & METHODS A longitudinal study was conducted at SDM craniofacial surgery and research centre in 2013 and 2014. Patients who underwent mandibular reconstruction with fibular flap were included. Subjective perceived Post-operative wound at the donor site was evaluated using Visual analog scale for pain and perceived walking ability, activities of daily living, gait alteration, cosmetic appearance, and overall perceived QOL was evaluated using validated 10-point self - assessment scale. The intervention was conducted in intervals of 15 days, 1month, 3months and 6 months. The test of significance was also conducted to investigate relationship of QOL with gender and age using correlation test. RESULTS There was highly significant reduction in perception of pain after surgery in 6months. There was severe to moderate pain associated with donor site at 15 days which made patient confined to bed and some felt moderate limitation but there was highly significant reduction in perception of limitation in walking after 6 months. After 6 months post-surgical intervention none of the patients had difficulty in carrying out day to day activities. A subjective perception of nil gait alteration was found in all 20 patients. Most of the patients were happy with cosmetic appearance at 6 months after surgery, but one patient was unhappy with scar at donor site. Overall quality of life was satisfactory in all the patients. CONCLUSION Subjective assessment can lead to valuable insights into the patient’s unmet needs, from treatment and enhancement of the physician-patient relationship to improvement in the patient’s quality of life. The study revealed a significant improvement in overall condition of the patient & visual analog scale is a good subjective tool for assessment perceived quality of life in patients undergoing free fibular harvest for mandibular reconstruction.

Abstract Id: YUGP4061
Retrospective Analysis Of Incidence Of Fibre-Optic Intubation In Head Neck Malignancy Patients For Difficult Intubation
Presenter - Dr. Nayana Kulkarni

Co-author - Dr. Rajnish Introduction: Head neck malignancy is associated with high incidence of difficult airway access and unanticipated difficult intubation. Improvement in airway management has brought down the incidence of morbidity and mortality due to cannot intubate cannot ventilate situations. Aims & objectives: 1) Study the incidence of fibre-optic intubation in head neck malignancy. 2) Avoid tracheostomy. 3) Avoid situation of cannot intubate cannot ventilate, as this is difficult airway access. Material and methods: 302 patients were analysed in 1 year of study period and 37 patients underwent fibre-optic intubation. All patients were nasally intubated and there no neuromuscular blocking agent was administered. Inclusion: Oral cancer patients like buccal mucosa, alveolus, tongue and retro-molar triagonetumors posted for commando operation, wide local excision, mandibulectomy, PMMC, free flaps. Exclusion: Thyroid
cancer patients. Results: 37 patients underwent fibre-optic intubation out of 302 patients. Our study period was 1 year of 302 patients with incidence of difficult intubation was 12.25% whereas study period of Bhatnagar study was 2 years for 210 patients with incidence of difficult intubation was 26.20%. Conclusion: 1) Avoid cannot intubate cannot ventilate situations. 2) Avoid tracheostomy and complications. 3) Ease of access of airway prior to surgical intervention as tracheostomy comes in surgical field of dissection. 4) Reduces morbidity and mortality associated with difficult airway situations.

Abstract Id: YUGP4065

Egfr T790M Mutation, A Major Culprit In The Progression Of Egfr Driven Nsclc And The Role Of Repeat Biopsy

Presenter - Dr. Shyam Aggarwal
Co-author - Shekhar Patil, Nitesh Rohtagi

Abstract: Non-small-cell lung cancer (NSCLC) accounts for the majority of primary lung cancer cases worldwide. The activating mutations of epithelial growth factor receptor (EGFR) have been demonstrated to associate with the development of NSCLC, with T790M mutation being the most common. Over the years, EGFR tyrosine kinase inhibitors (TKIs) were developed to target EGFR related mutations. However, patients with activating EGFR mutations who are initially responsive to EGFR TKIs eventually develop acquired resistance after a median progression-free survival of 10–16 months, followed by disease progression. Recently, the third-generation EGFR inhibitors have emerged as potential therapeutic options to block the growth of EGFR T790M-positive tumors. This article reviews the emerging data regarding EGFR mutations and clinical evidence on third-generation agents against EGFR T790M mutation in the treatment of patients with advanced NSCLC. It also reviews the role of repeat biopsy in improving the success rates of treatment of EGFR T790M derived drug resistant NSCLC.

Abstract Id: YUGP4067

Clinical Impact Of Intermediate Dose Level Target In Imrt For Head And Neck Cancer

Presenter - Dr. Sandeep Tiwari
Co-author - Munish Gairola, Parveen Ahlawat, Inderjeet Kaur

Back Ground: There are variations in delineation of targets across institutes for IMRT for head and neck cancers (HNC). The two common approaches in practice are: 2 dose level target IMRT (high-risk and low-risk targets) and 3 dose level targets IMRT (high-risk, intermediate-risk, and low-risk targets). The aim of this study is to compare early disease response and acute toxicities between these two approaches of IMRT. Material and Methods: This was a prospective randomized controlled study comparing patients treated with definitive chemoradiation. Fifty four patients were randomized equally into two treatment arms: 2 dose level IMRT (70Gy/35# for High-risk CTV and 63Gy/35# for low-risk CTV) and 3 dose level IMRT (70Gy/35# for High-risk CTV, 63Gy/35# for intermediate-risk CTV, and 56Gy/35# for low-risk CTV). All patients received weekly cisplatin 40 mg/m2. Early disease response evaluation was done at 3 months after the completion of treatment and acute toxicities were assessed weekly during treatment and compared between the two arms. Results: There was no significant difference in early disease response between the two treatment arms (complete response: 60.7% vs 72.4%; in 3 dose level IMRT and 2 dose IMRT respectively; p = 0.349). Acute toxicities 7 Grade 3 were comparable between the two arms: mucositis (63.3 % vs. 66.7 %, 3 dose level IMRT and 2 dose IMRT; p=0.373), dermatitis (43.3 vs 33.3 %, 3 dose level IMRT and 2 dose IMRT; p = 0.573), xerostomia (53.3 vs 33.3%, 3 dose level IMRT and 2 dose IMRT; p = 0.157) and dysphagia (46.7 vs 46.7%, 3 dose level IMRT and 2 dose IMRT; p = 1.00). Conclusion: Introduction of intermediate dose level target for head and neck IMRT does not impact early disease response and acute toxicities.

Abstract Id: YUGP4069

Does Presence Of Obstructive Jaundice Preclude Definitive Surgery? Evidence Au Contraire

Presenter - Dr. Preethi S Shetty
Co-author - Dr Mihir Chandarana, Dr Shraddha Patkar, Dr Mahesh Goel

Abstract: Introduction: Gall bladder carcinoma is known to commonly present in advanced stages, with obstructive jaundice being the most ominous sign of the same. Worldwide such patients are usually declared palliative and offered best supportive care. However, there is recent evidence to the contrary. We present a retrospective study on survival data of operated patients of carcinoma gall bladder with preoperative obstructive jaundice. Aims & Objectives: To study the survival outcomes in operated patients’ of carcinoma gall bladder with obstructive jaundice and factors influencing the same. Material and Methods: A retrospective analysis of gall bladder carcinoma patients was done from a prospectively maintained database from January 2010 to June 2017. Results: Of the 831 patients operated for a suspected gall bladder carcinoma, 59 patients (7.0%) presented to us with obstructive jaundice with a mean bilirubin level of 6.3 mg/dl. The median CA 19-9 level among these patients was 93ng/dl. 50 of them underwent pre-operative biliary drainage. Neoadjuvant chemotherapy was given in 34 patients and neoadjuvant chemoradiotherapy to 4 patients. The resectability rate was 65%. The median disease free survival (DFS) was 12 months with a mean overall survival of 46 months. On univariate analysis, the OS was found to be influenced statistically by presence of metastatic disease during surgery, resection status and adjuvant therapy. However on multivariate analysis, none of these factors were statistically significant. The DFS however was influenced only by adjuvant therapy. The mortality rate was 3.4% with a morbidity rate of 25%. The results of surgery were comparable to patients presenting to those without jaundice. Conclusions: The presence of obstructive jaundice in a patient with gall bladder malignancy doesn’t preclude surgery. Adjuvant treatment, absence of metastatic disease at the time of surgery completeness of resection are essential to achieve outcomes similar to non-jaundiced patients.

Abstract Id: YUGP4071

Malignant Melanoma Of The Parotid - Case Report And Review Of Literature

Presenter - Dr. Ghritashee Bora
Co-author -

ABSTRACT: INTRODUCTION: Although incidence of head and neck cancer in northeast India is one of the highest in the world, malignant melanoma of head and neck is relatively uncommon. We are reporting an extremely rare case of primary Malignant Melanoma in Parotid gland at our institute and review of literature. MATERIALS AND METHODS: Evaluation of a 69 years old male presented with symptoms of swelling below the right ear lobe for two months. PET-CT showed high grade metabolic activity in heterogeneously enhancing soft tissue nodular lesion in postero-medial aspect of superficial lobe of Right Parotid with sub-centimetre bilateral cervical nodes. There was no evidence of abnormal metabolically active lesion anywhere else. FNAC of neck node was done for histo-pathological diagnosis which was suggestive of metastasis of Melanoma. Patient underwent Right Superficial Parotidectomy with selective neck dissection and Pre-Auricular mole excision. Post-operative HPR showed a blackish brown nodule of size 4×2×2 cm with closest cut margin of 0.5cm Right lateral, suggestive of Malignant melanoma. The nodule was surrounded by lymphoid tissue ,no extra-capsular margin of 0.5cm Right lateral, suggestive of Malignant melanoma. The nodule was surrounded by lymphoid tissue ,no extra-capsular..
up. RESULT AND DISCUSSION: Melanoma of parotid is a very rare entity and most of them appear to represent as metastasis from other head and neck cutaneous melanoma. It is characterised by difficult and late diagnosis as well as poor prognosis, further its occurrence as primary in the Parotid gland is a rarer entity. It is assumed that Primary Malignant Melanomas of the Parotid originate in the glandular tissue or in intra-glandular Lymph Nodes, the most common symptom being a progressively enlarging, asymptomatic, firm and fixed mass. Primary treatment is surgical excision, followed by adjuvant treatment when indicated. CONCLUSION: Malignant Melanoma of the Parotid, although a rare entity, should be considered in the differential diagnosis of Parotid tumours. The treatment of choice is Parotidectomy with Selective Neck Dissection. The effectiveness of Adjuvant treatment in the form of Radiotherapy, Chemotherapy or Immunotherapy still remains controversial. Prognosis remains poor due to a late diagnosis and to an inherent aggressiveness of this type of tumour.

Abstract Id: YUGP4075
Aggressive Multi-Modality Approach For Ct1N0M1B Non Small Cell Lung Carcinoma With Synchronous Limited Brain Metastasis - A Case Report
Presenter- Dr. Thanju Leethash Thankachen
Co-author - Dr Geetha S Narayanan, Dr M.S Ganesh, Dr Roshan Koshy Jacob

NON SMALL CELL LUNG CARCINOMA (NSCLC) IS A LEADING CAUSE OF CANCER RELATED DEATH WORLDWIDE. 50 % OF THE CASES ARE METASTATIC AT DIAGNOSIS AND 20% DEVELOP BRAIN METASTASIS. AGGRESSIVE TREATMENT OF PATIENTS WITH THORACIC STAGE I OR STAGE II NSCLC AND ONE TO THREE SYNCHRONOUS BRAIN METASTASIS , TREATED WITH STERIOTACTIC RADIOSURGERY (SRS) FOR THE BRAIN LESION COMBINED WITH RESECTION OF LUNG TUMOR HAVE RESULTED IN BETTER SURVIVAL (MEAN SURVIVAL OF 64.9 MONTHS) HERE WE REPORT A CASE OF 47 YEAR OLD MALE PATIENT WHO PRESENTED WITH VAGUE CHEST DISCOMFORT OF 3 MONTHS DURATION. ON ROUTINE EVALUATION PATIENT WAS DETECTED TO HAVE A LUNG NODULE WHICH WAS CONFIRMED AS ADENOCARCINOMA ON BIOPSY. PET CT DONE FOR STAGING SHOWED RIGHT UPPER LOBE LESION (24 X 20 X 21 MM WITH SUV 9.8) ALONG WITH TWO LESIONS IN BRAIN , ONE IN THE TEMPORAL LOBE (9 X 8 MM WITH SUV 9.4) AND SECOND IN LEFT CEREBELLUM (18 X 15 MM WITH SUV 11.8)-CT1N0M1b. AFTER DISCUSSION IN THE MULTI-SPECIALITY BOARD AND IN CONCURRENCE WITH NCCN GUIDELINES, PATIENT WAS TAKEN UP FOR RESECTION OF THE PRIMARY LUNG LESION FOLLOWED BY SRS OF THE TWO LESIONS IN THE BRAIN. PATIENT TOLERATED THE PROCEDURES WELL. PATIENT IS ON CHEMOTHERAPY PRESENTLY AND IS DISEASE FREE SINCE 3 MONTHS. PATIENT WILL BE FOLLOWED UP CLOSELY TO DOCUMENT PROGRESSION FREE SURVIVAL AND OVERALL SURVIVAL. PREVIOUS STUDIES HAVE DOCUMENTED THE ROLE FOR SURGERY/SRS OF THE LIMITED BRAIN METASTASIS ALONG WITH RESECTION OF THE PRIMARY TUMOUR IN PATIENTS WITH SYNCHRONOUS RESECTABLE THORACIC NSCLC. AGGRESSIVE MULTI-MODALITY TREATMENT SHOULD BE RECOMMENDED IN THESE SUBSETS OF PATIENTS CONSIDERING THEIR FAVOURABLE OUTCOME.

Abstract Id: YUGP4077
Oncogenic Drivers In Nsclc And Resistance To Egfr Tki
Presenter- Dr. Anand Pathak
Co-author - Senthil Rajappa, Adwait Gore,

Non-small cell lung cancer (NSCLC) is increasingly being treated with targeted therapies. Epidermal Growth Factor Receptor (EGFR) has been extensively studied in NSCLC as an oncogenic driver. However, the efficacy of the EGFR tyrosine kinase inhibitors (TKIs) is adversely impacted by the development of resistance. The occurrence of de novo resistance to EGFR TKIs is attributed to multiple mechanisms such as point mutations of oncogenes and chromosomal rearrangements. The development of acquired resistance to EGFR TKIs is facilitated by secondary mutations, phenotypical transformation, aberrance of downstream pathways and activation of alternate signalling pathways. The T790M mutation is the most common mutation that accounts for about half of the acquired resistance to EGFR TKIs. This review article provides an overview of the common oncogenic drivers, targeted therapies for NSCLC and the established mechanisms implicated in the development of resistance to the EGFR TKIs.

Abstract Id: YUGP4079
Metronomic Therapy In Recurrent Head And Neck Cancer Patients
Presenter- Dr. Sirshendu Roy
Co-author - Dr. Rajnish Nagarkar, Dr. Sirshendu Roy, Dr. Mayank Patil

INTRODUCTION- Head and Neck cancer forms a major contributor towards the burden of cancer in India. Despite advances in Surgery, Chemotherapy and Radiotherapy, the prognosis of patients with head and neck cancer has not improved in past decades. Metronomic therapy exerts its anti-cancer activity by inhibiting tumour angiogenesis and inducing tumour dormancy. This therapy may prove useful, especially in cases of recurrent head and neck cancer, considering the anti-angiogenic activity. The current study aims to identify the prognosis of patients with recurrent head and neck cancer who undergo metronomic therapy MATERIAL AND METHODS- The study was a retrospective analysis carried out at a tertiary cancer centre in Nashik. It included 53 operated cases of Head and Neck cancer that came with recurrence from year 2013 to 2017. This study included the cases that were unfit for surgery, intra venous chemotherapy or not willing to undergo another surgery. These patients were started with oral tablets of gefitinib, endoxan and methotreaxate. The case files of these patients were examined to study response of this therapy. RESULTS- It was observed that out of 53 cases, 24 cases were stable and 29 cases hadprogressive disease. The cases that were stable were on metronomic therapy for an average 4-6months. Out of the stable cases, 13 were on Gefinet and 11 were on Methotreaxate. It was also seen that out of 53cases, 17 were having nodal recurrence. CONCLUSION- It is concluded that patients who were on oral metronomic therapy for an average of four months responded well to the therapy. It is also a safer and cheaper option to improve quality of life of head and neck cancer patients with recurrent disease.

Abstract Id: YUGP4081
Title: The Impact Of Systematic Lymphadenectomy In The Management Of Epithelial Ovarian Cancer: A Single Institution Experience
Presenter- Dr. Kiran Kulkarni
Co-author - Kiran Abhijit Kulkarni, Geeta Acharya, Premalatha T.S

Title: The impact of systematic lymphadenectomy in the management of epithelial ovarian cancer: a single institution experience

1 Department of Gynecologic Oncology, 2 Department of Biostatistics, 3 Department of Pathology, St. John's Medical College, Bengaluru Background: Ovarian cancer is the most fatal of gynecologic malignancies. The benefit of maximal surgical effort towards achieving complete cytoreduction, on the overall survival is well established. However, the extent of lymph node assessment is not well defined and practices are variable in different centers. This study attempts to assess the impact of systematic lymphadenectomy in the management of epithelial ovarian cancer.
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'Actionable' variants in 81% cases with direct impact on therapy/ prognosis with significant genetic aberrations in RAS/RAF, PI3K/ AKT and TP53/ APC signaling pathway. KRAS gene showed higher mutational frequencies of 54% followed by APC gene mutated in 44% of cases. KRAS was found to be co-mutated with APC and/or disruptive/non-disruptive mutations in TP53 (76%) indicating poor response to 5-fluorouracil (5-FU) based adjuvant chemotherapy and poor prognosis respectively. Lower frequency of mutation was observed in NRAS (3%) and SMAD4 (2%) genes. Out of total 200 cases, 46% cases with wild type KRAS (single gene testing) treated with anti EGFR mAB therapy had progressed with a poor outcome. Retrospective FFPE blocks of these patients were tested with NGS based multi gene panel and were found to have mutations in other important genes like NRAS, PIK3CA, APC, TP53, BRAF etc. indicating poor response to anti-EGFR agents and 5-fluorouracil (5- FU). The mutations in PIK3CA gene indicated favourable response to mTOR inhibitor Everolimus, suggesting targeted therapy option for these CRC patients. Even KRAS mutated patients who were treated with 5FU based chemotherapy regimen/riritonotecan monotherapy and who had progressive disease/bad prognosis were tested positive for other gene mutations. Conclusion: This study shows that KRAS mutation status is not the only predictive marker for the resistance to anti-EGFR therapy and emphasizes the utility of NGS based multi- gene testing before initiating anti EGFR therapy to decipher alternate pathways and targeted therapy options in CRC based on the mutation spectra of the patient. This will help in patient stratification leading to precision treatment, decreasing cost and adverse side effects related to chemotherapy.

Abstract Id: YUGP4084

"Various Addiction Patterns, Dietary Habits, Associated Medical Problems And Socioeconomic Status In Gastro-Intestinal Malignancies: A Prospective Study In Rural Area Of Maharashtra, India"

Presenter - Prof. Vandana Jain
Co-author - Darshana Kawale, Shailendra M Jain, Chaitali Waghare

Various addiction patterns, dietary habits, associated medical problems and socioeconomic status in gastro-intestinal malignancies: A prospective study in rural area of Maharashtra, India. Jain Vandana S., MD, Professor & Head Kawale Darshana,MBBS, Senior Resident Jain Shailendra M., MD, Professor Waghare Chaitali, MD, Associate Professor Pemmaraju Gopal, MBBS, Senior Resident Abstract Background: Gastro intestinal (GI) malignancies (from Esophagus to anus) are increasing with advancing age, various addictions and poor dietary habits. Early detection is difficult till patient notices symptoms. Primary prevention by knowing various risk factors and early symptom awareness will help in the healthier outcome. Objectives: This study is carried out to see various addiction patterns, dietary habits, associated medical problems and socioeconomic status with various sites involved in GI malignancies, in a tertiary care teaching hospital of Western Maharashtra, India. Materials and Methods: This prospective study is designed to know about various addiction patterns, dietary habits, associated medical problems and socioeconomic status, along with age, sex, various sites and the stage at first visit of all histopathologically proven cases of gastro-intestinal malignancies reporting in the Department of Radiotherapy & Oncology for treatment. Oral cavity to cricopharyngeal carcinomas NGS based single gene testing are likely to respond to anti-EGFR agents, only a fraction of patients are benefited from anti-EGFR agents (mAb) and chemotherapeutic resistance in CRC patients are common. It remains an unmet need to identify other molecular defects against which targeted therapy are available for improving clinical outcomes. The ability of Next generation sequencing (NGS) methods, to analyze several genes in parallel, could represent a valuable alternative in detecting the numerous genetic changes implicated in anti-EGFR mAb resistance. The current study aims to identify frequent hotspot mutations in CRCs using NGS, correlate with treatment and prognosis to determine their clinical impact. Methods: Out of total 200 cases of CRC aged 18-80 years (Median Age: 51) with known KRAS mutation status, 85 were consented to be profiled by Next Generation Sequencing (NGS) using 48 gene TruSeq Amplicon cancer panel from Illumina on MiSeq platform in an IRB approved study. All the cases had pathology review for histological type and grade. Average coverage across 212 amplicons were greater than 1000X. The FASTQ files generated by MiSeq Reporter (v2.6) of Illumina were further analyzed for variant calling and annotation using Strand NGS™. Mutations identified in the tumor were assessed for actionability, response to therapy and impact on prognosis. Results: Prospective analysis revealed

Clinical and Prognostic Implication Of Multigene Profiling In Colorectal Cancer Patients

Presenter - Mr. Rajesh Kumar KS
Co-author - Sheela ML, Nagesh Muniyappa, Shekar Patil

Clinical and Prognostic Implication of Multigene Profiling In Colorectal Cancer Patients Introduction: Colorectal cancer (CRC) is the third most common cancer and one of the leading causes of cancer related deaths worldwide. Development of CRC is characterized by the accumulation of multiple genetic alterations. Until recently, KRAS mutation status was the only validated predictive biomarker in this disease that has immensely improved the survival rates of patients with metastatic CRC (mCRC) by the administration of anti-EGFR monoclonal antibody (mAb). While KRAS wild-type patients are likely to respond to anti-EGFR agents, only a fraction of patients are benefited from anti-EGFR agents (mAb) and chemotherapeutic resistance in CRC patients are common. It remains an unmet need to identify other molecular defects against which targeted therapy are available for improving clinical outcomes. The ability of Next generation sequencing (NGS) methods, to analyze several genes in parallel, could represent a valuable alternative in detecting the numerous genetic changes implicated in anti-EGFR mAb resistance. The current study aims to identify frequent hotspot mutations in CRCs using NGS, correlate with treatment and prognosis to determine their clinical impact. Methods: Out of total 200 cases of CRC aged 18-80 years (Median Age: 51) with known KRAS mutation status, 85 were consented to be profiled by Next Generation Sequencing (NGS) using 48 gene TruSeq Amplicon cancer panel from Illumina on MiSeq platform in an IRB approved study. All the cases had pathology review for histological type and grade. Average coverage across 212 amplicons were greater than 1000X. The FASTQ files generated by MiSeq Reporter (v2.6) of Illumina were further analyzed for variant calling and annotation using Strand NGS™. Mutations identified in the tumor were assessed for actionability, response to therapy and impact on prognosis. Results: Prospective analysis revealed
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Abstract Id: YUGP4086

Free Flap Reconstructions Of Head And Neck Defects After Oncologic Ablation

Presenter- 'Dr. Sirshendu Roy
Co-author - Dr. Rajnish Nagarker, Dr. Sirshendu Roy, Dr. Yash Devokar

Background Head and neck cancer are sixth most common cancers worldwide. Primary modality of treatment for most head and neck cancers is Surgery with reconstruction of resultant defects. Reconstruction of these defects is a unique challenge as it has to not only restore integrity but also restore function and often cosmesis. The objective of this study was to assess the utility of free flaps in the reconstruction of these defects, done in a tertiary care centre in a three tier city of India. Methodology We analyzed the computerized medical records in this Retrospective study carried out in the department of head and neck oncology, HCGManavata Cancer Centre from March 2014-March 2017. Cases who had undergone surgery for head and neck malignancy, who underwent free flap reconstruction were included in the study. Results Out of the 1061 casesrequiring reconstruction after an oncologic ablation,201 cases underwent Free Flap reconstruction.Radial forearm was the preferred donor free flap for defects requiring faciocutaneous reconstruction, while Fibula was the preferred donor site for mandibular reconstructions. Free Flap survival rate was 94.5% with factors like age and comorbidities like Diabetes and hypertension or habits like Cigarette smoking or tobacco chewing not affecting survival rates.20 cases ofminor flap complications were observed. Conclusions Free flap reconstructions for head neck defects after oncologic ablation have been a boon with good survival rates and immense flexibility of use, giving good cosmetic and functional outcomes. Our study shows that a significant number of Free Flap Reconstructions can be done in a tertiary care centre in a three tier city of India with an internationally comparable survival rate.

Abstract Id: YUGP4088

Comparison Of Msi Detection In Colorectal Adenocarcinomas By IHC And Molecular Methods.

Presenter- 'Dr. Shefali Karve
Co-author - Dr.Veena R.,

Abstract for Paper presentation at Indian Cancer Congress 2017 Full Name : Dr.Shefali.H.Karve Academic Qualification: M.D.Pathology Institution Name: HCG,Bangalore Address: No.5, Bull temple road, Basavanagudi, Bangalore-560004. Mail id: shefalikarve@gmail.com Abstract title: Comparison of MSI detection in Colorectal Adenocarcinomas by IHC & molecular methods. Co-author: Dr.Veena R.S. , Head of Histopathology Dept. Hcg, Bangalore. Abstract Body : Colorectal cancer is the third most common cancer and is one of the leading causes of cancer related death. It develops either sporadically(85%) or as part of a hereditary cancer syndrome(<10%) or against a background of IBD. The adenoma carcinoma sequence underlies the development of CRC in most patients and 2 other distinct pathways have been identified – MSI & CIN. Discovery of these pathways led to the paradigm of CRC as a genetically heterogenous disease. Approximately 15% of CRC display high level of microsatellite instability (MSI-H) due to either a germline mutation in one of the genes responsible for DNA mismatch repair (Lynch syndrome) or somatic inactivation of the same pathway, most commonly through hypermethylation of the MLH-1 gene (Sporadic MSI-H). MSI refers to the hypermutable state of cells caused by impaired DNA mismatch repair(MMR). It consists of insertion & deletion mutations in stretches of short tandem DNA repeats (microsatellites) as well as nucleotide substitutes throughout the genome. Mutations in the DNA mismatch repair genes,MLH,MSH2,MSH6 & PMS2 result in a failure to repair errors in repetitive sequences, leading to MSI-H CRCs respond poorly to 5-FU based chemotherapy, but they maybe efficiently treated with camptothecin derivatives. Novel therapies that stimulate the immune system have been evaluated in mismatch
repair deficient tumors, including those related to Lynch Syndrome. The dense immune infiltration and cytokine-rich environment in mismatch repair-deficient tumors may improve clinical outcomes. A critical pathway responsible for mediating tumor induced immune suppression is the PD-1 mediated checkpoint pathway. Objectives of the study: 1) Frequency of MSI in the study population. 2) To study the expression of MSI markers- MLH1, MSH-2, PMS-2 & MSH-6 in colorectal cancers by IHC. 3) Correlation between MSI expression & histopathological features of CRC. 4) Correlation between IHC studies and molecular studies for MSI detection. Materials and methods: ? Study place : Department of Pathology, HCG cancer center, Bangalore. ? Study population: Colorectal cancer specimens of received in pathology department. ? Study design : Prospective and Retrospective ? Sample size: 54 cases ? Study duration : April 2016 to December 2017. ? Inclusion criteria: - According to Bethesda criteria. ? Exclusion criteria: - Metastatic colorectal carcinoma. Methodology: ? Surgically resected colorectal specimens from patients diagnosed with adenocarcinoma will be received and representative sections given and further processed. ? These will be stained with H&E and morphological features analyzed and tumor will be staged. ? Further those cases which fulfill the inclusion criteria will be subjected to IHC testing for the 4 MSI markers - MLH1, PMS2, MSH2 and MSH6 , in the Semiautomated Intellipath system from Biocare Medicals(USA). ? The above will further also be subjected to Flourescence – based multiplex microsatellite PCR. The PCR products will further be analyzed by Genetic Analyzer machine. Statistical analysis: ? Descriptive statistics ( frequency,% , Mean, Median and Standard deviation[SD] ) will be used to describe data such as patient demographics and tumor-specific variables. ? Statistical analysis will be done to assess any significant correlation of MSI with stage, age, location of tumor and histopathological features and correlation between IHC studies and molecular studies by chi-square test. ? SPSS Software , version 23(2015) will be used for the analysis. Results and conclusions are awaited.

Abstract Id: YUGP4090
Using Circulating Tumour Dna (Ctdna) As A Liquid Biopsy-A Validation Study
Presenter- Dr. Yogesh Shivakumar
Co-author - Krishna.C.R, Aninditha Kundu, Dr. Mohammad Nasiruddin

Basis of the study: A liquid biopsy is a biomarker that can be isolated from body fluids such as blood, saliva, urine, ascitic fluid or pleural fluid. Like a tissue biopsy, it is representative of the tissue from which it has spread and addresses the heterogeneity in tumor. ctDNA is tumour DNA that has been shed into the blood stream and can be present in 0.01% - 90% of the total Cell Free DNA (cfDNA).The amount of ctDNA is co-related to the tumour burden and varies between patients with different clinical presentations. Monitoring ctDNA is a non-invasive method to understand the tumour genotype and analyzing the fraction of mutant alleles from ctDNA compared to normal alleles from the patient's normal genome gives a clear picture of mutational load. This data has significant clinical utility in cancer diagnosis, prognosis and tumour monitoring. ctDNA can also be used as surrogates of drug or treatment response and aid in looking for resistant mutation (eg: T790M in EGFR positive patients)when solid biopsy is not an option. Methods: These findings are based on development and validation of a lab-developed test (LDT) to establish liquid biopsy platform. Retrospective and prospective FFPE blocks obtained from tissue biopsy of 25 lung and 25 colorectal cancer patients along with horizon’s reference standards were used for the study. 10 ml of blood was collected in Streck tubes or EDTA tube. The plasma was separated within 48-72 hours and total circulating DNA was isolated from plasma. Fluid chromatography was established using a spiked synthetic DNA. Droplets were generated by mixing the PCR reactions with oil and partitioned using the QX200TM Droplet Generator. The droplets were retrieved and PCR performed in a thermocycler. Post PCR, the droplets are individually counted on the droplet reader which uses a fluorescence-based technology. The analysis was performed using QuantSoftTM software and focused on actionable mutations in non-small cell lung cancer-epidermal growth factor receptor gene (EGFR) variants Exon 21-L858R, exon 19 deletions and exon 20- T790M resistance inducing mutation and GTPase Kirsten ras sarcoma (KRAS) variants on codon 12 (G12A/V/ S/D/R) and codon 13 (G13D). Mutant negative controls were used to establish the threshold for background signal for each assay. Positive controls were used to qualify PCR efficiency for the assay while a no-template-control (NTC) is used to rule out cross-contamination of samples. The software automatically calls the number of mutant copies in the sample, which is then verified and reviewed. Result: The Clinical sensitivity, specificity along with concordance when checked against biopsy was 88 % - 100% and 94 %-100% respectively. The analytical sensitivity was established using horizon reference standards and was set at 0.1% LOD at 5000 genome copies equivalent for all the variants. The copy number of the variants was tabulated and the data was co-related with the patient's histopathological data. Interestingly our test could detect EGFR T790 M mutation in two lung cancer patients from the plasma ct DNA before it was detected in tissue biopsy. EGFR T790M mutation is an acquired resistance mutation for first and second generation EGFR tyrosine kinase inhibitors(TKIs) like erlotinib gefitinib, afatinib and indicates good response to third-generation tyrosine kinase inhibitor (TKI) Osimertinib. These patients were started on Osimertinib and are on follow up. Conclusion: This highly sensitive and actionable blood based ctDNA assay provides a minimally invasive technique which is low risk, easily repeatable and an effective biomarker to monitor disease progression and earliest measure of response to treatment thereby expanding testing options leading to better treatment decisions.

Abstract Id: YUGP4094
Role Of Whole Body Versus Regional Fdg Pet-Ct Scan In Head And Neck Malignancy.
Presenter- Dr. Alok Pawaskar
Co-author - Dr. Rajnish Nagarkar, Dr. Alok Pawaskar, Dr. Pradip Kumar

Introduction: FDG PET-CT scan has been playing major role in management of head and neck (H&N) malignancies. FDG PET-CT is by default whole body imaging modality in oncology. Recently there have been suggestions that half-body (above diaphragm) PET-CT may be sufficient for the management of H&N cancer patients. This would save money and radiation exposure for the patient and resources for the hospital. Aim: This study aims to determine if half-body PET-CT is sufficient in management of head and neck malignancies or whole-body PET-CT scan needs to be done for complete evaluation in H&N malignancies. Materials and Methods: Total 1802 patients of head and neck malignancy had undergone FDG PET-CT scan at our centre from March 2014 to March 2017. After application of exclusion criteria, 165 patients who had undergone whole body PET-CT were included in the study. Of these; 144 were males, 21 were females with age between 21 yrs to 84 yrs. These include following cancer patients: Tongue (64), buccal mucosa (52), hard palate(6),Gingivobuccal sulcus(2), Floor of mouth(2), alveolus(9), oropharynx (17),Nasopharynx(5), Hypopharynx(4), Supraglottis(3), Unknown primary(5). Out of these 69 scans were done for suspected recurrence, 31 for staging and 65 for evaluation of response to therapy. These scans were evaluated for oncological findings outside head and neck region and findings below diaphragm. Results: Out of 165 patients of head and neck malignancy who underwent whole body PET-CT, 79 patients (47.9%) had findings related to malignancy outside head and neck region. Out of these 79 patients who had findings outside head and neck region, 43(26%)patients had findings in lungs and adjacent lymph nodes i.e. region above diaphragm. There were no abnormal PET-CT findings below diaphragm in these patients. Hence if only semi-body PET-CT
i.e. above diaphragm was performed in all the 79 patients; still 36 patients (22%) would have missed metastatic disease. In 52 patients of carcinoma of buccal mucosa; 29 (55.8%) patients had findings outside head and neck region. In 26 patients who had undergone scan for staging of head and neck malignancies; 10(38.5%) had positive findings outside head and neck region. Similarly 69 patients who underwent scan for suspected recurrence, 39 (56.5%) had findings outside head and neck region. And those who underwent scan for evaluation of response to therapy, 29 (65.4%) had metastatic findings outside head and neck region. Discussion: Significant number of patients with head and neck malignancies have metastatic disease outside head and neck region. Further extending scan up to diaphragm reduces number of missed metastases. Still significant number of patients (around 22%) would miss distant metastases if hemi-body scan is done. Primary organ in head and neck malignancy or indication for which scan is done does not have significant effect on distant metastases detected on whole body scan. Out of all patient groups, those with suspected recurrent disease have maximum number of patients having metastatic disease detected below diaphragm. Conclusion: It appears that, significant number of patients would miss findings on WB PET-CT if their scanning is limited to head and neck or hemi-body. This has significant bearing on management of these patients. Hence we recommend whole body FDG PET-CT scan for all the patients of head and neck malignancy. This data needs validation with larger patient numbers and better patient classification.

Abstract Id: YUGP4098
Title: Outcome Of Pediatric Osteosarcoma- A Single Center Experience
Presenter- Dr. Intezar Mehdi
Co-author - Dr Pramod S Chinder, Dr Suma T L, Dr Amit G

Type: Retrospective analysis Background: Osteosarcoma is the most common malignant bone tumor in children comprising about 4-5% of all childhood cancers. It commonly affects children in adolescent age group with slight male preponderance. Usually affects long bones with bones around knee joint being commonest. Pain and swelling are the usual presentation symptoms. Appropriate imaging followed by diagnosis with an image-guided biopsy is the key. Staging followed by proper MDT discussion for planning treatment is critical to success of therapy. The standard approach is to give Neoadjuvant chemotherapy with combination drugs out of which MAP- High dose Methotrexate, Adriamycin and Cisplatin is the preferred option followed by surgery- which could be limb salvage vs amputation followed by adjuvant chemotherapy. Overall cure rates are about 60-70% for localized disease and 30% for metastatic disease. There is not enough data on outcomes of children with MAP based regimens from our country. Subjects and Methods: We retrospectively analyzed the data from Jan 2011- July 2017 to study the existing epidemiological pattern, clinical presentation, relevant investigations, the protocols being used with special emphasis on outcome and survival. Results: A total number of 29 cases were studied. Total number of childhood cancer amongst kids in the same duration is around 300 (incidence at our institution 10%). Mean age at diagnosis was 14.8±3.1 years and median was 16 years. 65.5% were males. Distal femur was the commonest site 16 of 29 cases (55.17%) Pain (25, 86.2%) and swelling (22, 75.9) were the common presentations. Localized disease was seen in 18(62.1%), 11 (37.9%) were metastatic. Lungs (10, 34.5%) was the commonest metastatic site. MAP protocol was used in 14 (48.3%) and rest were on AP or IAP regimens. Surgery was done in 23 (79.3%) out of which 14 were on MAP regimen. Limb salvage surgery was done in 21(72.4%) out of which 13 were on MAP regimen. More patients on non-MAP regimen did not undergo surgery and the amputation rates were higher. Tumor necrosis which is an important predictor of outcome was higher in MAP group with 13 (44.83%) cases achieving >90% necrosis. Toxicity with febrile neutropenia, Mucositis and blood product requirement was higher in the MAP group but there were no deaths related to chemotherapy toxicity. Localized disease had a survival of 7/8 (87.5%) in MAP group and 8/10 (80%) in non-MAP group. Metastatic kids had a survival of 6/6 (100%) in MAP and 3/5 (60%) in non-MAP group with a follow up median duration of 51 months. Conclusions: Osteosarcoma is the commonest malignant bone tumor in children. MAP regimen is the preferred chemotherapy protocol with good response rates, better necrosis, and limb salvage surgery being possible in majority of the case with better outcomes. It is reasonably well tolerated with manageable toxicities. Longer follow up and larger numbers are required to ascertain the feasibility of this protocol in resource limited settings.

Abstract Id: YUGP4100
Understanding The Role Of Non-Coding Rnas As Modulators Of Chemoresistance In Lung Cancer
Presenter- Ms. Namratha Nadig
Co-author - Sudhanshu Shekar, Namratha Nadig, Prathibha Ranganathan

Chemoresistance has emerged as a major impediment in the field of cancer treatment. Resistance to anti-cancer therapeutics may already exist in tumor cells, prior to the treatment, or may arise as a result of therapeutic burden and positive selection. Several lines of evidence have established the involvement of microRNAs (miRNAs), a class of non-coding RNAs, in tumorigenesis and more importantly, in the acquisition of chemoresistance. In the present study, we investigated the role of dysregulated miRNAs that modulate the chemoresistant phenotype using lung cancer cell line. By analyzing small RNA sequencing data from chemoresistant sub-lines of a lung cancer cell line, we identified differentially expressed miRNAs involved in regulating chemoresistance. Using miRNA databases and miRNA target prediction tools, we identified potential target genes of the differentially expressed miRNAs. Further, we integrated the predicted target gene set with the differential expression transcriptomic profile using microarray to identify relevant target genes that are involved in the process of chemoresistance.

Abstract Id: YUGP4102
A Case Of Fibrolamellar Hepatocellular Carcinoma Managed Surgically At Atertiary Care Cancer Centre
Presenter- Dr. Prakash Pandit
Co-author - Dr. Rajnish Nagarkar, Dr. Prakash Pandit, Dr. Sagar Bhale Rao

Introduction- Fibrolamellar hepatocellular Carcinoma (FHCC) accounts for approx. 1% of the total primary hepatic malignancies with onset in the age group of 15-25 yrs. The treatment of choice in such cases is surgical resection of the tumour followed by liver transplant. Case Report- The patient was a 20yrs old male who presented with vague abdominal pain & fever for the past one year. They had visited multiple hospitals in past and after diagnosing a hepatic mass were advised Liver transplant. Not wanting to undergo a radical surgery, the patient was brought to our centre. After identifying a hepatic mass on Ultrasonography, hepatic biopsy was done and the diagnosis of FHCC was confirmed. Instead of liver transplant, as per the patient’s choice, Bisegmentectomy was done. Final histopathological diagnosis confirmed FHCC. Post-surgical recovery was uneventful. The patient has been on regular follow up for the past 5 years and currently is disease free. Discussion- FHCC is a rare malignancy with comparatively poor outcome. As this malignancy is commonly found in teenagers and young adults, families of such patients are not willing for radical surgeries. If such cases are identified early, conservative surgery is a viable option. This also puts less financial strain on the patient with good outcomes.

Abstract Id: YUGP4104
Abstract Id: YUGP4106

From Tissue To Dna - A Big Leap In Precision Oral Onco Care Predict, Prevent, Personalize And Practice
Presenter - Dr. Biren Banerjee
Co-author - , , ,

With the completion of Human genome project and Next generation rapid DNA sequencing based platforms, there has been a global phenomenon of Molecular medicine. In the last three decades, with the advent of high end technology and tools in Molecular Life sciences, there has been a transition from Blood/Serum/Sputum/ Tissue, Protein based diagnostics to Nucleic Acid(DNA/RNA) based Diagnostics. Head and neck squamous cell carcinoma (HNSCC) is sixth prevalent cancer in world and has highest incidence in India .The major obstacle for treatment of HNSCC is disease relapse and therapeutic resistance. The primary reason associated is presence of cancer stem cells (CSCs). CSCs have property of enhanced tumorigenicity and intrinsic resistance to drugs, which further implicated in carcinogenesis and treatment failure in many cancers. We have investigated the oral CSCs and tried to integrate the DNA damage response pathways, telomere maintenance pathway leading to therapy resistance in Oral CSCs It is imperative to understand the complexities of Genome based changes which are acquired and inherited. Genetic Disorders are mainly classified as inherited genetic instability, with higher frequency of anaphase bridges (18%) and shorter telomere length when compared to lower grade tumors. We further overexpressed -catenin in oral cancer cell line and observed reduced chemosensitivity towards Cisplatin, apoptosis evasion and enhanced DNA damage repair capacity. Silencing of -catenin, in cisplatin resistant cells increased chemosensitivity, and reduced CSC marker expression. Silencing of TRF2 (telomeric shelterin component) was further observed to form smaller oral cancer spheroids, impaired DNA damage repair capacity, reduced expression of CSC markers like CD44, Oct4, Sox2, reduced expression of and ERCC1 and chemosensitized oral cancer cells to cisplatin treatment when coupled with inhibition of P38 MAPK pathway. Increased -catenin and TRF2 expression was related to chemoresistance, elevated CSC phenotype, enhanced DNA damage response in oral cancer cell line and poor prognosis in HNSCC patients. Thus, therapy resistance in Oral CSCs integrates DDR and telomere biology pathways. We are in the era of integrated and inclusive medicine where clinicians, Scientists and Patients are important stake holders. The biggest challenge is to scale up the personalized approach as at one hand we have to tailor-make the therapy but on the other had we have to reach the last man in the village. Therefore, the key is to integrate the digital platform with game changing approach of health care delivery tools in the era of silicon revolution. We have identified a number of actionable targets in Oral Cancer in Odisha and are a part of the Virtual National Oral cancer Institute (VNOCI) DBT Govt of India. We are in a process of institutionalizing the standard care with the help of Digital and Genomics tools like oral mouth Shots and cut-margin molecular markers to predict prognosis and recurrence.

Abstract Id: YUGP4108

Acute Promyelocytic Leukemia: First Incidences Of Rare Variants T(11;17) And T(17;20) From India
Presenter - Ms. Ashwini Rajan
Co-author - Sumitra J, Deepika G S, Dr. Renu Ethirajan

Basis of Study: The diagnosis of Acute Promyelocytic Leukemia (APML) is time critical due to its poor clinical outcome associated with disseminated intravascular coagulopathy (DIC). APML is characterized by a balanced translocation of chromosome 15 and 17: t(15;17)(q22;q21), producing a fusion gene of PML and RARA, on derivative chromosome 15. 80% of AML cases treated with All-Trans-Retinoic-Acid (ATRA) have shown complete remission, otherwise leading to catastrophic hemorrhaging. Rare variants of the APML reported include, t(11;17)(q23;q21), t(5;17)(q35;q21), t(11;17)(q13;q21), all of which involve the RARA gene, that plays a vital role in the pathogenesis of APML. The lack of data correlating morphology, immunophenotyping and karyotyping for APML variants from India forms the basis of this study. A retrospective analysis from a cytogenetic point of view of all APML cases from 2012 to 2016 at our center with special emphasis on the two rare variant translocation, t(17;20)(q11;p13) and t(11;17)(q23;q21) is presented here. Materials and Methods: 29 APML positive cases from 2012 to 2016 referred for morphological assessment of bone marrow biopsy, immunophenotyping for an acute leukemia panel and for Cytogenetic analysis (Karyotyping and FISH). A 16 year old (Case 1) and a 32 year old male (Case 2) with clinical information query
Abstract Id: YUGP4112
Re-Irradiation In Recurrent Head And Neck Carcinoma - A Single Institute Experience
Presenter - Dr. Sasikala Prabaharan
Co-author - Dr.B.S.Ramesh , Dr. Biju, Dr. Chandra Reddy, Dr. Anuradha, Dr. Praveen. Aim Primary objective To assess the overall survival in head and neck carcinoma patient who received reirradiation. Secondary objective 1.Acute and late toxicity of reirradiation 2.Dosimetric study of organ at risk in reirradiation Materials and methods 14 patients diagnosed to have recurrent head and neck carcinoma taken in the study. The inclusion criteria are patients with biopsy proven head and neck carcinoma of subsites nasopharynx, oropharynx, hypopharynx, larynx and oral cavity. The exclusion criteria are distant metastasis, and poor performance status ECOG > 3. Patients with distant metastasis, poor performance status ECOG-3 excluded from the study. All patients underwent reirradiation with highly conformal radiation with either IMRT/IGRT/SBRT. All patients underwent CT simulation, contouring and treatment planning in Eclipse/multiplan treatment planning software. patients were assessed weekly for acute toxicity. Late toxicity assessed every 3 monthly. Results The overall survival was analysed using Kaplan meier curve. The median overall survival of the patient is 12 months. Conclusion With the advent of highly conformal radiation reirradiation is the promising option in recurrent head and neck carcinoma if salvage surgery is not possible.

Abstract Id: YUGP4114
Role Of Hpv Subtyping As A Predictor Of Treatment Outcome In Cervical Cancer
Presenter - Mr. Vishnu Harilal
Co-author - Dr H.S KUMAR, DR NEETI SHARMA, DR SHANKAR LAL JHAKAR

Background: Cancer of the cervix is the third most common cancer in india with estimated 1 lakh new cases in 2016, the second most common cancer in women worldwide and the most common cancer cause of death in the developing countries. There are many established factors on which the prognosis of this disease dependent on such as the stage of disease, nodal status, stromal invasion and others. Many of these facors are well studies, yet there is huge lacuane in predicting the biological behaviour of this malignancy. Hence the role of evaluating molecular markers such as hpv dna with respect to disease prognostication and treatment outcome is the need of the hour Purpose: To assess by a prospective study if HPV subtype has any role in predicting treatment outcome in HPV positive cervical cancers Methods: A prospective cohort of 50 patients of cervical cancer stage II HPV positive attending acharya tulsi RCC , Bikaner OPD was chosen. Patient data and clinic-pathological information was collected through personal interview and from case files. After scrutinizing the inclusion and exclusion criterion HPV DNA subtype assessment was be done with the assistance of Department of Anatomy SPMC Bikaner by the following method Fresh biopsy specimen were rapidly frozen and stored at 770 °C until analysis DNA Extraction – Genomic DNA was extracted by commercially available QIAGEN USA kit. DNA confirmation – Presence of DNA was confirmed prior to amplification by performing Human interleukin 1B gene specific PCR. HPV Specific Genome amplification – HPV PCR was performed by using HPV specific primers (MY09/MY11) and the positive samples were further subjected to HPV type specific PCR for HPV 16 and 18 which was followed by virus type characterization. Patients were treated with concurrent CTRT in the form of EBRT 50Gy / 2Gy/ 5 days a week with concurrent weekly cisplatin 40 mg/ m2 , followed by brachytherapy 7.5 gy X 3# with total dose of 85 Gy to point A. patients were followed up on regular intervals. Univariate analysis was conducted using Student’s t test and chi-squared tests. Survival curves were estimated by use of the Kaplan-Meier method: differences between groups were examined by the logrank test. Multivariate survival analysis was performed according to the Cox proportional hazards model. Results: HPV DNA was detected in 50 (85%) of 58 patients: HPV16 in 61%, HPV18 in 20%, other HPV types in 4%, and no HPV DNA in 15%. There was. After a median follow-up of 22 months, the presence of HPV18 DNA (adjusted RR = 2.59; 95% CI = 1.08–6.22) was a statistically significant predictor of survival and pointed towards poor survival outcomes. Conclusion: HPV 18 DNA type is an independent prognostic factor in patients with cervical carcinomas treated with concurrent chemo-radiotherapy Implications: The use of molecular markers HPV DNA and its subtyping could be pivotal in patient stratification with respect to prognosis and identification of high risk group. once established this might yield way to dose intensification or alternate treatment strategies in this high risk group offering them better treatment outcome
Abstract Id: YUGP4128
Detection Of Therapeutically Targetable Egrf T790M Mutation In Progressed Nsc Patients
Presenter - Dr. Subhankar Basak
Co-author - Dr. Kunvar Harsh Upveja, ,

The T790M mutation is an acquired mutation and the tumor genotyping for T790M requires new biopsy. However, obtaining sufficient tissue for mutation analysis in patients with advanced disease is challenging, as invasive interventions may be ineffective and unsafe. Moreover, detection of disease-relevant mutations from the biopsy of a single tumor lesion may not be reflective of the patient’s complete disease burden, especially in heterogeneous cancers. This can lead to delay in subsequent therapy and may not be feasible. Noninvasive genotyping of circulating tumor DNA (ctDNA) represents an attractive alternative for detection of EGFR T790M. Several methodologies are available for detection of T790M mutations from plasma samples. As part of AURA trial, four such technologies (digital and non-digital PCR systems) were compared, with the aim to identify robust platform. The two non-digital platforms comprised the cobas®EGFR Mutation Test and the TherascreenTM EGFR ARMS assay; both testing methods arise from established tissue tests that have been adapted for low-DNA-input plasma samples. The cobas®EGFR Mutation Test and the TherascreenTM EGFR RQG PCR test detect 41 and 21 mutations, respectively, in exons 18–21 of the EGFR gene; importantly, both tests detect the T790M mutation. The two digital platforms were the BioRad ddPCR and BEAMing dPCR. Digital PCR methods are purportedly more sensitive than other assays for mutant sequence detection and are fully quantitative, making them suitable for quantification of longitudinal plasma samples, which may allow for monitoring of disease/mutation evolution overtime. Similar ORR and median PFS has been reported in patients with T790M-positive plasma or T790M-positive tumor results. Upon availability of validated plasma T790M assays, some patients could avoid a tumor biopsy for T790M genotyping. Sensitivity of plasma genotyping for detection of T790M was reported as 70%. Because of the 30% false-negative rate of plasma genotyping, those with T790M-negative plasma results still need a tumor biopsy to determine presence or absence of T790M.

Abstract Id: YUGP4132
Laparoscopic Versus Total Robotic Sphincter Preserving Surgery For Rectal Cancer
Presenter - Dr. Pavan Sugoor
Co-author - Ashish Pokharkhar, Kamlesh, Ashwin Desouza

Aim Minimal access surgery has shown equivalent oncological outcomes & better peri-operative outcomes for rectal cancer surgery. Robotic colorectal surgery is gaining interest and it has been postulated to improve outcomes. But literature comparing laparoscopic & robotic rectal cancer surgery is sparse. This study aimed to analyse and compare outcomes of Laparoscopic versus Robotic total mesorectal excision (TME). Method 206 patients underwent TME, either Laparoscopic TME (L-TME) (n=206) or Da Vinci Xi single docking single phase total Robotic TME (R-TME) (n=76) between March 2013 to March 2017. Patient characteristics, perioperative clinical outcomes, complications, pathologic details were compared between the 2 groups. Results Patient characteristics were not significantly different between the groups. The mean operation time was 300 min in the R-TME group and 330 min in the L-TME group (P = 0.0001). The conversion rate was 1.3% in the R-TME group and 1.9% in the L-TME group (P = 0.564). The serious complication rate was 5.4% in the R-TME group and 10.3% in the L-TME group (P = 0.025). Both groups were comparable with regard to blood loss and hospital stay (Mean 8 days) The specimen quality was acceptable in both groups. Conclusion R-TME was performed safely and effectively, using the da Vinci Surgical System. The use of the system resulted in acceptable perioperative outcomes compared to L-TME.

Abstract Id: YUGP4134
Clinical Utility Of Staging Laparoscopy For Advanced Obstructing Rectal Adenocarcinoma: Emerging Tool
Presenter - Dr. Pavan Sugoor
Co-author - Aditi Chaturvedi, Rahul Bhamre, Ashwin Desouza

Abstract Aim The importance of multimodal treatment for advanced rectal adenocarcinoma mandated accurate preoperative staging with contrast-enhanced computed tomography (CECT) of thorax, abdomen, and pelvis, and magnetic resonance imaging (MRI) of pelvis. Staging laparoscopy (SL) could detect occult peritoneal metastases and avoid futile laparotomy in patients with advanced rectal cancer (RC). This study aimed to determine the clinical value of SL in treatment decision-making for advanced RC. Method Prospective observational review of colorectal database at Tata Memorial Hospital from January 2013 to December 2016 identified 562 patients diagnosed and treated for advanced RC. Of the 562 cases, 48.7% (274) were clinically and radiologically diagnosed of advanced near or complete obstructing RC. Of 274 cases, 34% (94/274) underwent SL with diversion stoma (DS) and 66% (180/274) underwent exploratory laparotomy with DS; the approach was at the discretion of surgeon. In the absence of ascites, extensive peritoneal deposits and un-resectable liver metastases, a curative treatment was offered, which entailed neo adjuvant chemoradiation (NACTRT), whereas the cohort of patients with extensive peritoneal disease received palliative therapy. Results Of the 94 patients with advanced RC, conventional imaging studies staged 73.5% (69/94) cohort as non-metastatic locally advanced and 26.5% (25/94) had potentially resectable metastatic RC. Pre-therapeutic SL upstaged the disease by 26% (18/69) and 8% (2/25) in locally advanced and potentially resectable metastatic RC cohorts, respectively. Treatment decision changed in 21.2% (20/94) of the patients, and futile laparotomy was thus avoided. Conclusion In our observational study, SL was found to be a safe and effective staging modality in RC; it detected occult peritoneal disease and prevented futile laparotomy in 21.2% of the cohort, which was of value to determine treatment strategy in patients with advanced RC before initiating NACTRT. SL and laparoscopic-assisted de-functioning stoma were associated with minimal morbidity and led to early initiation of NACTRT.

Abstract Id: YUGP4136
Tumor Somatic Mutation Profiling By Next-Generation Sequencing (Ngs) Will Have Significant Impact In Deciphering Therapeutic Options And In Prognostication Of Solid Tumors, Especially Lung Adenocarcinoma And Colorectal Cancers.
Presenter - Dr. Chirantan Bose
Co-author - Arati Khanna Gupta, Vidya Veldore, 

Background: The utility of NGS in management of various cancer (adenocarcinomas of lung and colon) patients remains undefined. Methods: We retrospectively analyzed the NGS profile of patients who were sequenced using a panel of 56 cancer-related genes in tumor DNA. Prognostic and therapeutic implications of mutations (SNPs) were evaluated through published literature (Pubmed and inhouse developed somatic mutation database - OncoMD). SNPs (singly nucleotide polymorphism) and short deletions (<25bp)
Pelvic And Para-aortic Nodal Metastatic Rate In Endometrial Cancer - A Prospective Study On The Role Of Risk Adapated Lymphadenectomy

Presenter - Dr. Ansar Pullampara pookunju
Co-author - AYYAPPAN S ,

70% of Endometrial cancer patients presents in stage I. when we follow a risk adapted lymphadenectomy for early stage patients, we notice that the lymphnode involvement occurs only in a very small group. We did a prospective study from 2013 to 2015 and 75 patients were enrolled for the study. Only 3 patients had positive pelvic nodes (4%) and 2 patients had positive para-aortic nodes (2.7%). But among the patients with grade 3 disease 20% pelvic and para-aortic node positivity was noted. In non-endometroid subtype 37.5% node positive rate was found(3/8). Those patients with more than half of myometrial invasion had a 8.6% node positivity rate (2/23) and those with any myometrial invasion had 5.3% node positivity rate (3/56). None of the patients without myometrial invasion had positive lymphnodes. We are able to conclude that risk adapted lymphadenectomy is the most judicious way of doing surgical staging in endometrial cancer.

Optimal Time Interval Between Neoadjuvant Chemoradiotherapy And Surgery For Rectal Cancer

Abstract Id: YUGP4139

Presenter - *Dr. Pavan Sugoor
Co-author - Pavan Sugoor, Praveen Khammar, Ashwin desouza

Abstract Aim: Neoadjuvant chemoradiotherapy (CRT) has been proven to increase local control in rectal cancer, but the optimal interval between CRT and surgery is still unclear. The purpose of this study was to analyse the influence of variations in clinical practice regarding timing of surgery on pathological response and oncological outcomes at a population level Method We evaluated 161 patients with locally advanced rectal cancer undergoing total mesorectal excision following an interval period after neoadjuvant CRT at Tata Memorial center, Mumbai between January 2013 and January 2014. Patients were divided into two groups according to the interval before surgery: < 8 wk (group I, n=36), 8-12wk (group II, n=69) and >12 wk (group III, n=56). Data related to patients, cancer characteristics and pathological examination were collected and analyzed. Results Group III was associated with a statistically significant mean blood loss of 1200ml and a hospital stay of 11 days. The median follow up period for all patients was 29 (4-39) Months group II had statistically higher rates of response than group I and III (50% vs 26.5% vs 23.9%, p< 0.000). Rate of tumor regression grade (TRG), was non statistically significant between groups (p=0.517) and Disease free survival (p=0.326) Conclusion Surgery after 8-12wks of completion of neoadjuvant chemoradiotherapy is associated with low morbidity without compromising oncological outcomes and survival.
hemicolecotomy and sigmoidectomy (1), sigmoidectomy and bilateral oophorectomy (1), total pelvic exenteration in male (1). Resection of parenchymatous organs (kidney, suprarenal gland, spleen, pancreas, liver and stomach) are quite rare in colon cancer. R0 resection were obtained in all patients. There was no post operative mortality noted in all patients. Special note on this study is resection of spleen and kidney in oligo metastatic colon cancer. Conclusion The R0 resections achieved through multivisceral resection improves survival in locally advanced colorectal carcinomas and highlights the importance of experienced, well-trained surgeons to decrease the incidence of complications. Keywords: multivisceral resection, colorectal cancer

Abstract Id: YUGP4148

Chemo-Radiation After Upfront Rectal Resections – A Clinical Dilemma

Presenter- Dr. Pavan Sugoor
Co-author - Manish Bhandare, Ashwin Desouza, Vikas Ostwal

Aim To compare the impact of adjuvant chemo-radiotherapy (ACRT) versus adjuvant chemotherapy (ACT) alone on recurrence and survival in patients with stage II and III rectal adenocarcinoma undergoing upfront curative resection. Method Prospective observational review of colorectal database at Tata Memorial Hospital from July 2010 to March 2015 identified 84 patients who underwent upfront curative resection for stage II or III rectal cancer. None of the patient received preoperative chemo-radiation. Of these, adjuvant chemo-radiotherapy was administered to 29 patients (ACRT group) and 55 patients received CAPEOX / FOLFOX based adjuvant chemotherapy (ACT group) alone. Results At a median follow-up of 20 months there were 10 recurrences (3 local recurrence) in the ACRT group and 15 (2 local recurrence) in ACT group. The estimated Disease free survival at 3 years in the ACRT group was 62.7% and in ACT group was 48.4% (p = 0.347) with an estimated 3-year overall survival of 82.1% and 87.7%in the ACRT and ACT group, respectively (p = 0.462). Subgroup analysis was performed after risk stratifying prognostic features (pT4, pN2, poor differentiation, involved resection margin). Conclusion Our study does not show any benefit of adjuvant chemo-radiotherapy over chemotherapy alone on local control, disease free and overall survival after upfront rectal cancer resection for low risk stage II – III. In the subgroup analysis local recurrence did not occur in patients who did not have poor prognostic features irrespective whether they received ACRT or ACT. Adjuvant chemo-radiation can be avoided in low risk stage II-III rectal cancer after upfront resection.

Abstract Id: YUGP4150

Liver Resection For Non Colorectal, Non Neuroendocrine Metastases: Outcomes Of 50 Consecutive Resections At Tata Memorial Centre, India

Presenter- Dr. Devayani Niyogi
Co-author - Shraddha Patkar, Mahesh Goel, Rajesh Shinde

Background The role of hepatic resection for colorectal and neuroendocrine liver metastases is well established. However, the role of liver resection for metastases from other primary sites is not so well known. Many studies have shown that selecting tumours with good biology for liver resection even in the metastatic setting can impact survival. However, in view of the small numbers belonging to each type of primary cancer, more studies are needed in this regard to clearly define the patient population and tumour type that unequivocally benefit from liver metastatectomy. This study aims to present our experience at Tata memorial Hospital with hepatic resection for non colorectal non neuroendocrine liver metastases. Methods: This is a retrospective study of a prospectively maintained database. It includes 50 patients having undergone liver resection for metastases from non colorectal, non neuroendocrine primaries in a period starting from April 2009 to December 2016 in a single center.

Data was maintained and analyzed using the SPSS software version 20. Survival data was analyzed using the Kaplan Meier curves. Results: A total of 50 patients underwent liver resection for non colorectal non neuroendocrine metastases at our center. The most common primary was Gastro Intestinal Stromal Tumors, accounting for 30% (n=15) followed by breast cancer 22% (n=11) and germ cell tumors 14% (n=7). We also performed liver resections for metastases from urological (renal cell carcinoma n=3, adenocarcinoma carcinoma n=2) gynecological (ovarian carcinoma n=3, carcinoma cervix n=1) soft tissue sarcomas (n=4), neuroblastoma (n=1), gastrointestinal PNET (n=2) and thyroid malignancies (n=1). 54% (n=27) of the patients had synchronous liver metastases at presentation of the primary tumor and 85% (n=23) of these underwent synchronous liver resection with the primary tumour. 7 of 50 patients (14%) had post operative complications. There was no post operative mortality. Median follow up time was 35 months. At the end of 5 years, 97% (n=48) patients were alive, 60% (n=30) being disease free. Median DFS was 72 months. (95% CI 34 -110) 5year DFS for patients with breast cancer was 51% while that for GIST was 47.8%. Though the impact of DFI on disease free survival did not reach statistical significance in our study, DFI of more than 24 months did show a trend towards improved survival. (46m v/s 77m, p = 0.274) Subgroup analysis was performed after risk stratifying prognostic features (pT4, pN2, poor differentiation, involved resection margin). Conclusion Our study does not show any benefit of adjuvant chemo-radiation over chemotherapy alone on local control, disease free and overall survival after upfront rectal cancer resection for low risk stage II – III. In the subgroup analysis local recurrence did not occur in patients who did not have poor prognostic features irrespective whether they received ACRT or ACT. Adjuvant chemo-radiation can be avoided in low risk stage II-III rectal cancer after upfront resection.

Abstract Id: YUGP4153

Eccrine Porocarcinoma Of Scalp: An Unusual Tumor At An Unusual Site

Presenter- Dr. Vipul Gupta
Co-author - Dr. J.B. Hedavoo, Dr. H. Motwani

Eccrine porocarcinoma is a rare malignant adnexal tumor of ductal portion of eccrine sweat gland. It commonly occurs in older age group, common site being lower extremities and rarely in scalp, face, ear, trunk and upper extremities. Local recurrence and metastasis to skin, lymph nodes, viscera and bone may occur. Surgery is the treatment modality of choice. Metastatic lesions can be treated with chemotherapy. We report an unusual case of eccrine porocarcinoma of scalp in a 85 years old female patient arising over right frontoparietal region. Diagnosis is quite challenging by clinical examination alone, hence histopathology and immunohistochemistry forms the mainstay for early diagnosis and treatment. Till date, only one case of eccrine porocarcinoma on frontoparietal region has been described in literature akin to our case. Introduction- Eccrine porocarcinoma is a rare malignant adnexal tumor which arises from intra-epidermal ductal portion of sweat gland. The first case was reported by Pinkus and Mhregan in 1963 after which few more cases have been documented. These rare tumors account for around 0.005% of all epithelial cutaneous tumors and have been termed as malignant hidroacanthoma simplex, malignant intra epithelial eccrine poroma, eccrine poropithelioma, malignant syringoacanthoma, dysplastic poroma and sweat gland carcinoma. It is the malignant counterpart of eccrine poroma, a common benign adnexal tumor. Eccrine porocarcinoma may arise de novo or due to malignant transformation of its long standing benign counterpart. Most Common location of eccrine porocarcinoma is lower extremities. Other less common sites are scalp, face, ear, upper extremities, trunk etc. Though uncommon, local recurrence and lymph node metastasis both may occur in eccrine porocarcinoma. Wide local excision with negative marginal status is the key management and post operative chemotherapy may be necessary in case of lymph node metastasis. In this case report, we are presenting a rare case of eccrine porocarcinomaof scalp in a 85 year old female. Case report- An 85 years old female patient presented to us with a bosseleted mass of 10 years duration.
over right frontoparietal region. It was firm, painless, freely mobile, tender, and bled on touch. There was no clinical evidence of any lymph node involvement or distant metastasis. CT scan showed no intracranial extension, no bony erosion and no calcification. Wedge biopsy suggested malignant skin adnexal tumor favouring sebaceous carcinoma. Wide local excision was done and preauricular lymph node sampling was done. Perciranium was free of tumor. The resultant defect was covered with split thickness skin graft. Cut section of tumor was greyish white, friable with areas of necrosis and cystic changes. Microscopic examination showed stratified squamous epithelium lined tissue with underlying neoplasm arranged in the form of lobules, islands and groups with a characteristic infiltrative borders. Tumor cells are polyhedral to flossoform with variable cytoplasm, hyperchromatic nuclei, distinct nucleoli and indistinct cell borders. Mitosis is brisk (20-10 high power fields) with few atypical forms. Squamous differentiation and clear cell change is seen. Histopathologically margins were free of tumor infiltration and there was no evidence of lymph node metastasis. Diagnosis was confirmed with Immunohistochemistry which showed tumor cells positive for p63, ck 5/6 with ki-67 proliferation index of 80%. Discussion- Eccrine porocarcinomas are very rare malignant adnexal tumors arising from intra-epidermal ductal portion of eccrine sweat gland. Around 50% cases involve lower extremities. In few cases, it may also involve head and neck region, upper limbs, trunk and abdomen . The tumors have been found to commonly affect elderly patients of more than 60 years, though cases have also been reported in younger age group. Eccrine porocarcinoma may either arise de-novo or secondary to any long standing pre-existing lesions like eccrine poroma, nevus sebaceous, chronic lymphocytic leukemia and actinoid keratoses. The commonest presentation is reddish nodular cauliflower like growth or infiltrative verrucous plaque which often shows superficial ulceration & bleeding due to trivial trauma. Clinically lesions of the extremities mimick seborrhic keratoses, pyogenic granuloma, amelanotic melanoma, squamous cell carcinoma and basal cell carcinoma and verruca vulgaris and hence should be differentiated from them. Clinical features of eccrine porocarcinoma of scalp also mimic cylindroma, eccrine poroma, sebaceous adenoma, sebaceous carcinoma, pilar tumor and metastatic carcinoma. Matlaba reported a case of ulcerative porocarcinoma of occipital region involving pericranium. Ritter et al have reported one case of eccrine porocarcinoma in occipital region with intracranial extension. They mentioned 6 cases of scalp porocarcinoma as described in literature. Rana et al described a case of porocarcinoma in frontoparietal region similar to this case. Microscopically eccrine porocarcinoma shows intra-epidermal nests or cords of polygonal anaplastic cells which invade downwards into dermis and subcutaneous tissue. Epidermotropism and ulceration of epidermis are often seen in eccrine porocarcinomas. The tumor cells contain clear cytoplasm, large hyperchromatic nuclei and prominence of nucleoli. Frequent mitosis and necrosis are also seen. Most of the sweat gland carcinomas exhibit immunoreactivity for CK, CEA and EMA. In our case diagnosis was confirmed with immunohistochemistry which showed positivity of tumor cells for p63 and ck-5/6 with ki-67 proliferation index of 80%. Treatment is done by wide local excision. If there is involvement of regional lymph nodes, regional lymph node dissection should be done. For covering such large skin defects plastic surgery assistance is needed. Metastatic lesions should be treated with chemotherapy. In the present case, after 6 months of follow up there is no local recurrence as well as no clinical evidence of metastasis. Around 100 cases of porocarcinoma have been described in literature, of which around 10 have been of scalp porocarcinoma. There is only one case in literature of porocarcinoma on frontoparietal region akin to our case. Conflict of interest – None Conclusion- The present case is being reported in view of its rarity. Although a rare diagnosis, it should be considered as a differential diagnosis while evaluating any exophytic tumor of scalp. Further studies are needed to get a better understanding about the lesion.

Abstract Id: YUGP4154
Second And Higher Order Primary Cancer

Presenter- Prof. Jayakumar Duraikkannu

Back ground: successful multi-modality treatment of Cancer results in longer survival nearly 66% five-year survival rate. This has the adverse effect of patients developing second and higher order cancers. I present a series of second and higher order cancers we came across.

Method: we had a patient with proven three cancers. Sixty three years old female was diagnosed as locally advanced carcinoma right Breast thirteen years back and treated by chemotherapy, Radiation and Radical mastectomy. Nine years back diagnosed as locally advanced carcinoma left Breast and treated in the same manner. A year back she was diagnosed as carcinoma cervix with eight adenxal mass. She suddenly passed away before any treatment, Carcinoma rectosigmoid and metastatic carcinoma Prostate synchronously presented and treated and on follow-up. Metachronous breast cancer successfully treated and alive without disease. Oral second primary, a sixty-three years old female diagnosed as left lower alveolar carcinoma(T4N0M0) seven years back underwent Composite resection and Pectoralis Myocutaneous flap and received Adjuvant Radiation. A year back she developed Carcinoma Left upper Alveolus(T1N0M0) underwent partial Maxillectomy and alive without disease. Seventy-two years old patient was diagnosed as Non-Hodgkins Lymphoma twenty years back and treated with chemotherapy now presents with Breast Cancer.

Result: the second and higher order cancers are treated successfully with high cure rate. Discussion: The occurrence of second primary cancers in cancer survivors is one of the most serious and lethal complications of cancer and it’s therapy. Second primary cancer could be due to the late sequelae of treatment or shared etiologic influences (environmental, host factors or genetic predisposition).

Conclusion: Regular follow up and early detection and treatment of second and higher order results in long survival.

Abstract Id: YUGP4155
Comparison Of Dose Volume Histograms Of Pelvic Bone Marrow And The Haematological Changes In Patients Of Cancer Cervix Treated With Conventional And 3-Dimentional Conformal Radiotherapy

Presenter- Dr. SANKALP NAIDU
Co-author - Dr. Piyush Kumar, Dr. Arvind Kumar, Dr. Pavan Kumar

Basis of study: Radiotherapy (RT) occupies an important role in the treatment of gynecologic malignancies, notably cervical cancer. Most attention has focused on gastrointestinal sequelae, including proctitis,fistulas, and small bowel obstruction. One side effect that has received little attention is hematologic toxicity(HT). However, with the increasing use of concomitant chemotherapy (CTX), particularly in cervical cancer patients, Haematological toxicity is now one of the most common acute sequelae in gynecology patients undergoing RT. Methods: Total 50 patients were included in this study between November 2015 to December 2016 which was randomised in two groups- Conventional arm & 3D-CRT arm having 25 patients each. Radiotherapy dose delivered will be 50 Gy in 25 fractions at 200 cGy/day it was followed by 3 applications of intracavitary brachytherapy of 7 Gy/ fraction each. Dose Volume Histograms Of Pelvic Bone Marrow were also calculated. Assessment of toxicity was done by RTOG(Radiation Therapy Oncology Group) scoring criteria. Clinical response assessment was done using WHO response criterion. Results: The median follow up was 6 months. The BM-V10 of the lumbosacral spine were more in both the arms. During treatment 11 patients developed haemoglobin grade I toxicity in arm I and 7 patients developed grade II toxicity in arm II, 5 patients developed grade II neutropenia in arm I and 2 patients developed grade I neutropenia in arm II. Dosimetric parameters involving the lumbosacral spine had stronger associations with HT than did those involving the ilium & lower pelvis. Conclusion- Results of this study show that 3D-CRT is safe and effective with a low incidence of acute haematological toxicity. On follow-up, the late haematological toxicity was similar in both the groups.
**Abstract Id: YUGP4157**

**Carcinoma Tonsil With Rib Metastasis: A Rare Entity**  
**Presenter:** Dr. Ashutosh Kumar  
**Co-author:** Dr Paramjeet Kaur, Dr Ashok K Chauhan, Dr Anil Khurana

**Introduction:** Squamous cell carcinoma of head and neck has a predilection for metastasis to cervical lymph node/s and distant hematogenous spread is unusual. Lung is the most common site of distant metastasis, followed by mediastinum, bone/s, central nervous system and other organs. Of all bone metastasis, known order of involvement is: spine (12.7%), followed by skull (4.2%), rib/s (3.1%), and long bones like femur & humerus (2.1%). To the best of our knowledge, metastasis of carcinoma tonsil to rib/s has not been reported so far and we claim it to be such maiden report.  
Case Report: An Indian 50 years old male, presented in Radiotherapy Department, PGIMS Rohtak, in December 2016 and was diagnosed as case of moderately differentiated squamous cell carcinoma of Right Tonsil (T3N2bM0, staged IVa). He received concomitant chemo-radiation (66Gy/33 fraction/6.3 weeks along with Cisplatin 110mg i.v. 3 weekly). He tolerated the treatment well and was planned to be kept on periodic follow-up. Merely 15 days after completion of treatment, patient reported back with lump on right side of chest wall which on examination was hard, fixed to chest wall, nontender, of size 7cmx5cm. CECT chest and abdomen showed right rib destruction, raising suspicion of metastasis. Further, it revealed multiple rounded hypochoic, hypodense lesions of variable sizes, in liver and small nodule noted in left upper lobe of lung, suggestive of metastasis. Cytological examination of rib lesion confirmed diagnosis of metastasis from squamous cell carcinoma.  
Discussion: In squamous cell carcinoma of head and neck, distant metastasis generally occurs after regional metastasis. The explanation to unusual sites of metastasis, such as ribs, is less clear. The disturbance of lymphatic drainage due to surgery and radiation may result in alternative pathways of drainage. Conclusion: The possibility of unusual/ rare site involvement must be kept in mind and addressed at the earliest accordingly. Keywords: Head and Neck carcinoma, Metastasis, Rare site

**Abstract Id: YUGP4159**

**Improved Survival In A Patient Of Anaplastic Astrocytoma With Re-Irradiation: A Case Report.**  
**Presenter:** Dr. Sampuran Kumar Acharya  
**Co-author:** Dr. Janaki M.G., Dr. Arunmohan P.V, Dr. Harshitha M. Jain

Anaplastic Astrocytoma represents almost 30% of all the glial tumours with a median age of diagnosis to be at 46 years with an overall survival of 13-15 months post diagnosis and treatment. The median time of first relapse is found to be at 15.2 months with an overall survival post relapse of 13.6 months. A 51 year old lady diagnosed to have a space occupying lesion in the right tempo-parietal region and underwent craniotomy with decompression surgery with the histopathology confirming it to be Anaplastic Astrocytoma. She was then treated with adjuvant External beam Radiotherapy to a dose of 60gy/30f (dec 2011 – Jan 2012 with IMRT technique) then followed by 6 cycles of adjuvant Temozolamide at 100mg/m2 monthly. 9 months post irradiation MRI revealed a choline peak which was suggestive of residual disease for which patient received stereotactic radiotherapy on cyber knife to a dose of 21Gy/3f(18th-20th September 2012). She was on regular follow up with serial MRI and the follow-up was uneventful for 4 years. Follow up MRI on 03-07-2017 showed a new space occupying lesion in the right cerebellar region, away from the original site. Patient underwent surgery(Excision) of the same in July 2017 and the patient is planned for concurrent radiotherapy (60gy/30f with IMRT technique) and chemotherapy (Temozolamide daily to a dose of 75mg/m2) followed by 6 cycles of adjuvant chemotherapy with tablet Temozolamide to a dose of 100mg/m2 monthly. Conclusion: Reirradiation in the era of advanced technology is safe and can provide long-term benefits with improved survival and reduced morbidity.

**Abstract Id: YUGP4163**

**Molecular Markers And Their Effect On Response To Treatment And Survival In Head And Neck Cancer Patients**  
**Presenter:** Dr. SANDEEP K S  
**Co-author:** DR SANDEEP KS, DR KIRTHI KOUSHIK

**MOLECULAR MARKERS AND THEIR EFFECT ON RESPONSE TO TREATMENT AND SURVIVAL IN HEAD AND NECK CANCER PATIENTS**  
**INTRODUCTION**  
Head and neck cancer being the most common cancer in the developing world accounts for about 2.2 lakh cases in India alone by 2020. Despite being significant improvement in management of head and neck cancer by multimodality treatment there is a significant morbidity and 5-year overall survival for locally advanced disease is 30% only. To improve the treatment outcome there is a significant trend towards molecular directed modification of treatment in recent years. Hence, we conducted a prospective observational study to assess the response to treatment and 3-year median survival of radically treated head and neck cancer. Objectives:  
1. To assess the EGFR, p53 and HPV status.  
2. To correlate these markers with response and survival outcome. Materials and methods:  
25 head and neck squamous cell carcinoma patients who were planned for concurrent chemoradiation were accrued and assessed for HPV, EGFR and P53 status and other factors like age, sex, socioeconomic status and tobacco use. All the patients were treated with EBRt to a dose of 66Gy in 33 fractions along with concurrent weekly cisplatin chemotherapy 40mg/mq; Response to treatment assessed after 6 weeks based on RECIST criteria and followed up for a median duration of 3 years and assessed for the survival. Results: 25 patients of head and neck squamous cell carcinoma prospectively assessed for molecular status HPV positivity found in 28%, EGFR receptor mutation were positive in 84% and p53 positive in 76%. 62% patient had shown complete response 28% had partial response 8% had progressive disease and 12% had stable disease. On correlation of response to molecular markers there is no statistical significance for EGFR status and response (p=0.5) HPV with response (p=0.8) and p53 positivity was approaching significance with respect to good response (p=0.07) On correlation with survival, HPV positive patients showed 57.1% survival at 3 years with p value 0.856, P53 mutation patients showed 62.3% survival with p value 0.565 and EGFR mutation patient showed 57.14% survival rate at 3 years with p value 0.504. Conclusion: HPV positive patient did better though not statistically not significant. The other markers also showed better trend though p value not significant.

**Abstract Id: YUGP4165**

**Efficacy, Safety, Pharmacokinetics (Pk) And Immunogenicity Of Proposed Bevacizumab Biosimilar Bmab-100 Compared To Avastin® In Metastatic Colorectal Carcinoma (Mcrc) Patients**  
**Presenter:** Dr. Ashwini Vishveswaranumrthy  
**Co-author:** Surender Beniwal, Mudgal Kothekar, Sarika Deodhar

**Background:** VEGF targeted molecular therapies like bevacizumab increase the efficacy of cytotoxic chemotherapy resulting in the extended survival, disease stabilization with significant impact on the treatment of mCRC patients. Bmab-100 is a proposed bevacizumab biosimilar. Methods: In this multicentre double blind randomized parallel-arm study; efficacy, safety, pharmacokinetics and immunogenicity of Bmab-100 was compared against Avastin® in first line mCRC patients with independent radiology confirmed advanced disease. Patients were randomized 1:1 to Bmab-100 or Avastin arm and received bevacizumab at 7.5 mg/kg along with XELOX (oxaliplatin and capecitabine) for up to six 21-day cycles. Primary PK parameters (Cmax, AUC0-4); Efficacy: disease control rate (DCR), progression free survival (PFS) rate and overall response rate (ORR) at 18 weeks by blinded central evaluation using RECIST 1.1; safety, immunogenicity and VEGF levels were also evaluated. Results: Intent to treat (ITT) population of 136 randomized patients consisted of 84 male and 52 female Asian origin patients. Overall,
similar demographic profile and baseline disease characteristics were observed in both arms. Comparable efficacy (Table 1) and PK bioequivalence was observed. SAEs were reported in 23.53% and 22.39% patients in Bmab-100 and Avastin arms, with 5 and 8 fatal TEAEs, respectively. No suspected unexpected serious adverse reactions were observed during the study. The overall ADA incidence rate, change in VEGF levels were comparable between the 2 arms. Conclusions: Comparable efficacy, and pharmacokinetic bioequivalence, safety and immunogenicity was observed between Bmab-100 and Avastin in mCRC patients and was consistent with bevacizumab literature. Table 1: Efficacy parameters at 18 weeks in ITT population Parameter Bmab-100 Avastin p-value* N=68 N=68 ORR 73 (38.24) 76 (51.52) 0.05, statistically non-significant. #PK data submitted for ESMO Asia 2017 Key words: Biosimilar; bevacizumab; colorectal cancer; disease control rate

**Abstract Id: YUGP4167**

**Crizotinib Induced Photosensitive Dermatitis: A Case Report**

**Presenter- Dr. Shabna Ibrahim**

**Co-author - Dr C D Sivanandan, Dr Sajeed A, Dr Rosshi Syam**

**INTRODUCTION** Crizotinib is a kinase inhibitor indicated for the treatment of metastatic or locally advanced non-small cell lung cancer of who are positive for Anaplastic Lymphoma Kinase (ALK) gene rearrangements (1). Crizotinib induced rash is uncommon and no cases of photosensitivity rash have been reported in the major trials. We report a case of Crizotinib induced severe photosensitive rash which is extremely rare. Literature review showed only one similar prior case report . CASE REPORT A 50 year old female, non-smoker, presented to our clinic with cough, dyspnoea and haemoptysis, of four months duration, in April 2016. CT scan of thorax reported a mass lesion in the left lung upper lobe, 4cm from the carina, with atelectasis. Further PET imaging showed a 4 x 2.9 x 1.8 cm FDG avid left lung suprahilar mass (SUV 13.0), encasing and obstructing the left upper lobe bronchus with contiguous infiltration and narrowing of the left main pulmonary artery, suggestive of carcinoma lung. PET also reported a 6 mm pleural based nodule (SUV 9.8) in the left lower posterior costophrenic sulcus and metabolically active left hilar and prevascular lymphadenopathy(SUV 12.9).Trucut biopsy from the mass revealed adenocarcinoma and she was staged as Adenocarcinoma lung cTN2N2M1. EGFR, ALK mutation analyses were requested. Simultaneously, we started her on palliative chemotherapy with carboplatin and pemetrexed combination regimen. The mutation analyses reported wild type EGFR but was positive for ALK gene rearrangements . Hence she was started on Crizotinib 250 mg twice daily after cardiology and ophthalomology fitness clearance. She tolerated the drug well for the first eight months. Then she reported with mildly erythematous, papular rash on the extremities, which progressively worsened to become ulcerated over a month’s duration. The rash was typically present on sun exposed areas of the body, both forearms, hands, feet and upper back and neck. Crizotinib was temporarily discontinued and a dermatology consultation was sought. A detailed history was elicited considering the delayed onset of the rash, but did not reveal any other cause. She was diagnosed with CTCAE v 4.0 grade 3 Crizotinib induced photosensitivity rash and treated with appropriate systemic and topical medications. The lesions healed over a period of four weeks. Disease evaluation showed good response to the ALK inhibitor. Hence Crizotinib was restarted after she was elaborately counselled on appropriate measures to avoid sun exposure to a minimum and anti-histamines were prescribed for prompt use. After three weeks of restarting Crizotinib , a mild scaly rash persists in the aforementioned areas without any ulceration. DISCUSSION AND CONCLUSION Crizotinib does not typically cause rash, unlike other small molecule tyrosine kinase inhibitors . There are only reports of grade 1 or 2 rash , in around 9% of the population( 2,3). In 2014, Mathew G Oser et al reported (4) the only other known case of Crizotinib induced photosensitivity , which had its onset after two months of use and forced discontinuation of Crizotinib. Our case is unique in that the photosensitivity appeared only after eight months of drug use . Despite the grade 3 severity, further symptoms were well controlled with appropriate preventive measures, allowing the patient to restart Crizotinib. Even though the rash appeared when the patient showed good clinical and radiological response to the drug, the association between the rash and the therapeutic effect of Crizotinib is not known and warrants further study. REFERENCES 1.Sahu, A., Prabhash, K., Noronha, V., Joshi, A., & Desai, S. (2013). Crizotinib: A comprehensive review. South Asian Journal of Cancer, 2(2), 91–97. http://doi.org/10.4103/2278-330X.110506 2. Xalkori package insert 11/2013. Available at: http://www.xalkori.com/sites/ default/files/documents/Xalkori_PI.pdf 3. Xalkori package insert 2/2012. Available at: http://www.accessdata.fda.gov/drugsatfda_docs/label/2012/202570s002lbl.pdf 4.. Oser MG, Jänne PA. A Severe Photosensitivity Dermatitis Caused by Crizotinib. Journal of thoracic oncology?: official publication of the International Association for the Study of Lung Cancer. 2014;9(7):e51-e53. doi:10.1097/ JTO.0000000000000163.

**Abstract Id: YUGP4173**

**Hormone Receptor Expression Of Primary Epithelial Ovarian Neoplasms And Their Prognostic Implications, A Preliminary Study**

**Presenter- Dr. Arpitha Anantharaju**

**Co-author - Dr U D Bafna, Dr Premalatha, Dr Pallavi. V.R**

Background- Ovarian malignancy is a lethal disease consisting of different histological types. Attempts have been made to study hormone receptor status and its use in the management of ovarian neoplasms, in this era of targeted therapies. With this background our study aimed at studying the estrogen and progesterone receptor expression in different sub types of ovarian neoplasms to correlate hormonal receptor status with clinicopathological profile and its role as a predictor of recurrence. Methodology: Clinico-surgico-pathological profile of 570 women with ovarian neoplasm (Epithelial ovarian carcinoma and low malignant potential tumor) who were being treated at Kidwai institute of oncology were prospectively studied from 1st of August 2015 to 31st of July 2017. Women operated (Staging laparotomy/ Primary debulking/ Interval surgery/ Completion surgery) under the Department Gynaecological oncology with pathological diagnosis of primary ovarian neoplasm were included. Post-operative histopathology suggestive of Primary peritoneal cancer, Fallopian tube cancer or benign ovarian tumors and women with recurrent ovarian malignancies were excluded. Tissue microarrays were constructed from representative paraffin- blocks of epithelial ovarian cancers and were stained for estrogen receptor (ER) and progesterone receptor (PR) expression with suitable antibodies by IHC. For this study, a preliminary subset of 89 patients whose ER and PR status are available at the time of study is included. Negative, weak and strong expression were defined using Allred score of <4, 4–6, and >6–8, respectively. Hormone receptor status expression compared between various histological subtypes, and correlated with preoperative tumor marker, surgico-pathological stage and recurrence rate with a mean follow up of 1 year Postoperatively patients after completing their adjuvant chemotherapy were followed up 3 months with clinical examination, biochemical marker and radiological finding to detect recurrence. Disease free interval was defined from the time of completion of adjuvant treatment to the time of radiological recurrence. Results and conclusions: Histopathological diagnosis of 89 patients were as follows- 49- high grade serous carcinoma (HGSC-55%), 24 – high grade carcinoma post neoadjuvant chemotherapy (HGSC-PostCT 26.9%),1- low grade serous carcinoma (LGS- 0.1%), 3- serous borderline (SBT 0.33%), 4- mucinous carcinoma- (MC- 0.44%), 5- Mucinous borderline tumor- (MBT 0.56%), 1- Endometrioid carcinoma (EC-0.1%), 1- clear cell carcinoma-(CCC- 0.1%), and 1-Malignant Mixed Mullerian tumor (MMMT- 0.1%). Table 1: ER expression of
Various historical subtypes ER Positive Negative Tissue loss Total Strong Weak Total (%) HGSC 34 9 43 (87.7) 5 (10.2) 1 49 HGSC-Post CT 17 3 20 (83.3) 1 (0.4) 2 3 3 LGSC 1 0 1 (100) 0 (0) 1 SBT 0 (0) 3 MC 1 0 (25) 3 (75) 0 MBT 1 1 2 (40) 3 (60) 0 5 EMC 1 0 1 (100) 0 (0) 1 CCC 0 0 0 (0) 1 0 1 MMAT 1 0 1 (100) 0 (0) 0 1 Table 2: PR expression of various histological subtypes PR Positive Negative Tissue loss Total Strong Weak Total (%) HGSC 11 15 26 (53) 22 1 49 HGSC-Post CT 5 8 13 (54.1) 8 3 24 LGSC 0 1 1 (100) 0 1 3 MC 1 0 1 (25) 3 (75) 0 MBT 1 0 1 (20) 4 (80) 0 5 EMC 1 0 1 (100) 0 (0) 0 1 CCC 0 0 0 (0) 1 (100) 0 1 MMAT 0 1 1 (100) 0 (0) 0 1 The expression of ER/PR in different histological subtypes as noted in the table varied and differences were statistically significant. PR/ER status of the tumor did not significantly vary with the use of neoadjuvant chemotherapy. The portion of tumors stained positive for ER was highest in LGSC, SBT, MMAT and EC (100%). The portion of tumors stained positive for PR were LGSC, EC and MMAT. A greater portion of tumors stained positive for ER than PR in all subtypes. Among the tumors expressing ER, co expression of PR was most likely for EC, LGSC, MMAT, MC and intermediate for MBT and HGSC. A substantial fraction of HGSC were ER positive but negative for PR. Association of receptor expression with disease free interval will be analysed and presented at the conference.

Abstract: YUGP4175

**Development And Validation Of A Low Cost In-House Targeted Amplicon Next Generation Sequencing Of Brca1/ Brca2 Genes Applicable In Both Germine And Somatic Tissues: Advantages Of A Multidisciplinary Scientific, Clinical And Informatics Team Presenter- Dr. Nikhil Phadke**

Co-author - Shona Nag, Pranjal Gadgil, Shatakshi Ranade

Molecular testing of the BRCA1/ BRCA2 genes is recommended in germline tissue for hereditary predisposition to breast and/ or ovarian cancers. Poly (ADP-ribose) polymerase (PARP) inhibitors have recently been approved by the FDA for clinical use in BRCA1/2 mutation positive ovarian cancers and have shown favorable results in BRCA1/2 mutated breast and/ or prostate cancers. Traditionally, molecular testing for BRCA1/ BRCA2 is carried out either by targeted capillary sequencing or using commercially manufactured next generation sequencing (NGS) panels. Capillary sequencing is cumbersome, time consuming and results are difficult to analyse.

NGS based commercial assays, on the other hand, require a complicated initial laboratory set up, use of expensive and inflexible proprietary reagents that frequently necessitate large-scale batch testing and require considerable technical and bioinformatics expertise. This significantly impedes access to these tests to large segments of the Indian population. We have developed a low-cost targeted amplicon NGS assay, with a custom informatics pipeline, which covers the entire coding regions and exon-intron boundaries of the BRCA1/ BRCA2 genes. We have validated our results analytically with standardized reference material and clinically with >80 samples. Clinically significant variants were detected in ~39% of cases, while variants of unknown significance were identified in ~4% of cases. There was complete positive and negative correlation with orthogonal testing protocols which included targeted capillary sequencing and commercially available NGS panels. The use of an indigenous laboratory process and informatics pipeline makes this assay very attractive. The reduced cost and complexity allows wider access to genetic testing for BRCA1/2

Abstract: YUGP4185

**Case Report - Nasopharyngeal Mucoepidermoid Carcinoma Presenter- Dr. Ramamoorthy Deepak**

Co-author - Dr. L. Padmanaban, Dr. Saritha. D. Dr. Bareena

Mucoepidermoid carcinomas, a kind of primary adenocarcinoma mostly occur in the major salivary glands, the minor salivary glands of oral cavity and in the lacrimal glands. These tumours rarely occur in the sino-nasal tract, with those originating in the nasopharynx being extremely rare. As per review of available literature on present date, nasopharyngeal mucoepidermoid carcinomas account for 0.6% of salivary gland tumours and 4.8% of mucoepidermoid carcinomas. These cases showed an age incidence ranging from 20 to 60 years with a female preponderance. In contrast to nasopharyngeal carcinomas, these tumours show low positivity rates for Epstein-Barr virus serological test. Histochemical positivity for mucin may not be demonstrated in the glandular and mucinous components of these tumours. Mucoepidermoid carcinoma of nasopharynx is treated with surgical excision combined with radiotherapy or chemo radiotherapy alone based on stage and resectivity. The cases are generally associated with poor survival making early diagnosis, proper histopathological diagnosis and prompt treatment very important. This case report highlights the rare occurrence of an intermediate grade nasopharyngeal muco-epidermoid carcinoma in a 48 year old female patient and is presented for its unusual occurrence in the nasopharynx which is a rare location for this lesion.
Abstract Id: YUGP4187
Evaluation Of Tumor Response For Locally Advanced Rectal Carcinoma Patients Treated With Neoadjuvant Chemoradiotherapy
Presenter: Dr. Johan Sunny
Co-author - Dr. Sanjeet Kumar Mandal, Dr. Geeta S.N, Dr. Bhanumathy G

EVALUATION OF TUMOR RESPONSE FOR LOCALLY ADVANCED RECTAL CARCINOMA PATIENTS TREATED WITH NEOADJUVANT CHEMORADIOThERAPY Dr Johan Sunny, Dr Sanjeet Kumar Mandal, Dr Geeta S.N, Dr Bhanumathy G, Dr Bhaskar V, Dr M S Ganesh, Dr Shashidhar V, Dr Manjunath

ABSTRACT Background: The utility of preoperative chemo-radiotherapy in the management of patients with locally advanced rectal carcinoma has become standard of care with a 5-year survival benefit of about 9% as compared to adjuvant chemo-radiotherapy. Neoadjuvant therapy are associated with tumor downsizing, improved resectability and potentially for sphincter preservation options in distal rectum tumors. A study using histopathological examination following neoadjuvant chemo-radiation and surgery was conducted to understand the response among Indian patients. Objective: To evaluate the tumor responses following neoadjuvant chemoradiotherapy with post-operative histopathological examination in locally advanced rectal carcinoma. Materials and Methods: This is a retrospective study of 18 patients with carcinoma rectum (cT3-4, N+, M0) treated neoadjuvant radio-chemotherapy at Department of Radiation Oncology, Vydehi Institute of Medical Sciences, Bangalore. All suitable patients received treatment with radiation dose of 5040cGy in 28 fractions to tumor target with margins along with Oral Capecitabine at a dose of 825mg/m2. The patients were assessed for surgery after 6 weeks of neoadjuvant chemo-radiation. Histopathological examination were documented and evaluated using American system of Ryan. Results: Out the 18 patients, 14 patients were evaluable and 4 cases were excluded from the study (2-treatment defaulted, 1-lost follow up, 1-unresectable). The mean age at presentation was 45yr. The male to female ratio was 1:0.38. The incidence for upper, middle and lower rectal cancers were 15.3%, 30.7% and 53.8% respectively. The stage at presentation was stage IIA (7.1%), STAGE IIB (64.2%) and Stage IIIC (28.6%). The LVSI positivity was noted in 14.2%, the nodal complete response was observed in 76.9%. Overall response rate was 98.2% with complete response (21.4%), moderate response (14.28%), minimal response (50%) and progressive status was observed in one patient. Conclusions: Our study shows similar response rate as western literature; however with better nodal complete response.

Abstract Id: YUGP4189
Dosimetric Comparison And Clinical Feasibility Of Deep Inspiration Breath Hold (Dibh) Technique In Left Sided Breast Cancer Patients.
Presenter: Dr. RESHAM SRIVASTAVA
Co-author - Shagun Misra, SA Yoganathan, S.K.Senthil Kumar

Background: A slice of heart, especially the region of left anterior descending coronary vessel (LAD), comes into the beam trajectory when irradiating left sided breast cancers. This may have long term cardiac implications. To keep the heart away from the bi-tangential beams while the radiation beam is on - (DIBH) technique is practiced. We plan to compare this technique with the standard practice of free breathing. Material and Methods Left sided breast cancer patients after breast-conserving or mastectomy were enrolled as per our institutional DIBH protocol. We have analysed the dosimetric comparison of cardiac and LAD doses and efficiency of the process. Results: We have trained left sided breast cancer patients of age < 65years of age. Seven patients were trained for the procedure and out of these 3 patients underwent treatment according to DIBH technique. Among remaining 4 patients 2 were unable to hold their breath inspite of 3 training sessions, in one on planning scan heart was already out of tangential trajectory in free breathing and in one no dosimetric benefit was observed on plan. Therefore DIBH technique was abandoned in these 4 cases. Training time as an OPD exercise was 15 minutes, to capture free breathing and breath hold scan was 45 minutes. Time taken to plan by the physicist was 30 minutes. First day treatment setup and treatment time was45 minute and rest of days it was 25 minutes. Average of mean dose received by heart in free breathing versus breath hold was 5.5Gy versus 2.5Gy and mean LAD dose received was 33Gy versus 22Gy. Conclusion: Radiotherapy of the left breast in DIBH can be incorporated into daily routine. Although time taken by DIBH technique is more than usual routine patients but is associated with significant dose reduction to the heart and LAD.

Abstract Id: YUGP4191
Angiosarcoma Of The Scalp: Case Report
Presenter: Dr. Ramamoorthy Deepak
Co-author - Dr. M. JANARTHINAKANI, Dr. L. Padmanabhan, Dr Saritha D

Angiosarcoma is a rare and deadly malignancy originating from the vascular endothelial cells that usually occurs in the head and neck, especially in the scalp. The presentation varies from a small plaque to multifocal nodules. The treatment depends on the extent of the disease. Most cases are treated with wide excision and reconstruction, radiotherapy and chemotherapy are advocated in the recurrent or extensive lesions with regional or distant metastasis. A case of a 86-year-old female patient with a scalp lesion and palpable neck node is presented. On excisional biopsy it was diagnosed as angiosarcoma of skin and soft tissue. Wide excision was done and patient was given radiotherapy. Keywords: Angiosarcoma, Malignant angioendothelioma, Malignant hemangiendothelioma of scalp

Abstract Id: YUGP4195
Dosimetric Comparison Of Prone Versus Supine Hypofractionated Partial Breast Irradiation Via External Beam Radiotherapy In Early Breast Cancer
Presenter: Dr ARUN THIMMARAYAPPA
Co-author - UDAY KRISHNA A S, V LOKESH, VARATHRAJ C

OBJECTIVES: Prone position helps in improving PTV dosimetry and reduce the lung and heart dose. In this study we analyzed the dosimetry of PTV and OARs - heart and lungs in prone versus supine hypofractionated partial breast irradiation METHODS AND MATERIALS: Twenty histologically proven, newly diagnosed early stage carcinoma breast with informed consent were enrolled for the study and randomized. All patient underwent breast conservation surgery with lumpectomy cavity clip placement. Later they were simulated and planned in prone and supine position. Lumpectomy cavity was delineated using the clips. 1.5cm CTV was generated from the cavity followed by 0.5 mm margin was given to the PTV. 3DRT or IMRT plans were generated in both the positions. Patient was treated in supine position to a dose of 40Gy delivered in 15Fraction at 2.66Gy per faction, 1 faction per day over 5 fractions per week. Dose constraints were applied to the OARs namely then ipsilateral lung V30 <10%, V20<20%, V30<10% and the heart V20<5%, V10<10% and Dmean <5Gy. In our study the PTV Dosimetric parameters were assessed using PTV D90, PTV V95, PTV Dmax and PTV Dmax-PTV V95. Lung Dosimetric parameters were mean ipsilateral lung V30, V20 and V10 and Heart Dosimetric parameters were V20, V10 and mean heart dose. RESULTS: Between October 2014 and December 2016, 20 patients were enrolled on the study. The PTV D90 was 37.91Gy in supine position and 38.03Gy in prone position. The PTV Dmax was 106.22Gy in supine position and 105.87Gy in prone position. The PTV V95 was 91.73% in supine and 93.77% in prone position. The mean ipsilateral lung V30 was 6.69% in supine and 2.47% in prone position which was statistically significant (p =0.002). The mean ipsilateral lung V20 was 11.05% in supine and 4.87% in prone position which was statistically significant (p = < 0.001). The mean ipsilateral lung
Abstract Id: YUGP4197

Geometric Uncertainties In Anatomical Subregions In Intensity Modulated Radiotherapy For Nasopharyngeal Cancer

Presenter- Dr. Chitra R
Co-author - Dr Malu Rafi, Dr Rejnish Kumar, Dr Kainical CT

AIM: 1. To determine the systematic error, random error and derive PTV margins at three different anatomical levels in Nasopharyngeal Cancer. 2. Comparison of PTV margins calculated using KV orthogonal and KV-CBCT match. PATIENT SELECTION: 10 patients who were treated with radical radiotherapy with or without concurrent chemotherapy for nasopharyngeal cancer at Regional Cancer Centre, Thiruvananthapuram using IMRT technique. METHODOLOGY: For each patient weekly KV portal images and CBCTs were reviewed (amounting to 6 orthogonal images and 6 CBCTs per patient). An offline match of these images (orthogonal images with DRR and CBCT with planning CT) was done independently at three different anatomical levels: Clivus, C3 vertebral body, C6 vertebral body. The shifts obtained at each level in x, y and z directions were recorded and systematic and random errors was calculated for each level. Further, the PTV margin for antero-posterior direction, lateral direction and crano-caudal direction for the three levels were determined using the van Herk formula, PTV MARGIN = 2.5% + 0.7. RESULTS: 1) The systematic error in x, y and z directions for each level was as follows: Clivus: (0.18 mm, 0.07 mm and 0.11 mm with KV match) and (0.13 mm, 0.06mm and 0.12mm with CBCT match) C3 vertebral: (0.13mm, 0.08mm and 0.20mm with KV match) and (0.11mm, 0.07mm and 0.10mm with CBCT match) C6 vertebral: (0.19mm, 0.16mm and 0.19mm with KV match) and (0.14mm, 0.07mm and 0.16mm with CBCT match) The random error in x, y and z directions for each level was as follows: Clivus: (0.12mm, 0.10mm and 0.74mm with KV match) and (0.15mm, 0.17mm and 0.20mm with CBCT match) C3 vertebral: (0.17mm, 0.12mm and 0.17 with KV match) and (0.17mm, 0.20mm and 0.19mm with CBCT match) C6 vertebral: (0.16mm, 0.14mm and 0.26mm with KV match) and (0.19mm, 0.19mm and 0.17mm with CBCT match) The PTV margins calculated for x, y and z directions were as follows: Clivus: (0.53mm, 0.24mm and 0.33mm with KV match) and (0.44mm, 0.26mm and 0.44mm with CBCT match) C3 vertebral: (0.43mm, 0.28mm and 0.61mm with KV match) and (0.40mm, 0.31mm and 0.34mm with CBCT match) C6 vertebral: (0.59mm, 0.50mm and 0.67mm with KV match) and (0.50mm, 0.31mm and 0.53mm with CBCT match) CONCLUSIONS: The setup uncertainties at different anatomical levels of the head and neck region show significant variations with more shifts noted in the lower neck. The PTV margins required to account for these uncertainties differ for these sublevels, pointing towards the need for using differential PTV margins. Even though the set up uncertainties could be reduced with use of CBCT match, the need for differential margins still remains.

Abstract Id: YUGP4199

Post Neoadjuvant Chemo-Radiation Positive Anterior Circumferential Resection Margin In Carcinoma Rectum: Extended Resection Of Rectum Versus Total Pelvic Exenteration—Results From A Single Centre Retrospective Study.

Presenter- Dr. KAMLESH VERMA
Co-author - Reena Engineer, Vikas S. Ostwal, Suman Kumar

Background: Positive circumferential resection margin has been shown to be a powerful predictor of poor prognosis in rectal CA. Radiologically positive anterior CRM (PACRM) after NACT+RT leads to either resection of involved organ alone i.e. Extended resection of rectum (ERR) or Total pelvic exenteration (TPE). Purpose of this study is to compare recurrence rate and survival of patients undergoing ERR or TPE for PACRM after NACT+RT. METHODS: Retrospective study of patients operated for rectal CA from January 2013 to December 2014. Results: Out of 237 patients with non-metastatic CA rectum, 51 patients (21.5%) had PACRM. After NACT+RT, 22 patients (43.1%) developed systemic metastases, 7 patients (13.8%) were down sized and underwent extra-mesorectal resection (AR/APR), remaining 22 patients (43.1%) had persistent PACRM. 13 patients with PACRM underwent ERR whereas 9 patients underwent TPE. Median duration of hospital stay in TPE group was 13 days (10 - 26) whereas it was 7 days (5 – 21) in ERR group. Negative pathological CRM was achieved in all TPE and 92.3% of ERR patients. After median follow-up of 31.6 months, 5 patients with TPE (55.6%) and 4 patients with ERR (30.7%) developed systemic recurrence. None of the TPE patient, whereas 3 patients with ERR (23.1%) developed local recurrence. Median D.F.S. was 12.3 months in TPE and 18.9 months in ERR whereas mean O.S. was 36.2 and 32.8 respectively. Conclusions: Due to lack of significant difference in O.S./ D.F.S. and low post-operative complication and duration of hospital stay, ERR can be considered as an acceptable alternative to TPE.

Abstract Id: YUGP4201

Is There A Role For Local Radiotherapy In Osteosarcoma? Boaz Vincent, Arvind Murthy, Sunitha Susan Varghese, Patricia S, Rajesh B, Selvamani B

Co-author - DR ARAVIND MURTHY, DR SUNITHA SUSEN VARGHESE, DR PATRICIA

BACKGROUND Osteosarcoma is the most common primary bone malignancy. The management of non-metastatic Osteosarcoma involves neo-adjuvant chemotherapy (NACT) followed by limb salvage surgery. The role of local radiotherapy is not clearly defined. This study aims at assessing the impact of local radiotherapy on the outcome of disease. METHODS The patients treated for osteosarcoma from January 2013 to December 2014 in our Institute were reviewed retrospectively and data was obtained from the electronic medical records of the institution. NACT with 3 cycles of Cisplatin and Adriamycin followed by limb salvage surgery followed by adjuvant chemotherapy for 3 cycles and radiotherapy was the most common treatment protocol for non-metastatic osteosarcoma. Radiotherapy dose administered was 60 – 66 Gy in 30-33 fractions. Age at diagnosis, site of disease, surgery performed, histopathology including percentage of necrosis and margin status, radiotherapy dose administered were retrieved. Local recurrence rate and overall survival were estimated using Kaplan Meier survival estimation by SPSS version 22.0.0. RESULTS A total of 30 patients were treated for osteosarcoma in 2013 – 2014 in the department. The mean age of presentation was 23.7 years (14 to 56 years). The most common site was distal femur (51.57%). Twenty-two (73.3%) patients underwent limb salvage surgery. More than 90% necrosis on histopathology specimen was seen in 9.09% of patients. Positive surgical margin was seen in 61% of patients. One patient developed metastasis during adjuvant chemotherapy prior to RT and one patient discontinued treatment. Twenty patients received adjuvant local radiotherapy. Median follow-up was 18 months (4 to 43 months). The local control
rate in the radiotherapy group was 95%. The overall survival was 36 months (95% CI 30 to 41.9 months). Forty three percent patients developed distant metastases during the follow up period. At the time of study, eight patients were alive. Six of them were disease free and 2 patients with lung metastases. Survival data of 3 patients were not available. CONCLUSION Post-operative radiotherapy offers a good local control for Osteosarcoma patients with positive or close surgical margins after limb salvage surgery.

Abstract Id: YUGP4203
An Introduction To Sandwich Interstitial Brachytherapy As A New Treatment Strategy To Counter Repopulation In Locally Advanced Carcinoma Cervix-A Phase 1 Study
Presenter- Dr. Suresh Raghunath
Co-author - Dr. Suresh Raghunath, Dr. Bhaskar. Vishwanathan, Dr. Sanjeet Mandal

Abstract: Need For Study: This study examines if it is possible to maximize treatment benefit by delivering significant dose optimization to the tumor at the onset of tumor repopulation through interstitial implant in the 3rd and 4th week of external beam radiotherapy. Objective: To evaluate the tumour response and toxicity profile in sandwich interstitial brachtherapy in locally advanced Ca Cervix. Methods: A prospective study of 10 patients undergoing definitive chemoradiotherapy for biopsy proven cervical carcinoma from Feb 2017 onwards was conducted at Vydehi Institute of Medical Sciences, Bengaluru. Clinical assessment was done as per FIGO recommendations and Relevant Investigations were sent and recorded as Baseline Data. Cervical cancer patients Stage IB2 to IVA planned for Definitive CTRT prospectively enrolled into the study and received 3DCRT 46Gy in 23 Fractions with MUPIT implant for HDR Brachtherapy of 6 Gy in 5 fractions in the 3rd AND 4th week of EBRT with Inj.Cisplatin 40 mg/m2 weekly for 5 weeks. Clinical response assessment of the disease was done at 6 weeks and 3 months after completion of treatment. Radiological assessment was done at 3 months using T2 weighted MRI with contrast. RECIST 1.1 criteria was be used to document response and Acute Toxicities were graded by RTOG criteria. The comparison of normally distributed data was done using Independent T test and the non-normal data was analyzed using Mann-Whitney U test after 3 months of treatment. Statistical Analysis was performed using SPSS. Results: Results showed a favourable response to Sandwich Interstitial Brachtherapy with acceptable toxicities.

Abstract Id: YUGP4217
Title: Outcome Of Acute Lymphoblastic Leukemia (All) In Children- A Single Center Experience
Presenter- Dr. Intezar Mehdi
Co-author - Dr Suma T L, Dr Amit G, Dr Amritanshu Ram

Type: Retrospective analysis Background: ALL is the most common malignancy in children affecting children between 2-6 years with higher male preponderance. General manifestations include fever, hepatosplenomegaly, and lymphadenopathy with anemia, thrombocytopenia and low or high WBC count. Most children are treated by incorporating combination drugs involving 6 months of intensive chemotherapy followed by maintenance chemotherapy for 2 to 3 years. The outcome for children with ALL is good, with cure rates ranging from 75 to 90%. There is not enough published data from India with current protocols addressing outcomes in paediatric ALL. Subjects and Methods: Data from Jan 2011- July 2017 was included to study the epidemiological pattern, clinical presentation, relevant investigations, protocols being used with special emphasis on outcome and survival. Results: A total number of 100 cases were studied out of 300 (incidence 33%) childhood cancer kids seen in the same duration. Mean age at diagnosis was 6.65 years and median was 5 years of which 65% were males. Children in the age group of 2-6 years constituted about 45%. B-ALL was the commonest phenotype (65%). Philadelphia chromosome positivity was seen in 4%. 3 kids with bi-lineage or bi-phenotypic leukaemia were further excluded from analysis. 52 patients (53.6%) were treated with UK ALL 2003 protocol and rest with BFM protocols. 92 (94.8%) started treatment at our centre. NCI risk stratification criteria indicated 40(54.1%) at high risk and 34(45.9%) at standard risk. CNS positivity was seen in 9 (11.3%). Induction mortality was 8 (8.2%). 78 patients were available for evaluation post induction. Remission was achieved in 14 of 17 cases (Pre MRD era) and MRD negativity (<0.01%) was achieved in 58 of 61 (95.08%) post MRD era. 17 (21.78%) patients have finished treatment and 61 are on treatment. Relapse was seen in three and overall mortality was seen in 11 cases who started treatment. Conclusions: ALL is the commonest cancer in children with high cure rates. Longer follow up and larger numbers are required to ascertain the survival in our country with the current protocols.

Abstract Id: YUGP4219
Induction Chemotherapy In Locally Advanced Oral Cavity Cancer: A Single Centre Observational Study
Presenter- Dr. Pavneet Kohli
Co-author - Pavneet Kohli, Shivasanker M, Biswajit D

Background: Oral cancers continue to be the most common cancers in India and a significant proportion of patients present in locally advanced stage. The treatment protocols available have not given satisfactory results. Neoadjuvant chemotherapy has been tried out successfully in other cancers like cancer of larynx. Our study aimed to study the role of neoadjuvant chemotherapy in locally advanced oral cancer. Materials and Methods: A retrospective analysis of a prospectively maintained data of consecutive locally advanced oral cavity cancers enrolled for induction chemotherapy in a tertiary health centre in South India was carried out between August 2014 and June 2017. Post-induction these patients either underwent surgical or non-surgical local intervention depending upon their response. All patients received the standard three drug regimen of Docetaxel, Cisplatin and infusion 5-FU. Statistical analysis was performed by SPSS version 16. Descriptive analysis was performed. Results: A total of 62 patients of locally advanced oral cavity cancer were enrolled to receive chemotherapy. Ten patients defaulted during different intervals of the chemotherapy and were excluded from the analysis. Buccal mucosa was the most common site of the primary tumour (48.67%) with lower alveolus the second most common site (29.03%). 53.8%(28/52) of patients completed 3cycles of chemotherapy while 35.1% received 2 cycles. 2 patients died of chemotherapy associated toxicity. 51.9% patients had partial response. 13.46% had stable disease while disease progression occurred in 30.1%. 2 patients(3.84%) had complete pathological response. 61.53% patients underwent definitive surgery. 2 patients despite partial response did not consent for surgery. The reasons for not operating in remaining patients were disease progression, poor performance status and chemotherapy associated toxicity. On final histopathological analysis of surgically excised specimens 2 patients showed positive margins while 9 patients (28.1%) had close margins. 65.62% (21) had free margins on final biopsy analysis. Conclusion: Use of induction chemotherapy is safe and can achieve resectability in 55.62% of locally advanced/borderline operable oral cavity cancers. It also provides a bridge therapy in developing countries where waiting lists are long and health resources crunch.

Abstract Id: YUGP4221
Title: Role Of Cytogenetic Profiling In Predicting Outcomes Of Paediatric Acute Myeloid Leukaemia (Aml) Patients
Presenter- Dr. Dr Suma T L
Co-author - Dr. Intezar Mehdi, Sakshi Chikkalgi, Dr Amit G

Background: AML accounts for approximately 20% of acute leukemia in children and is the second most common leukemia in children. An
annual incidence in India varies from 0.9 to 3.5 per 100,000 children with male preponderance. Children suspected of AML undergo bone marrow examinations by cytology, flow-cytometry, cytogenetics, fluorescent in-situ hybridization and PCR. Flow-cytometry is used for French-American-British classification of AML subtypes, Cytogenetics. FISH and PCR is tested for detection of abnormal genetic features. Although, cytogenetics helps determine to understand prognosis and predict outcomes, while risk could determine outcomes, but it cannot predict outcomes. More samples needed for the concordance between risk and prognosis (X² = 17.529, p = 0.002).

Methods: Retrospective study of 32 AML cases was done and based on flow-cytometric analyses stratified into low, intermediate and high risk. Cases were also divided into prognostic categories using Cytogenetics. Risk and prognostic categories were compared with response evaluated post-treatment to evaluate their predictability. Results: 32 AML records were analysed. Risk frequencies, prognosis frequencies and response frequencies were tabulated. There was a concordance between risk and prognosis (X² = 10.559, p = 0.032). Conclusion: Although, cytogenetics helps determine to understand prognosis and determine risk, it cannot predict outcomes. More samples needed for determining the role of Cytogenetics in treatment and outcomes.

Abstract Id: YUGP4223

Comparative Assessment Of Qol In Locally Advanced Cancer Esophagus Patients Treated With Neoadjuvant Chemotherapy Or Neoadjuvant Chemoradiotherapy

-Presenter- Dr. KARISHMA TEKTA
-Co-author- Srivastava A, Saluja S, Kishore S

Purpose: Prospective assessment of variation in quality-of-life (QoL) in locally advanced cancer esophagus patients receiving neoadjuvant chemotherapy (NACT) versus neoadjuvant chemoradiation (NACTRT). Methods: Patients randomly allocated to NACT and NACTRT arms were assessed using validated EORTC QLQ-C30 (ver 3) and EORTC QLQ-OES18 questionnaires in hindi delivered pre and post neoadjuvant treatment. Domains assessed were Global health status (QoL), Physical (PF) and Role functioning (RF), Nausea vomiting (NV), Fatigue (FA), Eating (OESEAT), Reflux (OESRFX) and Dysphagia (OESDYS). Results: 39 fit patients of mean age 54.6 ± 10.1 SD years were treated with NACT (n=24) or NACTRT (n=15). Pretreatment baseline scores in both arms were comparable. Post neoadjuvant treatment, significant changes in QOL, PF, RF, OESRFX, OESDYS were documented in both arms. Post NACTRT, there was worsening of FA and NV whileOESRT scores failed to improve significantly. FA did not change with either treatment. Conclusion: Both NACT and NACTRT improved dysphagia, reflux and global QOL with consequent improvement in related domains. However, fatigue, nausea/vomiting and eating were adversely affected by the treatment intensification in chemoradiation arm. Longer follow up is required to assess sustained differences. TABLE: Domain Treatment arm Pretreatment Post neoadjuvant treatment Pre vs Post treatment significance QOL NACT 47.2 ± 6.3 77.0 ± 8.2 P< 0.05 NACTRT 45.5 ± 9.8 79.9 ± 6.8 P< 0.05 PF NACT 72.2 ± 15.5 83.3 ± 11.2 P< 0.05 NACTRT 75.1 ± 12.9 87.9 ± 11 P< 0.05 RF NACT 56.2 ± 13.6 53.1 ± 13.6 P< 0.05 NACTRT 58.9 ± 13.8 30.4 ± 34.6 P< 0.05 FA NACT 40.2 ± 13.8 47.2 ± 18.3 P= 0.4 NACTRT 39.9 ± 13.8 51.1 ± 17.2 P< 0.05 NV NACT 29.8 ± 24.8 ± 16.4 P= 0.08 NACTRT 19.9 ± 21 42.2 ± 29.4 P< 0.05 FA NACT 76.3 ± 18.3 72.2 ± 12.6 P= 0.5 NACTRT 64.4 ± 19.7 68.8 ± 8.6 P= 0.1 OESEAT NACT 41.3 ± 10.8 30.2 ± 6.8 P< 0.05 NACTRT 37.7 ± 7.6 33.8 ± 9.6 P= 0.6 OESRFX NACT 19.4 ± 16.7 9.7 ± 15.4 P<0.05 NACTRT 28.8 ± 11 17.7 ± 17.1 P<0.05 OESDYS NACT 59.2 ± 22 75.4 ± 29.8 P<0.05 NACTRT 57 ± 24.4 68.1 ± 33.8 P<0.05

Abstract Id: YUGP4225

Title: A Study On The Incidence And Management Of Febrile Neutropenia In Paediatrics In A Tertiary Care Hospital

-Presenter- Dr. Dr. Suma T L
-Co-author- Dr. Intezar Mehdi, Usha M, Dr Raghavendra Rao

Background: Chemotherapy the cornerstone of treatment of majority of solid and liquid cancers. The aim of this study is to evaluate the incidence of febrile neutropenia in paediatric cancer patients presenting with fever. Methods: A cross sectional study to evaluate the incidence of febrile neutropenia in paediatric cancer patients presenting with fever. Data included basic anthropometry, presenting complaints, type of cancer and treatment history, biochemistry and microbiology data and present course of treatment. Results: Paediatric cases with known diagnoses of cancer, admitted with a complaint of fever, and satisfying the selection criteria were 176. The sample, with an age of 7.9 ± 4.59 years and 121 males (68.8%), presented with complaints of fever alone (38.1%), or along with vomiting (14.2%), mucositis (12.5%), cough (8%), cold (4%), body chills (4%), headache (3.4%), and other symptoms. Of the 176 cases, 109 (61.9%) had liquid tumours comprising of 72 ALL (66.1%), 14 AML (12.8%), 9 Burkitt’s Lymphoma (8.2%) and others, while of the 67 solid tumours, 45 (67.2%) cases of osteosarcoma, 6 (9%) cases of Wilms tumor, 5 (7.5) cases of neuroblastoma, etc. were seen. Porta-cath insertion was done in 124 (70.5%) of the cases while a Hickman catheter was inserted in 48 (27.3%) cases. Difference in the incidence of Bacterial growth in blood culture was assessed between solid and liquid tumours and was seen that solid tumours had higher incidence (8/67, 12%) as opposed to liquid tumours (4/109, 3.7%). Amongst solid tumours, those with porta-cath insertion had a higher incidence of infection (6/36, 16.7%) that those that had a Hickman catheter placed (2/29, 6.8%). Amongst liquid tumours however, although inconclusive, those with the porta-cath had a lower incidence of infection (3/88, 3.4%) that those that had a hickman catheter placed (1/19, 5.3%). Conclusions: Febrile neutropenia is a common complication in childhood cancer treatment. In the present study, the incidence of febrile neutropenia was seen more in haematological malignancies. Use of porta-cath has a higher infection rate as compared to Hickmans catheter in case of solid tumours. A larger observational study is needed to substantiate these findings.

Abstract Id: YUGP4227

Oncological Outcomes Of Rectal Cancer Surgery In Two Different Time Zones: A Retrospective Analysis Of 455 Patients From A Single Institution

-Presenter- Dr. Jayakarthik Y
-Co-author - Dr KVN Raju, Dr T Subramanyeshwar Rao, Dr Satish Pawar

 Aim To assess and compare the pathological and survival outcomes of patients undergoing upfront surgery followed by adjuvant treatment versus NACRT followed by surgery for rectal adenocarcinoma. Methods We retrospectively reviewed the medical records of patients with adenocarcinoma of the rectum who subsequently underwent surgery from August 2010 onwards. Analysis was done on the pathological and survival outcomes of the patients. Results There were 455 patients who underwent surgery for adenocarcinoma of the rectum. Overall patients with pathological Tis, T1, T2, T3, T4 were 0.21%, 17.36%, 3.07%, 31.64%, 41.09% respectively. 60%, 10.76%, 9.23%, 2.19%, 9.01%, 8.35% had pathological No.1A,1B,1C,2A,2B status respectively. 6.81%, 58.46%, 15.82%, 17.58% had well differentiated, moderately differentiated, poorly differentiated and no residual tumors respectively on the final histopathological analysis. Comparision of the outcomes were done among patients undergoing upfront surgery(n=112) with those undergoing surgery post nacrt(n=343). CRM positivity was seen in 13.39% and 8.10%, LVI in 34.82% and 24.48%, EMVI in 23.21% and 6.99%, node...
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positivity was seen in 53.57% and 35.56% respectively. Among the node positive patients, extra nodal extension was seen in 38.33% and 28.68%, apical node involvement in 18.33% and 16.39% among the two groups. In 3 year follow up the patients having distant relapse and dying was 46.15% in the upfront surgery group and 30.9% in the NACRT group. The positive impact of the NACRT on the individual pathological parameters has also been detailed. Conclusion NACRT has shown to improve the pathological outcomes and thus impact survival in the management of rectal adenocarcinoma

Abstract Id: YUGP4231
Aberrant Expression Of Sphingosine-1-Phosphate Metabolizing Enzymes And Long Non-Coding Rnas In Oral Squamous Cell Carcinoma Patients
Presenter - Ms. Supriya Vishwakarma
Co-author - Ashok Kumar, Rahul Agarwal, Deepti Joshi

Objective and Background: Sphingosine-1-Phosphate (S1P) is a signaling sphingolipid. The role of S1P metabolizing enzymes in oral squamous cell carcinoma (OSCC) has not been fully understood. Dysregulated expression of long non-coding RNAs (lncRNAs) in cancer marks the spectrum of disease progression and may serve as an independent predictor for patient outcomes. Role of MALAT1, Khps1-406, UCA1, HOTAIR, TUG1, H19, HULC lncRNAs have not been elucidated in OSCC. Material and Methods: Here, we determined the mRNA expression profile of eight S1P metabolizing genes (Sphk1, Sphk2, SGPL1, SGPP1, SGPP2, LPP1, LPP2 and LPP3) and above lncRNAs by quantitative real-time PCR in tumor tissues of 50 OSCC patients compared with adjacent normal tissue of the same patient. Results and Conclusion: In this study, we demonstrate that the expression of four out of eight major enzymes that regulate S1P levels were altered significantly in OSCC. Expression levels of Sphk1 and SGPP1 genes were upregulated significantly in 70% and 75% OSCC tumors, respectively. Importantly, expression levels of Sphk2 and LPP3 (PPAB2B) were downregulated in tumor tissue of 70% of OSCC patients. Furthermore, expression level of lnc RNAs TUG1 and UCA1 was up-regulated significantly in tumor tissue of OSCC patients; whereas expression of MALAT1 and H19 was downregulated in the OSCC tumors. Our data shows that expression of S1P metabolizing genes and 4 lncRNAs is altered significantly in OSCC tumors, thus these enzymes could be a potential therapeutic target.

Abstract Id: YUGP4233
Evaluation Of Two Boost Radiation Schedules In Post Lumpectomy Early Stage Carcinoma Breast
Presenter - Dr. Buddhi Singh Yadav
Co-author - Dr S C Sharma, Dr G Singh,

Introduction Breast-conserving surgery (BCS) followed by radiation therapy to the intact breast is an established standard of care for the majority of women with early stage invasive breast cancer. Recommended whole breast irradiation (WBI) schedule is 45 to 50 Gy and it is followed by a boost of 10 to 16 Gy to the tumour bed. In this study we compared boost schedule of 10Gy/5#/1 week with 16Gy/8#/1.5 weeks in post lumpectomy patients of early stage breast cancer. Materials and methods From October 2012 to December 2016, the study included 87 early stage breast cancer patients post BCS. All patients were treated by WBI of 40Gy/16#/3weeks. WBI was followed by tumor bed boost of 10Gy/5#/1 week in 44 patients or 16Gy boost 33% as compared to 23% in 10Gy boost arm. Late skin toxicities were also high in patients with 16Gy boost. Grade 2 induration was seen in 4.5% and 12% patients with 10Gy and 16Gy boost respectively. None of the patients with 10Gy had grade 3 induration as compared to 2% with 16Gy. Similarly none of the patients with 10Gy had grade 2 edema as compared to 5% with 16Gy. Pigmentation was observed in 9% and 23% patients with 10Gy and 16Gy boost respectively. Grade 1 fibrosis was 2% versus 12% in patients with 10Gy and 16Gy boost respectively. Median follow up was 39 months. Cosmetic score was good/excellent in 91% and 84% patients with 10Gy and 16Gy boost respectively. It was fair/poor in 9% and 17% with 10Gy and 16Gy boost respectively. Local recurrence occurred in one patient in 16Gy arm. Conclusion Acute and late skin toxicity was higher with 16Gy boost dose. Cosmetic score was better with 10Gy boost.

Abstract Id: YUGP4237
Correlation Of Sentinel Node Positivity On Frozen Section With Histopathology Diagnosis On Excision Biopsy.
Presenter - Dr. Tejas Chincholi
Co-author - Tejas S Chincholi, Vijay Kumar Sharma, Mahesh K Bandimagal

Background: Sentinel node biopsy on frozen section helps reduce unnecessary axillary dissection. Frozen section specimens for validation of sentinel node positivity is important to make decisions intra-operatively on axillary dissection. Methods: One hundred and forty two consecutive patients with operable Carcinoma breast were evaluated for sentinel node biopsy using frozen section while undergoing primary surgery as a treatment. In all these patient’s axillary nodes were not palpable clinically before surgery. Sentinel node biopsy procedure was done using methylene blue technique and sentinel node isolated. Frozen section had a sensitivity of 91.6% with histopathology (95% CI-76.4 to 97.8%) and specificity of 99% (95% CI- 92.6 to 99.8%). 97.2% negative on frozen was negative on histopathology and 94.3% positive on frozen section was positive on histopathology. Only 5.7% positive on frozen was negative on histopathology. This was significant with chi square = 115.2, p<0.001 Conclusion: Frozen section is a good technique with good sensitivity to detect sentinel node.

Abstract Id: YUGP4239
Title: Role Of C-Reactive Protein As A Marker For Infection In Paediatric Cancer Patients, Presenting With Fever Title: Role Of C-Reactive Protein As A Marker For Infection In Paediatric Cancer Patients, Presenting With Fever
Presenter - Dr. Amit Galgali
Co-author - Dr. Intezar Mehdi, Apoorva Jagateri, Dr. Suma T L

Background: Fever is a response to infection but only 50% of cancer patients develop infection although fever is seen. CRP is an acute phase reactant to inflammation. NLR & PLR are indicators of subclinical inflammation. Patients with fever often spend between two days to a month in the hospital. CRP determination has been used in the diagnosis of infection as well as to monitor the outcome of infection treatment in patients with paediatric malignancies and fever. Distinguishing between infectious fever and non-infectious fever is of paramount importance in cancer patients because of the urgency and necessity for appropriate treatment in these high risk and immunocompromised individuals. Determination of serum CRP levels in febrile patients is helpful in the differential diagnosis of bacterial and viral infections as well as its serial measurements are used to monitor treatment effectiveness. Objectives: The study was designed to evaluate if biochemical markers of inflammation influence duration of hospital stay and does this differ with different paediatric cancers. Methods: Paediatric instances of hospital admission due to fever were retrospectively analysed along with their cancer history, biochemical
Abstract Id: YUGP4241
Impact Of Preoperative Chemoradiation On Tumour Regression In Rectal Cancer
Presenter - Dr. Rahil Patel
Co-author - Dr. Janaki MG

Background: Neoadjuvant chemotherapy has become standard treatment for locally advanced rectal cancer. Neoadjuvant chemoradiotherapy not only can reduce tumour size and recurrence but also increases tumour resection rate and anus retention rate with minimal side effects. Purpose/objective: To assess efficacy of preoperative chemoradiation on tumour regression. Materials and methods: Database from 23 patients was retrospectively reviewed. Data for preoperative tumour staging was collected using Contrast enhanced CT scan of Abdomen-Pelvis. Neoadjuvant radiotherapy was given with a dose of 45Gy/25f over 5 weeks along with two cycles of four weekly chemotherapy of 5-Fluorouracil 1gm over four days. All patients underwent AR/LAR/APR later on. Post-operative histopathology reports were collected and correlated with preoperative CT scan findings to assess the response to neoadjuvant chemoradiation using Dworak and Rodel tumour regression grading system. Results: All patients received neoadjuvant chemoradiation. Tumour response to Neoadjuvant chemoradiation was seen in 82.6%. Downstaging in tumour size post chemoradiation was seen in 11 patients (47.8%). Downstaging in nodal status was seen in 12 patients (52.1%) (p=0.004). Results were not statistically significant as far as responses between tumour grades (p=0.411), downstaging in tumour size (p=0.426), response to treatment based upon time interval between chemoradiation and surgery (p=0.426) were considered. Moderately differentiated tumour grade showed complete response in 1 patient (5%) and partial response in 14 patients (58.3%). Well differentiated tumour grade showed partial response in 2 patients (50%). Poorly differentiated tumour grade showed partial response in 1 patient (50%). Thirteen patients (72.2%) showed partial response and one patient (5%) showed complete response (pCR) when surgery was performed within 12 weeks of completion of chemoradiation. All Four patients showed partial response when surgery was performed after 12 weeks of completion of chemoradiation. Conclusion: Most of the patients showed response to neoadjuvant chemoradiation. Downstaging in nodal status was the only significant finding seen with neoadjuvant treatment.

Abstract Id: YUGP4242
Curative Treatment Of Neuroendocrine Tumors Of The Esophagus: A Tertiary Centre Experience
Presenter - Dr. Parag Ingle
Co-author - Parag Ingle, Sabita Jiwnani, George Karimundackal

Curative treatment of neuroendocrine tumors of the esophagus: a tertiary centre experience Parag Ingle, Sabita Jiwnani, George Karimundackal, C S Pramesh Purpose Neuroendocrine tumor of esophagus is a rare entity. There is paucity of literature on its management and outcomes. This retrospective study aims to evaluate the management strategy and the outcomes of patients with this rare malignancy who underwent potentially curative resection at a tertiary cancer centre. Methodology Patients with neuroendocrine tumors of esophagus who underwent potentially curative resection between the years 2006 to 2016 were identified from a prospectively maintained database. Relevant details of these patients were gathered from the electronic medical record. Demographics, clinicopathological profile, treatment strategy, recurrence pattern and survival outcomes of these patients are reported. Results Six patients (four male, two female; age range 47-60 years) were identified. Five patients had clinical T3 (cT3) tumor stage while one had cT2 tumor. Clinicoradiologically all patients had positive nodes. Five patients received neoadjuvant platinum based chemotherapy. Margin free resection by transthoracic esophagectomy with two field or three field lymphadenectomy was performed in all cases. One patient who underwent upfront resection received platinum based adjuvant chemotherapy. Small cell carcinoma was reported in five cases while one had poorly differentiated carcinoma with neuroendocrine traits. Two patients developed nodal recurrences while one patient developed distant metastasis and all three subsequently died. Over a mean follow up of 40 months (range 5-124 months) four patients have died 5, 9, 14 and 31 months after surgery and two are alive and disease free, 57 and 124 months after surgery. Conclusion Multimodality therapy might help to achieve good outcomes in this rare subset of patients with neuroendocrine tumor of esophagus. Collaborative research will help better understand the disease and modify management strategy to improve outcomes. Conflict of Interest: None to declare

Abstract Id: YUGP4244
Protective Diversion Ileostomy In Low Anterior Resection For Rectal Cancer: A Meta-Analysis Of Randomized Controlled Trials
Presenter - Dr. Aakanksha Goel
Co-author - Aakanksha Goel, Nilokali Chishi, Manish Kumar Gaur

Introduction Low anterior resections (LAR) of rectum with sphincter salvage have become increasingly popular in the management of low and mid rectal cancers as their oncological safety and potential to improve quality of life have been established. The advent of neoadjuvant therapy and circular stapling devices has improved sphincter salvage rates in rectal cancer. Anastomotic dehiscence is a potential complication of LAR and can lead to significant postoperative morbidity and mortality. The present meta-analysis addresses the potential role of protective diversion ileostomy in LAR to lessen the anastomosis leak rates and reoperation rates. Methods A literature search was performed in Pubmed for the randomized controlled trials (RCTs) that compared the role of protective ileostomy with no-ileostomy in low anterior resection of the rectum, published prior to October 2016. Review manager (Cochrane Collaboration’s software) version RevMan 5.2 was used for analysis. The effect size for dichotomous and continuous data was displayed as relative risk (RR) and weighted mean difference (WMD) respectively with their corresponding 95% confidence intervals. A fixed effect or random effects model was used to pool the data according to the result of a statistical heterogeneity test. Heterogeneity between studies was evaluated using the Cochran Q statistic and the I2 test, with p < 0.05 indicating significant heterogeneity. Results There were five RCTs available for the analysis. A total of 768 patients were included in the meta-analysis – 390 underwent protective diversion ileostomy at the time of LAR in rectal cancer while 378 patients did not. The fashioning of ileostomy significantly decreased the anastomosis leak rates (RR 0.33, 95% CI 0.21-0.51, p value <0.000) and reoperation rates (RR 0.26, 95% CI 0.15-0.45, p value <0.000). Conclusion The present metaanalysis supports the beneficial role of protective diversion ileostomy in LAR in rectal cancer as it decreases the anastomotic leak rates by one third and reoperation rates by one fourth.

Abstract Id: YUGP4246
Volume Based Prescription In Intracavitary Brachytherapy In Carcinoma Cervix: An Institutional Experience
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Presenter- Dr. LITHIKA LAVANYA M
Co-author - DR MOHAN KUMAR S, DR JANAKI M G, DR ARUL POONI T

Background: Carcinoma Cervix is the second most common cancer in women worldwide. Concurrent chemoradiation is the standard treatment for locally advanced carcinoma cervix. Brachytherapy plays an important role in local control and late toxicities. Though there is a transition from 2D based brachytherapy planning to 3D based planning, there are limited number of studies on volume based dose prescription. In the present study we have analysed the treatment outcome and chronic toxicities in volume based dose prescription in intracavitary brachytherapy. Objective: To determine the local control and late toxicities at 2 years in volume based dose prescription in intracavitary brachytherapy. Materials And Method: Retrospectively analysed the data of 68 carcinoma cervix patients who underwent intracavitary brachytherapy from August 2013 to July 2015. CT scan based simulation was done after insertion of ICBT applicators, organ at risk and high risk CTV (HRTV) were defined according to GEC-ESTRO guidelines and radiation dose of 6.5Gy was prescribed to HRCTV for 4 fractions. Patients were followed up once in 2 months after completion of treatment. Local tumour control and late toxicities were assessed by clinical examination and imaging modality when required. Results: Median age was 48 years. Three patients belonged to stage IIA, 51 to stage IIB and 13 to stage IIB. Seven out of 68 had loss of follow up, 7 died due to unknown cause and hence only 54 patients were considered for analysis. One patient had local recurrence. Local tumour control rate at 2 years was 96%. Two patients developed grade 2 proctitis (3%). One patient had vaginal stenosis (1%). Conclusion: The local tumour control rate and late toxicities observed in this study were comparable to that observed in literatures on Point A based prescription.

Abstract Id: YUGP4248
Open Versus Laparoscopic And Robotic Approach For Intersphincteric Resection: Retrospective Study Of Oncological Outcome From Single Centre Of India.
Presenter- Dr. KAMLESH VERMA
Co-author - Ashwin Desouza, Vishwas Pai, Ashish Pokharkar

Introduction: Role of minimally invasive surgery in low rectal cancer is still debated, though minimally invasive approach seems useful in obese patients with narrow pelvis. This is a retrospective review of a prospectively maintained database including all the patients of rectal cancer who underwent ISR at Tata Memorial centre between July 2013 to April 2017. Results: 139 patients with rectal cancer underwent ISR during above mentioned period – 62 open (44.6%), 56 laparoscopic (40.3%) and 21 robotic (15.1%). After median follow up of 24.2 months estimated 3 year disease free and overall survival for entire cohort were 70.6% and 88.0% respectively. In open surgery group there were 2 (3.2%) local and 7 (11.3%) systemic recurrences. 5 (71.4%) patients with systemic recurrences died due to disease. In laparoscopic surgery group there was 1 (1.8%) local and 10 (17.0%) systemic recurrences, one (10.0%) patient with systemic recurrence died due to disease. In robotic surgery group 1 (4.8%) patient had developed systemic recurrence and died, none of them developed local recurrence. 3 year estimated overall survival in open, laparoscopic and robotic group was 84.6%, 94.5% and 87.5% respectively (p = 0.513). 3 year disease free survival was 77.5%, 50.3% and 87.5% respectively (p = 0.248). Conclusion: Based on these short term results laparoscopic and robotic ISR seems oncologically appropriate for selected patients with low rectal cancer. Whether laparoscopic and robotic ISR is equivalent to open procedure in terms of long term oncological outcome, can be answered by prospective studies with longer follow up.

Abstract Id: YUGP4250

Intersphincteric Resection: Retrospective Study Of Oncological Open Versus Laparoscopic And Robotic Approach For

Abstract Id: YUGP4256
Pelvic Exenteration In Cervix And Anorectal Malignancies Single Institution Experience
Presenter - Dr. Ramana reddy Naru
Co-author - Narendra H ,

INTRODUCTION: Pelvic exenteration(PE) is an ultra radical surgery first introduced by Alexander Brunschwig in 1948 for locally advanced...
gynecological cancers[1]. In a series by Brunschwig and Barber [2] long-term survival was obtained in several patients, suggesting the possibility of cure in selected patients. Cervical carcinoma displays recurrence rates related to clinical stage as follows: stage FIGO IB 10%, stage FIGO IIA 17%, stage FIGO IIB 23%, stage FIGO III 42% and stage FIGO IV 74% [3]. Most of recurrences occur within 3 years after primary treatment (80% to 95%) and prognosis is poor with a 5-year survival rate ranging from 6% to 77% [4]. The reported risk factors in the literature for poor prognosis in PE were tumour size exceeding 4 cm, margin status and lymph node metastasis[5]. PE surgery removes basically all the pelvic organs including not only the uterus, ovaries, and vagina, but also the bladder, rectum, and rectosigmoid colon. However, the procedure was purely palliative and the operation resulted in the long-term survival of only a few patients[1]. Over decades the improvement in surgical techniques, perioperative management, and selection criteria led to significant improvements in perioperative mortality, long-term survival, and quality of life [6,7]. Subsequently, the surgical procedure has evolved from a purely total exenteration to an operation that includes a reconstructive phase with urinary diversion, colon-sparing surgery, anal sphincter preservation, and pelvic ?oor reconstruction. Today, PE is considered to be a feasible procedure that o?ers life to selected patients for whom no other possibility of cure is available. The goal of PE has been mainly shifted from a palliative procedure to a potentially curative one. The goal of the study was to determine patient characteristics, surgical outcome, survival, recurrence and complications in curative PE treatment. MATERIALS ANDMETHODS: We thoroughly reviewed medical records of 13 patients who underwent Pelvic Exenteration (PE) at tertiary care centre from August 2012 to July 2015 (3 years) for recurrent cervical and anorectal malignancies. Approval for this retrospective study was given by the Institutional Review Board. Patients underwent a thorough preoperative assessment to evaluate their general medical status and indication for surgery. The primary indication for PE is recurrent cervical and anorectal malignancies without distant metastasis. Patients underwent computed tomography (CT) or magnetic resonance imaging (MRI) of the pelvis and abdomen to evaluate the disease extent and to estimate the likely extent of surgery, and postion emission tomogram (PET) or CECT chest to identify metastatic disease. Images and biopsy results were discussed at the tumor board-a multidisciplinary team meeting before definitive procedure. Pelvic lesions and suspected metastatic lesions (presence of which generally precluded surgery) underwent histological con?rma?on. Once surgical management was considered indicated, the procedure was discussed at length with the patient. The patient was provided with full details regarding the nature of the operation and its consequences. For each patient, the following characteristics were recorded: age at the time of procedure, primary cancer histology, site and size of recurrence, history of previous treatments, timing between primary diagnosis and relapse, type of operation, pathology, complications, and the interval time from surgery to last follow-up. PE was classiﬁed as anterior, posterior, and total PE. Anterior PE was referred to the removal of the reproductive tract and the bladder. Posterior PE was referred to the removal of the reproductive tract along with the rectosigmoid colon and the total PE was referred to the removal of the reproductive tract, bladder, and recto-sigmoid colon. Surgical parameters including PE type, intraoperative complications, and the length of hospital stay were evaluated. Early complications were deﬁned as those occurring within 30 days of the exenteration. Late complications were deﬁned thereafter up to 1 year. Complications were classiﬁed as gastrointestinal, wound-related or other. Overall survival (OS) time was calculated as months from the date of surgery to death or the date censored. Disease-free survival (DFS) time was calculated as months from the date of surgery to the date of recurrence. Descriptive statistics are reported as frequencies, percentages, mean, median and standard deviations. The association between OS and PE was estimated using the method of Kaplan-Meier and assessed using the log-rank test. All statistical testing was conducted at the 0.05 confidence level using SPSS version 20. RESULTS: Thirteen patients underwent pelvic exenteration for cervical and anorectal malignancies. Patient and disease characteristics are presented in Table 1. The median age at cancer diagnosis was 48 years (range 43–71) and median age at the time of exenteration was 49 years (range 43–71). Almost all patients were presented with symptoms at time of initial cancer diagnosis. The most common symptoms reported were vaginal bleeding (76.9%), bleeding per rectum (23.1%), abdominal pain (38.5%) and weight loss (30.8%). Ten patients (76.9%) had primary chemoradiation treatment, while 2 (15.4%) had upfront surgery and 1 (7.6%) had surgery followed by chemoradiation. The majority of patients had recurrent cervical cancer (61.5%) and two patients had persistent cervical cancer. Most patients had exenteration for treatment of recurrent cancer (76.9%). Median time from original diagnosis to recurrence was 12 months (range 5–120). As cited in Table 2, anterior pelvic exenteration (38.5%) was the most common procedure followed by anterior (30.7%) and posterior (30.7%) exenteration. As demonstrated in Table 3, of the 4 patients who had lymph node dissections, 2 (16%) had positive pelvic lymph nodes at the time of exenteration. There was one (2%) patient of anorectal carcinoma had chemoradiotherapy for a positive lymph node and another patient of anorectal carcinoma who had palliative resection received postoperative chemotherapy. We identiﬁed 2 patients with early complications of paralytic ileus, 1 patient with abdominal wound infection and perineal wound dehiscence in another two patients. These complications were managed conservatively. One patient had late complication of fecal ﬁstula after 16 months postoperatively planned for diversion colostomy but patient was defaulted. Prognostic pathologic features and survival outcomes are presented in Table 3. The median follow-up time was 14 months for the entire cohort (range 3–43 months, SD: 13.1). With a median survival of 18 months, 1 year overall survival from pelvic exenteration for the entire cohort was 84.6%, with 38.5% of patients still living at 2 years and 15.4% at 3 years. Patients who were treated for recurrent disease had better overall survival (p = 0.041) than those treated for primary or persistent disease. Negative margin status was not associated with a longer disease-free survival or overall survival (p=0.84). Overall survival of cervical cancer and anorectal carcinoma were comparable (p = 0.18). Nodal status at the time of exenteration was not associated with time to recurrence or survival (p=0.2) Table no.1 Patient characteristics: Characteristic Median age at diagnosis(years) 48 (43-71) Primary tumor site Cervix 10 (76.9%) Anorectum 3 (23.1%) Indication for exenteration Primary treatment 2 (15.4%) Recurrent disease 8 (61.5%) Residual disease 3 (23.1%) Histology Squamous cell carcinoma 10 (76.9%) Adenocarcinoma 2 (15.4%) Melanoma 1 (7.6%) Table no.2 Surgical data Median age at exenteration(range) 49 (43-71) Exenteration type Anterior 5 (38.5%) Posterior 4 (30.7%) Total 4 (30.7%) Type of resection Curative R0 12 (92.3%) Palliative R+ 1 (7.6%) Type of conduit Ileal 3 (23.1%) Colonic 10 (76.9%) Intra operative Blood loss NA Median Hospital stay in days 10 (8-22) Wound dehiscence Perineal 2 (153%) Abdominal Nil Abdominal Wound infection 1 (7.6%) Paralytic ileus 2 (15.3%) Fecal fistula 1 (7.6%) Table no.3 Prognostic factors and outcomes after pelvic exenteration parameter Number of patients Margin status at PE Positive 17 (76.9%) Negative 12 Site of recurrence post PE Pelvis 3 (23.1%) Distant metastasis Liver metastasis 2 (15.3%) Bone metastasis 1 (7.6%) Pelvis and Ingual lymphnode 1 (7.6%) None 6 (46.1%) Median OS in months(range) 18 (3-48) Median DFS in months(range) 16 (3-46) Median Follow up in months(range) 14 (3-43) Time to recurrence after PE in months 18 (3-42) Disease status NED 3 (23.1%) Alive with disease 1 (7.6%) Dead of disease 6 (46.1%) Dead of other 3 (23.1%)
Abstracts

The clinical improvements obtained in the last decades may be mainly due to better surgical techniques and more intensive postoperative care. Although exenteration was originally described for the treatment of centrally recurrent cervical cancer, good outcomes have been demonstrated for other pelvic disease sites[11,12]. However, this study focused on the more traditional use of exenteration, and in our cohort overall survival was better for patients with recurrent cancer than persistent or primary cancer (p = 0.041) and no significant survival difference were noted in comparison to cervical with anorectal(0.18), R0 versus R+ resection(0.84), lymphnode positive versus negative(p= 0.20). In Benn et al. Study, patients with recurrent disease had lower overall survival than patients with persistent or primary cancer (p= 0.0003). Overall, the median survival time in our study was 18 months with a 1year overall survival from pelvic exenteration for the entire cohort was 84.6%, with 38.5% of patients still living at 2 years and 15.4% at 3 years. Patients who were treated for recurrent disease had better overall survival (p = 0.041) than those treated for primary or persistent disease. Negative margin status was not associated with a longer disease-free survival or overall survival (p=0.84). Overall survival of cervical cancer and anorectal carcinoma were comparable (p = 0.16). Nodal status at the time of exenteration was not associated with time to recurrence or survival (p=0.20). This is comparable to other studies which found median 5year survival times ranging from 30% to 60% [12-16]. Various aspects of patient characteristics and preoperative, operative and postoperative variables have been investigated to help select the most appropriate patients for this procedure. Even though the data is variable, many studies have cited characteristics, such as tumor size, nodal status, pelvic sidewall involvement, margin status, histology, and time from primary diagnosis to exenteration as affecting survival [11,12,14,15]. Fotopoulos et al. found that complete tumor resection was associated with higher overall and progression free survival [14]. Similarly, Rutledge and McGuffee found that some long term survival can be achieved even with positive lymph nodes, if completely resected. But in our study did not show any survival difference. One of the most important problems after PE is the large defect created in the perineal-pelvic floor after resection. It has been conclusively demonstrated that to lower postoperative complications, it is necessary to fill this defect [17]. Flaps are being widely used to reconstructed the perineum defect after PE because they present with several advantages such as providing skin coverage, reliability, good blood supply and bulky tissue to fill the pelvic cavity. In a study published by Nelson and Butler [18] comparing surgical outcomes of VRAM flap vs thigh flaps for immediate reconstruction of perineum defect showed that vertical rectus abdominis myocutaneous (VRAM) flaps were associated with fewer complications than thigh flaps, not increasing abdominal wall morbidity. We used VRAM for a postoperative patient with perineal wound dehiscence. The complication rate in our cohort was 38.4% for early complications and 7.69% for late complications. This is similar to the 30 to 60% complication rate reported in the literature [6,13,14,19,20]. The limitations of this study primarily retrospective, but missing data were minimal. Further, these results may not be generalizable to all institutions. To conclude, PE may be the only curative option for patients with pelvic recurrent gynecologic cancers. Patient selection, free surgical margins, no lymph node involvement, and adequate pelvic reconstruction are the most important factors for PE to produce favorable outcomes. REFERENCES: 1. Brunschwig A. Complete excision of pelvic viscera for advanced carcinoma: a one-stage abdominoperineal operation with end colostomy and bilateral ureteral implantation into the colon above the colostomy. Cancer 1948;1:177-83. 2.Brunschwig A, Barber HR. Extended pelvic extenteration for advanced cancer of the cervix. Cancer 1964;17:1267-70. 3. Perez, C.A., Grigsby, P.W., Nene, S.M., Camel, H.M.,Galakatos, A., Kao, M.S. and Lockett, M.A. Effect of tumor size on the prognosis of carcinoma of the uterine cervix treated with irradiation alone. Cancer69:2796-806. 4. Peiretti, M., Zapardiel, I., Zanagno, V., Landoni, F,Morrow, C.P. and Maggioni, A. 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Plast Reconstr Surg. 2009;123:175–183. 20. Miller B, Morris M, Gershenson DM, Levenback CL, Burke TW. Intestinal fistulae formation following pelvic exenteration: a review of the University of Texas M.D. Anderson Cancer Center Experience, 1957–1990.

Abstract Id: YUGP4258

Assessment Of Information Needs, Decision Making Preferences And Evaluation Of Quality Of Life In Patients With Metastatic Cancer Receiving Palliative Radiotherapy

Presenter - Dr. BATTEPATI C NARASIMHULU

Co-author - Dr Monica mallik irukulla, DR FAYAZ AHMED.

Back Ground:The disease requires patients to learn about the illness, make decisions regarding treatment and cope with the illness and therapy. Materials and Methods:prospective study in 50 patients with metastatic solid malignancies received palliative radiotherapy.We assessed Information needs of patients using Cassileth’s InformationNeeds questionnaire.Decision making,control preferences assessed using control preference scale and SURE test questionnaire. QOL was assessed before and 1month after completion of radiotherapy by using EORTC QLCQ30 Questionnaire. Pain score was taken before 1 month after completion of RT by using pain scale. Results:86% of the patients absolutely wanted to know about their disease and treatment related information.70% of patients experienced decisional conflict (SURE test score <4).96.7% had concordance between preferences and perception.96.7% of the
Abstract Id: YUGP4260
A Prospective Randomized Study For Comparison Of Mammographic And Ultrasoundographic Features Of Triple-Negative Breast Cancer With Other Breast Cancer Subtypes
Presenter- Dr. Pankaj Somani
Co-author - Dr Abdul Rouf Gauri, Dr Shiv Singh Meena, Dr Raj Govind Sharma

Introduction Breast cancer is the most commonly occurring cancer in females worldwide. It is commonest cancer of urban Indian women and second commonest in the rural women. Among these huge number of cases, Triple-negative (TN) breast cancers have high malignancy potential and are often characterized by early systemic relapse. Early detection is vital, but there are few comprehensive imaging reports. Here we describe mammography and ultrasound findings of TN breast cancers, investigate the specific features of this subtype, and compare the characteristics of TN breast cancers with those of Non Triple – Negative breast cancers. Triple-negative breast cancers generally occur in young women and they have the potential to be aggressive. It is important for this subtype of tumour to be detected early. Basis of my study - To study whether there are any peculiar Radiographic feature (on ultrasound & mammography) which can differentiate between Triple Negative Breast cancers from other subtypes?

Materials and Methods – This is a Hospital based randomized prospective type of Observational study. The study is being conducted in S.M.S. Hospital, Jaipur in Department of Surgical Oncology. Duration of Study is From June 2015 to June 2017. Total 183 cases were studied. Thorough analysis was done of Sonographic and Mammographic findings of all Breast Cancer patients and comparison is made among the groups (Triple Negative v/s Non Triple Negative). Results – Among the studied 183 patients, 48 were Triple – Negative while remaining 135 were of other subtypes. On mammography TN breast cancer were more likely to show Lobulated shape, heterogeneous density, microlobulated margins, non calcified lesions, asymmetrical densities and architectural distortion. On USG TN breast cancer were more likely to show lobulated shape, microlobulated margins, hypoechoic lesions with hyperechoic halo, posterior acoustic enhancement, increased Doppler vascularity and auxiliary lymph node positivity. Conclusions – On mammography the triple negative breast cancer is characterised by heterogeneously dense, lobulated shaped, non calcified masses with microlobulated margins, asymmetrical densities and architectural distortion. On USG TN tumors are seen as a lobulated hypoechoic masses with hyperechoic halo, micro lobulated margins having posterior acoustic enhancement, increased Doppler vascularity and auxiliary lymph node positivity. The radiologist must be aware that this subtype of cancer is having peculiar morphological features on imaging. Improved recognition and detection on mammography and ultrasound imaging should add to a better understanding of the biological behaviour of the disease entity and should lead to rapid pre-treatment planning. Implication for Practical Purpose This study is to describe findings on mammography & ultrasound for TN breast cancers in comparison with other subtypes. As Triple-negative breast cancer largely represents a subtype of breast tumors with unique molecular and clinical characteristics, distinctive risk factors and patterns of recurrence, association with BRCA1 mutation status, inferior prognosis, and expanding therapeutic options. Several distinctive morphological features of these aggressive tumors.
Abstract Id: YUGP4275
Do Acellular Mucin Pools In Resection Margins For Rectal Cancer Influence Outcomes?
Presenter - Dr. Parag Ingole
Co-author - Munita Bal, Vikas Ostwal, Reena Engineer
Purpose Positive resection margins predict poor prognosis. Literature on the impact of acellular mucin (ACM) in circumferential resection margin (CRM) or distal resection margin (DRM) of proctectomy specimens on rectal cancer (RC) recurrence and outcome is lacking. The study was conducted to determine the oncological outcomes of the RC patients with ACM in or within 1 mm of margins of the rectal resection specimens. Methodology Histopathology reports of RC resection specimens dated from June 2013 till May 2016 were received and reviewed to identify cases with ACM in CRM (n=10) and DRM (n=2). Necessary details of these patients were gathered from the electronic medical record. Pattern of recurrence was studied. Results In cases with only ACM in CRM (n=10) disease (primary tumor or nodes) was radiologically reaching the mesorectal fascia except one who had extra mesorectal nodes. Median distance of tumor from anal verge was 2 cm. Each patient received neoadjuvant therapy: four patients received chemoradiotherapy (NACTRT), one received short-course radiotherapy, and five received NACTRT followed by neoadjuvant chemotherapy. Abdominoperineal resection, intersphincteric resection and total pelvic exenteration were done for five, three and one patient, respectively. Over a mean follow up period of 28 months, three patients had distant site recurrences. None had local recurrence. None of the cases with only ACM in DRM (n=2) post anterior resection had recurrence. One of them underwent upfront resection while the other received NACTRT. Conclusion ACM in CRM or DRM of rectal cancer resection specimens does not seem to increase likelihood of local recurrence. Conflict of interest : None

Abstract Id: YUGP4277
Pediatric Primary Spinal Glioblastoma Multiforme In Association With Congenital Malformations: A Case Report
Co-author - Dr.Nalini Kilara, Dr.Sanathosh Kumar Devadas, Dr.Janaki MG
INTRODUCTION: Primary spinal glioblastoma multiforme is an extremely rare malignancy, with an incidence of 1.5% of all the spinal cord tumors. Amongst the pediatric CNS tumors, spinal cord tumors represent less than 1% and out of this 1–3% are high-grade tumors. It has got an extremely poor prognosis with survival of approximately 1 year after diagnosis. Here we present a rare case of primary spinal GBM in an adolescent with multiple congenital malformations. CASE PRESENTATION: A 14-year-old adolescent female presented with acute onset backache followed by sudden weakness of both lower limbs. Neurological examination showed intact higher mental functions and no cranial nerve deficits. There was flaccid motor weakness of the lower limbs with power 0/5 and absent lower limb deep tendon reflexes. Sensory system examination was remarkable for dermatomal level of L1. Bilateral planters were mute. There was bladder involvement. Upper limb neurological examination was normal. Blood investigation showed raised creatinine. Brain and spinal magnetic resonance imaging showed an intradural, extramedullary lesion, 15cm in length, 7mm in AP dimension extending from D6 to D11 level and causing spinal cord compression. An USG abdomen done to look for the cause of raised creatinine showed an ectopic right kidney. Routine chest X-ray revealed dextrocardia. She underwent D5-D10 laminectomy with laminoplasty and evacuation of extradural collection. The histopathology report showed diffuse midline glioma, GBM - WHO grade IV, H3K27M mutant GFAP positive. She received external radiotherapy along with concurrent temozolamide. CONCLUSION: There are no well-known associations between GBM and dextrocardia or kidney malformations. This case is one of the rare presentations of pediatric GBM and multiple congenital anomalies.

Abstract Id: YUGP4279
Triple Negative Breast Cancer: Clinical Outcomes Based On Her 2 Status
Presenter - Dr. SHYNY REDDY
Co-author - Dr.Meher Lakshmi, Dr.Stalin Bala, Dr.Sadashivudu
Background –Triple negative breast cancer (TNBC) is a distinct subtype of breast cancer with unique pathological,molecular and clinical behaviour. There are no approved targeted treatments for TNBC other than chemotherapy. Our aim is to study the clinicopathological characteristics and outcomes with particular attention to HER2 based subpopulations in TNBCs.

Methods: Data of 1024 breast cancer patients registered at our institute between 2009 and 2014 was retrospectively analyzed and the ones with TNBC were included. Relevant Demographic and clinical information was collected. Survival data was analyzed using the GraphPad Prism 6 Software. Results: A total of 210 TNBC’s were identified which accounted for 20.5% of all breast cancers. Median age at diagnosis was 50years(22-78years). Ninety six patients(46%) had lump in the breast of less than 3 months duration. Family history of breast or ovarian cancer was present in 6 patients.Ninety five patients (45%) were pre or perimenopausal at presentation. At the time of diagnosis 111 patients(55%) had early breast cancer, 84 patients(40%) had locally advanced breast cancer and only 9 patients(4%) had metastatic disease. Nodal involvement was seen in 131 patients(62%). Modified Radical Mastectomy was the preferred surgery by most patients who were eligible for upfront surgery(81%).Most of the tumors were Grade 3(78%). Lymphovascular invasion and margin positivity was present in 18% and 4% of the tumors respectively. Anthracyclines and taxanes were used in the adjuvant treatment of majority of patients. Adjuvant chemotherapy was administered for 179 patients (85%) and Neoadjuvant chemotherapy for 22(11%) patients. Pathological Complete Response was obtained in 60% of patients. During the follow up period 59 patients (33%) had recurrences, the most common sites being lung(21 patients) followed by bone and brain. Three year OS was 63%, Event Free Survival was 57%. Sixty six patients died during this period and 32 were lost to follow up. Three year OS was shorter in patients with borderline HER2 status i.e, HER 2 IHC 2+ (54.5%) when compared to patients with HER2 negative status i.e, HER 2 IHC 0 and 1 (62.8%). Conclusion: Though TNBC’s are aggressive malignancies, outcomes are not alike in all the subtypes based on HER2 expression. It is important to determine the HER2 status in patients with TNBC. Increased expression of HER2 oncogene as assessed by Immunohistochemistry is associated with poor outcome in our analysis.

Abstract Id: YUGP4281
Dosimetric Analysis With Different Bladder Filling Protocol In High-Dose-Rate Intracavitary Brachytherapy (Hdr-Icbt) For Cervical Cancer: An Institutional Observation.
Presenter - Dr. SATHISH ARJUNAN
Co-author - SHUBHA SUPRIYAA, VEZO KHOTO, SAI KUMAR V
Aim: This study was done to compare different bladder filling protocol during high-dose-rate intracavitary brachytherapy (HDR-ICBT) in cervical cancer with 3D dose volume histogram (DVH) parameters of bladder and other organs at risk and to optimize bladder volume. Material and methods: This study was done with 30 patients who underwent HDR-ICBT with computed tomography compatible applicator after completion of EBRT in carcinoma cervix patients. Computed tomography based planning was done for each patient with bladder emptied (series 1), after 100ml (series 2), 200ml (series 3) and 300ml (series4) bladder filling with saline infusion through the bladder catheter. Contouring was done on the Eclipse Planning System. 7 Gy to point A was prescribed with the standard
loading patterns. Various 3D DVH parameters including Dmax, D0.1,D0.2, D1, D2,D5,D10 doses were calculated for bladder and rectum. Relevant statistical test was performed. Results: The mean bladder volume was 79.4cc, 173.7cc, 265.4cc and 365.2cc for series 1, 2, 3 and 4 respectively. The Dmax,D0.1,D0.2, D1, D2, D5, D10 bladder doses for series1 were 11.3Gy,8.9Gy,8.4Gy,7.1Gy,6.4Gy,5.4Gy,4.5Gy; series 2 were 10.3 Gy,8.5 Gy,8.1 Gy,6.8 Gy,6.1 Gy,5.1 Gy,4.2 Gy; series 3 were 14.8 Gy,11.2 Gy,10.5 Gy,8.5 Gy,7.5 Gy,6.1 Gy,4.9 Gy; series 4 were 16.3 Gy,11.2 Gy,10.4 Gy,8.4 Gy,7.4 Gy,5.9 Gy,4.7 Gy . It was noted that there was a trend towards higher bladder doses in series 3 and 4 . Similarly for rectum D max, D0.1,D0.2,D1,D2,D5,D10, D2,D5,D10 doses were calculated for bladder and rectum. Relevant statistical test was performed. Results: The mean bladder volume was 79.4cc, 173.7cc, 265.4cc and 365.2cc for series 1, 2, 3 and 4 respectively. For bladder filling protocol with empty bladder and 100 ml volume during cervical brachytherapy. There is no significant impact of bladder filling on DVH parameters, although larger bladders tend to have higher doses. Small bowel doses are lesser with lesser bladder volumes. Further evaluation and validation are necessary.

Abstract Id: YUGP4283

Biological Tailoring Of Radiation In Head And Neck & Oral Malignancies – The Potential Role Of P53 On Elf4E As Predictive Parameters
Presenter- Dr. Shubha Supriya Asaiathambi
Co-author - Bindu Joseph, Rekha V Kumar, Champaka G

Keywords: P53 , elf4E , Biological Prognostic markers , Head and Neck Squamous cell carcinoma(HNSCC) Introduction: Radiation forms an integral component in the multidisciplinary management of head and neck cancer . In the past few decades we have seen tremendous advances in Radiotherapy technology , allowing for conformal and intensity modulated treatments to improve efficacy and reduce toxicity. Chemoradiation has allowed for a biological dose enhancement with proven survival benefits. However with new insights into the molecular biology of carcinogenesis, there is a potential for defining more aggressive clinical situations. These may require larger CTV (clinical target volume) margin, broader levels of nodal coverage or alternative radiation sensitizers. In this study we have evaluated the potential of two proven negative prognostic and predictive marker P53 and elf4E to predict the chance of early failure in resected Head and Neck & Oral cancer. Design : 40 patients with Oral cancers and 26 patients with Head and Neck cancers who had undergone radical surgery as their primary treatment where evaluated for the molecular biomarkers P53 and elf4E in the primary tumor and resected margin with a median follow up of twelve months . RESULTS: There where 21 local failures with 9 deaths . Notably the presence of elf4E was positive in resected margin of 50% Head and Neck cancer patients who failed treatment . This however did not appear to have prognostic significance in oral Cancer subjects . The absence of both biomarkers was associated with significant local control even in the absence of adjuvant treatment (p=0.00). The absence of P53 was significantly associated with improved local control in Head and neck and Oral cancer patients (p=0.001). The absence of elf4E had significant local control in Head and Neck cancer patients.(p=0.0083) CONCLUSION: There appears to be a potential role for tailoring the intensity and indications of adjuvant radiotherapy based on molecular profiling of resected margins and should be the basis for further clinical trials .

Abstract Id: YUGP4288

Cell-Free Circulating Tumor DNA (CFTDNA) – In Cervical Carcinoma: A Future Directives As Diagnostic Marker.
Presenter- Dr. Shubha Supriya Asaiathambi
Co-author - Nivedita S, A. Sathish, Mohammed Ismail S

Back ground: There are many diagnostic modalities are developed or under development to improve the diagnostic ability and to prognosticate in patients with cervical carcinoma. Cell-free circulating tumor DNA (CFTDNA) is one among them. In this study we are aiming to know the diagnostic ability at diagnosis and at early recurrence of Cell-free circulating tumor DNA (CFTDNA). Also to know its utilization in prognostication and to guide for genomically matched therapy. Methods and Material: A total of 25 patients with locally advanced squamous cell carcinoma of cervical cancer (Stage IB-IIIB) were tested prospectively with 50 gene tumor panel in a NABL accredited laboratory. 4 ml serum was collected, CFTDNA was isolated and they were checked for single nucleotide variants (SNVs) genes/ copy number variants (CNVs). Patients were either rechecked by NGS or PCR for the same genetic alterations. Results: Average patient age was 51.57yrs(range 30-83yrs) and all patients were squamous cell carcinoma. In 21/25(84%) patients, CFTDNA was detected and sufficient to carry under NGS. Of 50 genes, around 32 genetic alteration were detected. Mean genetic alteration was 4.08(2-14). In 3/25 (12%) patients are more than 8 genomic alteration detected, 5/25(20%) patients had 5-8 genetic alteration, remaining 13/25(52%) patients had less than 4 genetic alteration. Most common SNVs detected included were, TP53 -11/21 (52.3%) patients, CDKN2A -10/21(47.6%) patients, PTEN and STK11 -7/21 (33.3%) patients, BRAF and VHL -6/21 (28.5%) patients , EGFR and SMAD4 -4/21(19%) , CTNNB1,GNAS, KIT ,APC , PIK3CA- 3/21 (14.28%)patients, SMARC81, SMO,RET, FBXW7,ERBB2, CSF1R,CDH1 , AKT1, ATM , EBB4, FGFR3 ,FLT3, HRAS, JAK3, MET, NOTCH1, NPM1, KRAS , PTEN11- 1 or 2(4.7 to 9.5%) patients. On combination of these genetic alterations - EGFR, KIT, PTEN, PIK3CA,TP 53, VHL are the main alterations and combination of these gene (Diagnostic GENETIC MODULE) , at least one genetic alteration among combination was found in 100% patients at any point of time. Further follow up data regarding correlation of these genetic alteration with prognosis by following studies. Conclusions: CFTDNA can be easily demonstrable and can be used as non-invasive diagnostic tool in cervical carcinoma. Further, to create proper genetic module as diagnostic and prognostic marker- continuation of the study in large scale with different race, ethnicity and country required.

Abstract Id: YUGP4289

Data Of Bone Marrow Transplant Including Solid Tumor In Vims &Rc
Presenter- *Dr. Najeeb Mohammed
Co-author - Dr Manjunath N, Dr Shashidhar VK, Dr Roshan JK

Aim of the study: to detect the trend in bmt including bmt in solid tumor Materials and methods : patient who presented to vydehi institute of research center with different malignancy in the past 8 years who required bmt Results and Conclusion: 20 cases in the 8 years from 2009 to 2017 were analysed with majority of the patients being multiple myeloma followed by lymphoma ( HL and NHL ) and 2 cases of solid tumor refractory nasopharyngeal carcinoma and refractory GCT were analysed analysed for toxicities time for recovery and response. All patients recieved hdct based on the protocol. Majority of the patients had severe mucositis followed prolonged myelosuppression and mean recovery time was 2 to 3 weeks. Patients with solid tumor had faster recovery time compared to patients with multiple myeloma.

Abstract Id: YUGP4291

A Study Of Demographic Profile Of 50 Patients Of Carcinoma Penis Presenting To A Tertiary Care Center In Eastern India.
Presenter- Dr. Sanjay Kumar Vidyarthi
Co-author - Dr. B.B.Pandey,

Introduction Carcinoma penis is more common in less developed areas of the world, such as parts of Africa, Asia, and South America.
where it accounts for 10-20% of malignancies in men as against <1% in developed countries. Bihar being in developmental stage socio-economically sees a very large proportion of patients suffering from penile cancers. We attempted to study the demographic characteristics of these patients. Methods A total of 50 patients presenting to our hospital between May 2016 to April 2017 were included in this study and studied for various pre-determined demographic factors which included age, socioeconomic status, BMI, district of residence, grade and stage of disease and need for total or partial penectomy. All penile amputations except T1a(G1,2) were combined with a bilateral inguinal nodal clearance. Results Average age of patients included in this study was 48.2 years (range 25-74 years); 80% of the patients belonged to low socio-economic class while majority of the patients hailed from Dharbhanga, Sharasa, Purnia, Chhapra and Khagaria districts which had 24%, 20%, 18%, 14% and 10% contribution respectively. 50% of the patients presented with Grade II disease. 14% had histopathology reported as Verrucous carcinoma. T2 N1 was the most common stage at presentation (40%). None of the patients in this study had systemic metastasis at presentation. Partial penectomy was needed in 70% while 30% had to undergo total penile amputation for want of adequate clear margins.

Abstract Id: YUGP4293
Study Of Quality Of Life In Patients After Surgery For Total Glossectomy
Presenter - Dr. Ahmed Syed
Co-author - Dr ramachandra.

Study of quality of life in patients after surgery for Total glossectomy
Introduction: Total glossectomy is a morbid procedure done in advanced tongue cancer. Many centres defer this procedure in view perceived high morbidity though it is superior in terms of disease control and survival. Rehabilitation of the total glossectomy patients is challenging because of possible severe disability to speech and swallowing and risk of aspiration. We will study the quality of life of the patients who have undergone total glossectomy. Material and method A cross-sectional study with a 50 people will be studied for their swallowing ability and quality of life (QOL) post surgery will be evaluated by administering three different swallowing assessment tests, which are 1. 100 ml water swallowing test and 2. Clinician rated instruments, A.Performance Status Scale – Head and Neck (PSS - HN) and B. Functional Oral Intake Scale (FOIS). 3. The QOL is studied using the EORTC (European organization for research and treatment of cancer) QLQ 30 and HN 35 questionnaire. Association of demographic factors, reconstruction, clinical stage, adjuvant treatment with swallowing and speech outcome and quality of life was studied with Mann-Whitney U test. Results All patients of total glossectomy were tolerating oral feeds and off tracheostomy tube. Median NG tube removal days was 18 days. 75% patients resumed their jobs. Gender, age were not significantly associated with the swallowing and speech outcome. Conclusion: Quality of life in total glossectomy patients is acceptable and majority of them resumed their pretreatment jobs. Reference 1. Patterson JM, Hildreth A, McColl E, Carding PN, Hamilton D, Wilson JA. The clinical application of the 100mL water swallow test in head and neck cancer. Oral Oncol. 2011 Mar;47(3):180-4. doi: 10.1016/j. oraloncology.2010.11.020. Epub 2011 Jan 12. PubMed PMID: 21227737. 2. Chaukar DA, Das AK, Deshpande MS, Pai PS, Pathak KA, Chaturvedi P, Kakade AC, Hawaldar RW, D'Cruz AK. Quality of life of head and neck cancer patient: validation of the European organization for research and treatment of cancer QLQ-C30 and European organization for research and treatment of cancer QLQ-H&N 35 in Indian patients. Indian J Cancer. 2005 Oct-Dec;42(4):178-84.

Abstract Id: YUGP4298
Feasibility Of Sentinel Lymph Node Detection In Breast Cancer Using Intraoperative Dual Mapping In Low Resource Setting- A Pilot Study

Presenter - Dr. Vijaykumar DK
Co-author - Dr Reshu Agarwal, Dr DK Vijaykumar, Dr S. Sundaram

Aims and Objectives: Currently the triple technique (including preoperative SLN imaging using SPECT CT after radioactive colloid injection; intraoperative injection of blue dye; and intraoperative usage of hand held gamma probe) has been demonstrated to be most accurate for the identification of Sentinel lymph node (SLN). However the availability of nuclear medicine department for SLN imaging is one of the major barriers in the diffusion of SLNB technology. The purpose of this study was to investigate whether the SLN detection rate using the intraoperative dual mapping (radioactive colloid + methylene blue dye) technique is comparable to the triple technique in a prospective trial. Methods: This prospective trial was started in the department of breast and gynecology oncology in collaboration with department of nuclear medicine at Amrita Institute of Medical Sciences, Kochi, Kerala in May 2017. Intraoperative dual SLN mapping technique consisted of subareolar injection of technetium 99m-labelled filtered sulphur colloid (15-37 MBq) and 3ml of 1% isosulphan blue dye just after anaesthetic induction followed by locating and dissecting the SLN using hand held gamma probe and blue dye. Triple technique consisted of subareolar injection of radioactive colloid followed by SPECT CT preoperatively; subareolar injection of blue dye intraoperatively; locating and dissection of SLN using gamma probe and blue dye. SLN biopsies (SLNBs) or complete axillary dissections were carried out, and SLNs identified during these procedures were classified as containing both blue dye and radioactivity ("blue-hot" nodes), radioactivity alone ("hot-only" nodes), or blue dye alone ("blue-only" nodes). Cases were categorized and tabulated based on the presence or absence of these three types of SLNs. Endpoint measured was the overall SLN detection rates and were compared between the two techniques. Results: Out of total 375 SLNBs done, 203 were done using triple technique and 41 using dual technique. SLN detection rates with intraoperative dual mapping technique was 100%, while that of triple technique of SLN identification was 97.6% (p = 0.216). We looked into the SLN detection rate of the individual procedures of the two techniques (triple versus dual technique); SLN detection rate of preoperative imaging using SPECT CT after radioactive dye injection was 100% in triple technique (procedure not performed in dual technique); SLN detection rate of intraoperative injection of blue dye ("blue" node) was 76% in both the techniques; SLN detection rate of "hot" nodes with the gamma probe was 94.5% in triple and 99% in dual technique; and the SLN detection rate of "hot and blue" nodes was 96.7% in triple and 100% in dual technique. Using either technique the SLN location was in axilla in 100% of cases. In 100% cases the surgical approach for SLN biopsy remained same. Conclusion: SLN detection rate of intraoperative dual technique was equivalent to the SLN detection rate of triple technique. Thereby in low resource settings where SPECT CT imaging is not possible in India and the availability of nuclear medicine department for SLN imaging is one of the major barriers in the diffusion of SLNB technology. The purpose of this study was to investigate whether the SLN detection rate using the intraoperative dual mapping (radioactive colloid + methylene blue dye) technique is comparable to the triple technique in a prospective trial. Methods: This prospective trial was started in the department of breast and gynecology oncology in collaboration with department of nuclear medicine at Amrita Institute of Medical Sciences, Kochi, Kerala in May 2017. 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Conclusion: SLN detection rate of intraoperative dual technique was equivalent to the SLN detection rate of triple technique. Thereby in low resource settings where SPECT CT imaging is not possible in vicinity, the sentinel lymph node biopsy can still be performed by procuring the radioactive colloid (from outside centre) and blue dye and the hand held gamma probe. Keywords: Sentinel lymph node biopsy, intraoperative dual technique, triple technique, SPECT CT, radioactive colloid, methylene blue, gamma probe

Abstract Id: YUGP4300
Prostate-Specific Antigen (PSa) Levels In A Community-Based Population In Delhi/Delhi-Ncr Region.
Presenter - Dr. Dipika Bumb
Co-author - Krithiga Shridhar, Jyotsna Govil, Amrita Nandi

Background: Prostate cancer is the sixth most common cancer worldwide and according to the most recent cancer registry data, the second most commonly occurring cancer in Delhi males. Rates are expected to continue increasing with increased life expectancy. Limited data are available on Prostate-Specific Antigen (PSA) levels in South Asians at community level due to lack of population-based screening in these settings. Methods: We report median PSA levels in...
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an opportunistic screening population of men aged 50+ years (N=823) who attended the Indian Cancer Society (ICS) cancer detection centre (CDC) (N=271) and camps (N=552) from 2011-15 at New Delhi-NCR. Participants were registered with an in-person structured questionnaires on demographic and lifestyle factors, and were administered digital rectal exam (DRE) and PSA testing. Patients with abnormal screening results were referred to collaborating institutes for further investigations and follow-up. Results: The mean age of men was 62.6 yrs (±8.7). A majority (77%) had at least completed school education, consumed vegetarian diet (61.7%) and 22.1 % were prevalent users of tobacco. The median PSA level was 0.8 ng/dL (IQR: 0.5, 1.5) that ranged between 0.024 and 28.2 ng/dL. The median (IQR) levels of PSA significantly differed by categories of age (50-60yrs: 0.7 (0.5,1.2); 61-70yrs:0.9 (0.5,1.6); 71+ys:1.2 (0.5,2.2))

occupation (retired:1.1 (0.6,2.0); in service:0.7(0.5,1.2); unemployed:0.9(0,6.1,4); professional:0.8(0.5, 1.7)), tobacco: (never: 0.9 (0.5, 1.6); ever: 0.8 (0.4, 1.2)), DRE status (normal: 0.8(0.5,1.3); abnormal : 0.9(0.5,1.7)) and location of screening (CDC: 0.9(0.5,1.6); camp: 0.8 (0.5,1.3)). However, adjusted median levels of PSA did not differ by any other factor except age (p<0.01). Conclusion We reported PSA levels of Indian men aged 50+ years screened opportunistically by ICS that ranged between 0.024 and 28.2 ng/dL. Age was the only factor that appeared to be influencing PSA levels in this population.

Abstract Id: YUGP4302

Giant Soft Tissue Sarcoma Of Neck In A 45 Years Old Female – Largest Ever Reported In Medical Literature: A Case Report And Review Of Literature

Presenter- Dr Abdul Rouf Gauri, Dr Shiv Singh Meena, Co-author - Dr Pankaj Somani

Abstract: A soft tissue sarcoma of neck is a rare entity with sarcoma purely confined to neck is even a greater rarity. We report a case of giant soft tissue sarcoma of neck in a 45 years old female of undifferentiated mesenchymal variety which was managed by angio-embolization followed by marginal resection of the tumour, while preserving the vital structures in the neck, and post operative radiotherapy with a 12 months follow up. This is a rare case of giant soft tissue sarcoma purely confined to neck. The case report also validates the need of multidisciplinary approach in the management of soft tissue sarcoma of neck and surgical excision being the primary treatment modality combined with radiotherapy with and without chemotherapy. ?? Case Presentation : A 45 years old female presented to Sawai Man Singh Hospital, Jaipur, Rajasthan, with a huge swelling on her right side of neck, gradually increasing for the last 4 years. She also complained of dull aching pain in the swelling for the last 15 days with no radiation of pain. Before coming to our institute, she went to a hospital in her locality 4 years back for a swelling in the right upper neck and got it excised, thereafter swelling reappeared after about 3 months of excision. When she came to our observation, the swelling was extending vertically from right ear lobule to the right clavicle, and horizontally from right border of trachea to the right paravertebral area posteriorly (Figure 1, 2, 3) with mild degree of torticollis to the right. The right carotid pulsation was not appreciable. The size of the swelling was 18 cm in its greatest vertical extension and 16 cm in its greatest horizontal extension. No lymphadenopathy was apparent on neck examination. The chest x-ray revealed shifting of trachea to the left by the mass in the neck (Figure 4). Fiber-optic laryngoscopy showed bulging of the right pharyngeal wall towards midline with normal vocal-chords and glottic space. The Magnetic Resonance Imaging (MRI) revealed a large mass at right neck extending into the right supraclavicular and infraclavicular area. (Figure 5, 6, 7). The core needle biopsy of the patient showed a spindle cell neoplasm with prominent haemangiopericytomatic pattern overall morphology is that of malignant undifferentiated neoplasm. The Immunohistochemistry (IHC) report showed neoplastic cells positive for Vimentin and S100 while negative for Cytokeratin (CK), Smooth Muscle Actin (SMA) and CD34 which favoured it to be as malignant mesenchymal neoplasm. The CT Carotid Angiography showed a large mass on right side the neck abutting right common carotid, internal and external carotid artery (Figure 8). The patient was subjected for angio-embolization of the neck mass using a 6 Fr catheter through femoral artery to the right external carotid vessel, a branch of this artery was the feeding vessel which was embolised successfully using gel foam. The patient was prepared for surgery for excision of mass which was done after raising the skin flap making a T-shaped incision (Figure 9, 10, 11). The right sternocleidomastoid muscle, right external jugular vein were sacrificed but the right carotid vessel, spinal accessory nerve, vagus nerve were kept intact (Figure 12). Moreover there was no injury to the cervical sympathetic chain evident as following surgery the signs of Horner’s Syndrome were absent. Post-operative period was uneventful, she was started with oral feeds after about 8hours following surgery and the vacuum suction drain was removed on post operative day 7. The histopathological examination showed a high grade, spindle cell neoplasm with the mass reaching upto the margins. The IHC report showed cells positive for Vimentin and focally positive for S100. Scattered cells are positive for CD68. Negative for SMA, CD34, Desmin, CK7 and EMA. This favoured possibility of either Malignant peripheral nerve sheath tumour or Undifferentiated malignant mesenchymal tumour. After about 6 months of follow up patient is doing good with no torticollis, no signs of horner’s syndrome, facial palsy, phrenic nerve palsy, spinal accessory nerve palsy or any signs of recurrence of the tumour. But at 9 months post op, she presented to us with metastatic deposit in bilateral lungs in contrast enhanced CT scan of Thorax for which later on she was subjected to chemotherapy also. Discussion: Head and neck soft tissue sarcomas (HN-STS) are rare mesenchymal malignant neoplasms accounting for < 10% of all soft tissue sarcomas and approximately 1% of all head & neck neoplasms. STS show a biphasic age distribution—80 - 90% affect adults and 10-20% are seen in paediatric population. The most common symptom of HN-STS is a painless mass. Examination generally reveals a subcutaneous mass of neck possibly with distortion or destruction of the adjacent structure. Tumors of neck can impinge on the vital structures, causing dysphagia, hoarseness and even dyspnoea. A detailed history and physical examination play a major role in the diagnosis. Imaging plays a major role in defining the extent of the tumour to nearby vital structures for treatment planning and deciding surgical approach. Magnetic resonance imaging (MRI) is generally superior to computed tomography (CT) scans in soft tissue sarcomas. CT scan is preferred to assess bone involvement. Positron emission tomography (PET) using fluorodeoxyglucose (FDG) is to grade the tumour. Histological examination of a biopsy specimen can lead to a definitive diagnosis [11]. Fine needle aspiration cytology (FNAC) is an easy, fast and cheap technique. Core needle/Trucut biopsy provide enough tissues for accurate histopathological studies and grading. Excisional biopsies should be reserved for selected masses smaller than 3cm in diameter [11]. For deep seated tumor or those near vital structures, ultrasound or CT Scan guided biopsies are recommended. Complete surgical resection of sarcomas in the parotid, neck, and parapharyngeal space is preferable to incisional biopsy if the FNA is non-diagnostic. The classical treatment modalities employed in HN-STS are: surgery, radiotherapy and/or chemotherapy. Adequate surgical excision is not applicable in most of HN-STS due to the complex anatomy and close proximity of major vital structures to primary tumor hence, resection of gross tumor with postoperative adjuvant therapy is the treatment of choice in most cases [27]. Radiotherapy in HN-STS is indicated in high grade sarcomas, positive surgical margins, lesions larger than 5 cm and recurrent lesions [27]. Chemotherapy provides improved local control especially if combined with radiation therapy. Indications of chemotherapy are unresectable HN-STS with extension to the unusual locations (skull base), high grade sarcomas and aggressive sarcomas [27]. Conclusion HN-STS are rare malignancies and giant STS of neck region being even rarer. Herein we report a case of giant STS of head & neck region which underwent a marginal resection. The difficulty in resecting such a big mass is attributed to the anatomical complexity and proximity of vital structures.
structures in the neck. Till date only few cases of giant soft tissue sarcoma of neck have been reported in literature and still few of them have been managed by surgical resection. We present a case of giant soft tissue sarcoma in neck which was managed by surgery and post operative radiotherapy.

Abstract Id: YUGP4303
“Pancreatico-Jejunal Anastomosis By Blumgart’S Technique After Whipple’S Operation”- Analysis Of 20 Cases In A Tier 2 City Hospital In India
Presenter- *Dr. Nagesh Madnoorak
Co-author - Dr Pramod Shinde, .

Purpose: To study the morbidity & results of Pancreatico-Jejunal (P;J) anastomosis by Blumgart’s technique after Whipple’s Operation.
Introduction: - Despite improvements in perioperative outcomes following pancreaticoduodenectomy (PD), morbidity remains as high as 30–50%. - Most morbidity relate to failure of the pancreatic-anastomosis resulting in intra-abdominal hemorrhage, intra-abdominal abscess, prolonged hospital stay, or occasional mortality. - Mortality remains about 1 to 4 % - In the effort to prevent postoperative pancreatic fistula (POPF), numerous modifications of the pancreatic reconstruction after PD have been described. However, there is currently no universally accepted standard technique for pancreatic reconstruction after PD.

Materials & Methods: A serial of 20 cases of pancreatico-jejunostomy by Blumgart’s technique after Pancreatico-duodenectomy done during February 2014 to January 2017 were analyzed for morbidity & mortality. - A transpancreatic U-suture technique (Blumgart anastomosis, BA), which aims to avoid shea forces during knot-tying was used for pancreatico-jejunostomy.
- Postoperative course, hospital stay & complications were monitored & recorded in the study. Results: - Average hospital stay: 12 days - One patient had persistent jaundice for 4 weeks. - Two patients had biliary leak, required re-exploration - One patient had secondary Gastro-duodenal artery bleed due to pancreatic leak. - No post op. mortality in our study. Conclusion: - Blumgart’s technique of PJ is technically easy to perform in our set ups. - It is safe in all types of pancreatic consistency. - Duct size does not make difference in outcome - It gives better holding strength to suture line so that major dehisence is avoided - It is a technique which can be successfully used in a tier 2 city hospital having limited infrastructure & resources.
Keywords : Pancreatico-jejunostomy, Pancreatico- duodenectomy, Whipple’s operation, Blumgart

Abstract Id: YUGP4306
Awareness And Acceptability Of Reconstructive Breast Services In Patients With Carcinoma Breast
Presenter- *Dr. Ashutosh Tondare
Co-author - Dr Nita S Nair, Dr Prabha Yadav, Dr Vinay Shankadhar

Authors: Tondare A, Nair NS, Yadav P, Shankhdhar V, Jaiswal D, Parmar V, Chitkara G, Badwe RA. Background: Quality of life has become an integral aspect of the management of breast cancer and surgery has seen a paradigm shift towards more breast conservation surgery (BCS). However many women still need to undergo a mastectomy for oncological concerns. Factors impacting the choice a woman makes to undergo breast reconstruction (BR), is unclear and are hypothesized to be influenced by socio-economic factors. We conducted a cross sectional survey, to evaluate the awareness and acceptability of breast reconstruction amongst women with breast cancer at our institution. Methods: A novel questionnaire was designed and served to women presenting to the breast clinic. Three groups were interviewed, women planned for breast surgery, women on follow up post mastectomy and women on follow up post BCS. The questionnaire was administered in the language they best understood, to record various socio economic aspects that may impact their choice to opt for BR. Results: the final results were analyzed from 492 women who participated in the survey. Of these 212 (43.08%) were planned for surgery, and 280 (57%) patients were on follow up. Majority women (48%) were more than 50 yrs of age, literacy rate was 87%. More than 70% were home-makers and 15 patients (0.03%) were unmarried. The aspects evaluating awareness of BR suggested that 202 (41%) women had knowledge about BR, but only 28% knew about types of BR. Major source of knowledge was surgeon (56%) and media (50%). Majority patients on follow up did not want reconstruction (67% in mastectomy group). Of those, 59% did not opt for BR as they had coped with the mastectomy and did not feel the need for BR. Only 8% cited family or financial reasons and 6% were worried about it affecting the treatment. Among women planned for surgery, 69.6% had not considered BR. When questioned only 25 (13%) suggested the choice for BR was influenced by cost. 102 (52.3%) felt they did not need it, 20(10.2%) were worried it would affect treatment. Conclusions: Our study shows high awareness regarding BR in women being treated for breast cancer. However only 31.5% women opt for BR, suggesting good coping skills among those who undergo mastectomy and priority on treatment related concerns, independent of socio economic issues.

Abstract Id: YUGP4308
Ct Guided Interstitial Brachytherapy In Locally Advanced Carcinoma Of Cervix: An Institutional Experience
Presenter- *Dr. Nishant Vidyasagar
Co-author - Dr Mohan Kumar S, Dr Janaki M.G, Dr Arul Ponni T.R

Cervical cancer is the most common cancer in Indian women and over 80% of them present at an advanced stage who are treated with concurrent chemoradiation. Brachytherapy forms one of the major modality of treatment in carcinoma cervix. Studies from developed countries have shown that MRI based brachytherapy resulted in better treatment outcome and lesser toxicities. But due to limited resources, CT based planning is practiced in majority of the centres. In our study, we analyzed the treatment outcome and late toxicities in patients who underwent CT based interstitial brachytherapy. Objective: To determine the local control and late toxicities at 2 years in patients who underwent interstitial brachytherapy. Methodology: Seventy six patients underwent ISBT from September 2013 to July 2015. CT scan simulation was done after insertion of the perineal needles. Target volume and Organ at risk were defined according to GEC-ESTRO guidelines. Radiation dose of 6.5 to 7.5 Gy was prescribed to HRCTV for 3 to 4 fractions. Patients were followed up once in 2 months after completion of treatment. Local tumor control and late toxicities were assessed by clinical examination and imaging when required. Results: Mean age was 47 years. Eight patients were stage IIB, 2 were IIIA and 66 were IIIB. Eight patients were lost to follow up, hence only 68 patients were included in the analysis. Five patients had local recurrence, 3 of them died and 2 were alive with residual disease. The local control at 2 years was 92.7%. Two patients had grade 2 proctitis (2.9%), 1 had grade 3 proctitis (1.4%) and 2 had vaginal stenosis (2.9%). Conclusion: The local control rate and late toxicities of interstitial brachytherapy with CT planning at our institution was in accordance with the available literature. Further studies are required to compare the treatment outcome using CT based planning with that of MRI.

Abstract Id: YUGP4310
Total Glossectomy Rehabilitation Group Our Experience.
Presenter- *Dr. Ahmed Syed
Co-author - Dr John, .

Total glossectomy rehabilitation group our experience. Introduction In our society treatment of cancer prevails the other aspects of loss. Support groups are organizations of people who share common disorder, it is a place of open communication, mutual respect and safety. It is a place where people are free to ask questions, vent frustrations or
Abstract Id: YUGP4312
Evaluation Of Carbonic Anhydrase Ix As A Biomarker In Cancer
Cervix Patients Undergoing Radiotherapy
Presenter - Dr. DISHA TIWARI
Co-author - DR KIRTI SRIVASTAVA, DR MANSI BARTHWAL, DR ARUN KUMAR YADAV

Introduction: Cervical carcinoma is the second most common malignancy in women worldwide. It is estimated that over a million women worldwide currently have cervical cancer. Worldwide, cervical cancer is both the fourth-most common cancer and the fourth-most common cause of death from cancer in women. In 2012, 528,000 new cases of cervical cancer were diagnosed, and 266,000 women died of the disease (GLOBOCAN 2012), nearly 90% of them in low-to-middle-income class countries. Multifactorial causation, potential for prevention, and the sheer threat it poses make cervical cancer an important disease for in-depth studies, as has been attempted by this paper by studying the hypoxic marker. Recently, there has been increasing interest in the identification of biomarkers able to predict both response to treatment and survival. Aim: The aim of this study was to evaluate the association of hypoxic marker Carbonic anhydrase (CAIX) markers to predict the clinical outcome of patients with cervical carcinoma. Materials and methods: This study was conducted on biopsy proven previously untreated cases of cervical cervix who presented to the Department of Radiotherapy at King George’s Medical University (KGMU), Lucknow, Uttar Pradesh, India. The study was a single institution, non-randomised, prospective study to evaluate carbonic anhydrase IX as a biomarker in cancer cervix patients undergoing radiotherapy. Sample size: Total 75 samples • 25 healthy control subjects (Age and sex matched) • 25 cancer cervix patients (duplicate samples i.e. baseline and follow up). Approximately 2 ml of blood was withdrawn before initiation of treatment and at the time of first follow up. Standard treatment was given as external beam radiotherapy (EBRT) with concurrent chemotherapy followed by intracavitary radiotherapy (ICRT). Blood samples was analysed for the level of CAIX. Statistical analyses was performed with the SPSS software package v 13.0. Results: Pre-treatment high level of carbonic anhydrase IX correlated with poor treatment outcome.

Abstract Id: YUGP4314
5 Year Analysis Of Overall Survival , Disease Free Survival In Carcinoma Breast
Presenter - Dr. Namratha sai Reddy Bijivenula
Co-author - Dr Geeta S Narayanan, Dr Mansi Sandip Shah,

Abstract Id: YUGP4322
Evaluating The Feasibility Of Robotic Assisted Laparoscopic Surgery In Endometrial Carcinoma.
Presenter - Dr. Saumya Somani
Co-author - Dr Pankaj Somani, Dr Shweta Jain,

Abstract Id: YUGP4324
Outcomes Of Video Assisted Thoracoscopic Esophagectomy In Locally Advanced Carcinoma Esophagus
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Presenter- *Dr. Zubair Ahmed*
Co-author - Gp Capt (Dr) Pradeep jaiswal, Anushree Vartak, Col(Dr) Debashish Mukherjee

From April 2015 to Apr 2017 (2 years), 25 patients with stage II&III carcinoma of the esophagus, were prospectively enrolled in the study. Statistical analysis was performed by using descriptive and inferential statistics using chi square test/fisher exact test for categorical data. Independent sample t-test to compare mean values between the two groups was used and Paired t-test was used to test the relative change with respect to time. P-value less than 0.05 was considered as significant at 95% confidence level. The statistical software SPSS version 16.0 used in the analysis. Age ranged from 36-75yrs, with a mean age of 58.68 and majority of patients were in age group of 51-60yrs. Males were affected more than females with males to females ratio (M:F=2.5:1) Most common risk factor was smoking, 59% patients were past or present smoker followed by tobacco chewing in 14% patients, alcohol consumption in 27% patients. All patients presented with Dysphagia(100%), associated with weight loss(48%) and Anorexia(32%). Of which 65% patients had grade 3 dysphagia and 35% had grade 2 dysphagia. Most common location of tumour in Mid thoracic esophagus(52%), followed by lower thoracic esophagus(36%). Gastro-esophageal junction tumours(siewert type 1 and 2) constitutes about 25% of patient cohort. Among 25 patients , 22(88%) patients had Squamous cell carcinoma histology and 03(12%) patients had adenocarcinoma. Clinical staging with CECT and PET-CT scan 20% were stage II and 80% were stage III. Among 25 patients, majority of patients (68%) received NACCRT, of which all had SCC of Mid/Lower third of Esophagus. 3 patients of Adenocarcinoma and 5 patients of SCC received NACT (32%). None of patient of Adenocarcinoma received NACCRT. Post neoadjuvant therapy 40% of patients were able to eat normal food and 60% patients were able to eat food cut into small pieces after thorough chewing which was statistically significant (p<0.012). Among the cohort, 23(92%) patients successfully underwent VATS esophagectomy with an R0 Resection. Remaining 2 patients, one required conversion to thoracotomy due to extensive pleural adhesions and other had to be aborted in view of anaesthesia related complication (Desaturation). Mean thoracoscopy duration was 120min Mean operating time 300min Mean blood loss 165ml Mean ICU stay 2.2days 30 day mortality nil. Spectrum of immediate morbidity pneumonia (4%), atrial fibrillation (8%), chyle leak (8%), Neck Anastomotic leak (16%), Hoarseness(12%), Spectrum of late morbidity anastomotic stricture (40%), persistent neck fistula (8%), dumping syndrome (4%), FJ related pain and discharge(20%). Pathologic complete response(pCR) to primary tumour ‘T’ stage was documented in majority 10(41%) of patients. 58% of patients had complete response in nodal status ‘N’ stage. N1 was documented in 33%. Average Lymph node harvested per patient is 10. Post NeoAdjuvant therapy patients had statistically significant regression(p<0.01) in staging and majority were stage 1(45%) as per AJCC 8th Edition. Pathologic response as per CAP guideline, tumour regression grade 0 i.e complete absence of tumour cells in primary and Lymphnodes was seen in 33% of specimen, where as presence of residual tumour cells in abundant suggestive of poor response seen in 29% of patients. In our study we found a significant correlation between the SUV% reduction and TRG after analyzing the data of all 24 patients in both NACCRT and NACT group with a significance value of 0.031. ROC curve analysis for prediction of histopathologic response by SUV7% our data showed an AUC of 0.754 and sensitivity and specificity of 18F FDG PET scan of 78.6% and 60% respectively with cut-off of 63%.

Abstract Id: YUGP4328
Dosimetric Benefits And Clinical Outcome In Lung Cancer Patients With Adaptive Radiotherapy
Presenter- *Dr. SWETA KUMARI*
Co-author - NISMA, SATHISH A, JAYASHREE N P

OBJECTIVE: To assess the impact of mid treatment Radiotherapy planning on normal lung and heart doses as a part of adaptive radiotherapy in lung cancer patients MATERIAL AND METHODS: A total of 10 patients were taken prospectively for this study with or without concurrent chemotherapy. 2 sets of CT simulation was done , one at baseline and other at 45-46Gy of RT. GTV , CTV , ITV and PTV were delineated according to our institutional protocol. Phase I of 45-46Gy dose is planned in baseline scan and plan of 18-20Gy dose in both baseline and Phase 2 scan(mid treatment scan) is done. Dosimetric / Volumetric parameters of target volumes and critical normal structure were analysed. Relevant statistical tests were used for analysis RESULTS Mean GTV, CTV, ITV and PTV of baseline scan were 129.3cc (25-275.7) ,270.8cc(45-545.3) ,695.8cc(376.3-1055.1) and 951.1cc(528.3-1373.3) respectively and mean GTV , CTV, ITV and PTV of Phase 2 ( mid treatment scan) were 69cc(6.7-275.7), 176cc(35.5-545.3),367cc(90.3-746) and 514cc(134-859.5) respectively.Percentage reduction of target volume after 45-46 Gy(mid treatment scan) of GTV,CTV,ITV and PTV were 94.6%,35%,47.2% and 45.9% respectively. Baseline ipsilateral lung without PTV and heart without PTV were 1038.7cc (485-2393) and 445.8cc (380 -579.7) respectively and mid treatment ipsilateral lung without PTV and heart without PTV were 1082(589-1558) and 490(401-550) respectively,Mean percentage increase in normal ipsilateral lung without PTV is 19.9% IN Phase 2 scan and heart without PTV 16%(where ever it come in RT field) (p<0.05) In phase 2 plan, by delivering the same dose to phase I PTV would resulted in significant high dose to contra-lateral lung. (V20= 55.9%,V10=51.2% Heart (mean dose 7.2%)and ipsilateral lung (mean dose 8%) CONCLUSION MId treatment adaptive RT planning proved better normal tissue sparing without compromising the target. Long term follow up is required for substantiating this hypothesis. Single mid treatment RT plan compared with multiple interval RT planning needs to be tested further.

Microsatellite instability (MSI) is characterized by small deletions or insertions within a number of repeated nucleotide units in DNA due to defects in DNA mismatch repair process. MSI pathway is detected in 12-15% of colorectal carcinomas, of which 2-5% is hereditary . The hereditary mutation of one of the four mismatch repair genes (MSH-2, MSH-6, MLH-1, PMS-2) results in Lynch syndrome/ Hereditary Nonpolyposis Colon Cancer (HNPPC). Tumors that arise via the MSI show certain clinicopathological features including proximal colon location, mucinous histology, and infiltration by lymphocytes. In this study, we investigated the correlation between clinicopathological features and immunohistochemical MLH-1, MSH-2, PMS-2 expressions in a total of 61 resection materials with colorectal adenocarcinomas between 2013 and 2015. All the cases were retrospectively evaluated in terms of age, sex, localization, size, accompanying polyp, multiple tumors, arising from polyp, differentiation, mucinous differentiation, pathological tumor stage, lymphovascular and perineural invasion, lymphocyte amount in the tumor microenvironment, surgical border and lymph node metastasis. We found a meaningful relationship between immunohistochemical markers and clinicopathological features usually observed in tumors with microsatellite instability. Loss of PMS2 expression was seen in 7 cases,MSH6 in 1 and combined loss of MSH6 and MSH2 in 7 cases. MSH6 was negative in 2 cases with loss of PMS2 expression. MSH6 alone was negative in 1 case. This finding suggests that 16 cases (26%) of our cases could have MSI, and further molecular testing is indicated in these cases.

Abstract Id: YUGP4330
Correlation Between Microsatellite Instability (MSI) And Clinicopathologic Features In Colorectal Cancer-Initial Experience In A Tertiary Cancer Centre
Presenter- *Dr. Noushad Aryadan*
Co-author - SANGEETHA K NAYANAR, VARADARAJAPERUMAL, DEEPAK ROSSHAN

Microsatellite instability (MSI) is characterized by small deletions or insertions within a number of repeated nucleotide units in DNA due to defects in DNA mismatch repair process. MSI pathway is detected in 12-15% of colorectal carcinomas, of which 2-5% is hereditary . The hereditary mutation of one of the four mismatch repair genes (MSH-2, MSH-6, MLH-1, PMS-2) results in Lynch syndrome/ Hereditary Nonpolyposis Colon Cancer (HNPPCC). Tumors that arise via the MSI show certain clinicopathological features including proximal colon location, mucinous histology, and infiltration by lymphocytes. In this study, we investigated the correlation between clinicopathological features and immunohistochemical MLH-1, MSH-2, PMS-2, MLH-1, PMS-2 results in Lynch syndrome/ Hereditary Nonpolyposis Colon Cancer (HNPPCC). Tumors that arise via the MSI show certain clinicopathological features including proximal colon location, mucinous histology, and infiltration by lymphocytes. In this study, we investigated the correlation between clinicopathological features and immunohistochemical MLH-1, MSH-2, PMS-2, MLH-1, PMS-2 expressions in a total of 61 resection materials with colorectal adenocarcinomas between 2013 and 2015. All the cases were retrospectively evaluated in terms of age, sex, localization, size, accompanying polyp, multiple tumors, arising from polyp, differentiation, mucinous differentiation, pathological tumor stage, lymphovascular and perineural invasion, lymphocyte amount in the tumor microenvironment, surgical border and lymph node metastasis. We found a meaningful relationship between immunohistochemical markers and clinicopathological features usually observed in tumors with microsatellite instability. Loss of PMS2 expression was seen in 7 cases, MSH6 in 1 and combined loss of MSH6 and MSH2 in 7 cases. MSH6 was negative in 2 cases with loss of PMS2 expression. MSH6 alone was negative in 1 case. This finding suggests that 16 cases (26%) of our cases could have MSI, and further molecular testing is indicated in these cases.
Abstract Id: YUGP4336
Phyllodes Tumour: A Single Institution Retrospective Audit
Presenter - Dr. Garvit Chikara
Co-author - Dr Nita S Nair, Mrs Rohini Hawaldar, Dr Vani Parmar

Authors: Chikara G, Nair NS, Hawaldar RW, Parmar V, Joshi S, Shet T, Badwe RA

Introduction: Phyllodes tumour are rare fibroepithelial neoplasms that account for less than 1 percent of all breast tumours in women. They consist of a wide spectrum of tumors ranging from benign phyllodes to malignant phyllodes. Surgery is the primary modality of treatment of phyllodes tumor and surgical margins may be the most important factor responsible for risk of local recurrence. We conducted a retrospective audit of 453 patients treated at our centre from the year 2000 to 2016, which is among the largest series on management of phyllodes Method: All women who presented to Tata Memorial Centre (TMC) between 2000 to 2016, with phyllodes tumor in the breast were included in the analysis. Demographic, clinicopathological, treatment data and current status was collected from the hospital medical records and telephonic interview. Results: Four hundred and thirty three women were included in this analysis. Median age at presentation was 44 years (Range 16 -78 years). Of these, 177/433 (40.9%) had benign phyllodes, 84 (19.4%) had low or intermediate grade phyllodes, 131 (30.3%) had malignant and 41(9.5%) had sarcoma on histopathology. History previous excision was noted in 154 (%) and 104/154presented to TMC with local recurrence. Wide excision was performed in 205 (52%), median pT was 6 cm (Range 1-35 cm) and 12 (3%) of the patient had positive resection margins after surgery. At a median follow up of 25 months overall survival (OS) was 91.7%. On multivariate Cox Regression analysis surgical margins (p=0.036)and histology of the disease(p=0.000) had worse OS , while age at presentation and type of surgery did not impact survival . OS for women with benign phyllodeswas 98.9%, low/intermediate phyllodes was 98.8%, malignant phyllodes was 85.5% and sarcoma was 65.9%. The model was also run including only those who presented to TMC without prior excision. At a median follow up of 27 months , the OS was 98%, with worse outcome noted with more aggressive histological subtype (p=0.08). Conclusion: Surgical margins and histological subtype of phyllodes tumour are factors that have an impact on overall survival. Thus emphasizing the need for appropriate surgical planning and en bloc excision of the phyllodes at presentation.

Abstract Id: YUGP4338
Role Of Prophylactic Swallowing Exercises In Reducing Radiation Induced Dysphagia In Head And Neck Cancer Patients
Presenter - Dr. Nishant Vidyasagar
Co-author - Dr Janaki M.G, Dr Lithika Lavanya, Dr Prathyush V

BRIEF RESUME OF THE INTENDED WORK NEED FOR STUDY
In our hospital, head and neck cancers constitute 28% of cases every year. These patients are treated by a multimodality approach consisting of surgery, chemotherapy and radiation therapy depending on the stage and related co-morbidities. Dysphagia is a common complication in patients undergoing radiation both acutely and long after treatment is completed. It is due to decreased tongue retraction, decreased sensation, edema and mucosal sensation alteration. They experience changes in swallowing with restricted diet, persistent PEG tube feeds and has negative effects on quality of life. AIM OF STUDY To assess the efficacy of prophylactic swallowing exercises in reducing radiation induced dysphagia in head and neck cancer patients. METHODOLOGY Sample size – 20 (10 in each arm) The patients will be treated by external beam radiation therapy to a dose of 60 Gy or more in around 30-35 fractions using 3DCRT/ IMRT technique on 6MV LINAC with radical intent. The structures involved in swallowing will be contoured in all patients and dose received by them and its correlation with dysphagia will be assessed. The patients in the test arm will be asked to perform 5 swallowing exercises (effortful swallow, super supraglottic swallow, tongue hold maneuver, tongue retraction, mendelson maneuver) throughout their treatment, each exercise 10 times, 3 times/day. Swallowing function in both arms will be assessed with Functional Oral Intake Scale(FOIS) and Performance Status scale(PSS-H&N) at baseline, at 2 months, 6 months, 9 months after treatment. RESULTS The results of this prospective study will be presented.

Abstract Id: YUGP4340
Randomized Controlled Trial Comparing Preoperative Chemotherapy Versus Preoperative Chemoradiation In Patients with Middle, Lower Esophageal And Gastro-Esophageal Junctional Cancer. Short Term Outcomes
Presenter - Dr. Satish Pawar
Co-author - Dr. Nusrath, Dr. T. Subramanyeshwar Rao, Dr. KV/N Raju

AIM: The present study was aimed to compare resectability, pathological response rates and short term surgical outcomes in patients with carcinoma esophagus and gastro esophageal junction randomized to neoadjuvant chemotherapy and chemoradiation followed by surgery, with 1:1 enrollment ratio. Study Period: In one and the half year study period only 78 patients were enrolled and 70 patients were analyzed, from May 2014 till December 2015 at Basavarajakam Indo American Cancer Hospital and Research Institute, Hyderabad. Inclusion Criteria: Patients with histologically confirmed, potentially resectable middle lower esophageal and esophagogastric junction cancer of clinical stage T2-4a, NO+M0. Exclusion criteria: Patients with unresectable disease invading other adjacent structures, such as aorta, vertebral body, trachea, etc (T4b), with prior history of any other malignancy, cervical and upper thoracic esophageal tumors were excluded from the study. Materials and methods: All patients underwent a thorough pretreatment staging in form of a complete history and physical examination, complete hemogram, liver function test, renal function test; upper gastrointestinal endoscopy with biopsy, computed tomography of the chest, and abdomen and pulmonary function test. Bronchoscopy was done for middle third esophageal tumors. Chemotherapy and chemoradiation were given as per protocol. A repeat CT scan of chest and abdomen and upper gastrointestinal endoscopy was done 4-6 weeks after the completion of therapy to assess the response of therapy and feasibility of surgery. The concurrent chemoradiation was done as per CROSS study protocol with weekly intravenous paclitaxel and carboplatin i.e., on days 1, 8, 15, 22, and 29, carboplatin targeted at an area under the curve of 2 mg per milliliter per minute and paclitaxel at a dose of 50 mg per square meter of body-surface. The same chemotherapy drugs were administered in chemoradiation arm scheduled at every 3 weeks for a total of 3 cycles. For middle third oesophageal tumors thoraco-laparoscopic assisted esophagectomy with 2 field lymphadenectomy was done. For lower esophageal and GEJ tumors laparoscopic assisted transhiatal esophagectomy with D2 lymphadenectomy was done. Results: The percentage of patients who had curative R0 resection was similar in both the arms (86% vs. 88%). More patients on neoadjuvant chemotherapy as compared to neoadjuvant chemoradiation had disease progression. Percentage of patients with resectable disease was statistically more in NACRT arm as compared to NACT arm (p=0.0027). There was trend toward more pathological complete regression in NACRT arm (p=0.0675). Median blood transfusion during hospital stay, median day of extubation, return of bowel sounds after surgery, starting of jejunostomy feeding and oral feeds, passage of stool and flatus were similar in both the arms. Median ICU and hospital stay were similar in both the arms. Various surgical complications occurring in both the arm were similar. The percent of patient achieving complete tumor regression i.e., tumor regression grade TRG 0 in primary site (pT0) was significantly higher in neoadjuvant chemoradiation group. Neoadjuvant chemotherapy group had significant higher lymphovascular invasion frequency, though perineural invasion frequency was similar in both the arms. The down staging effect on nodal status was similar in both the arms. There was a statistically significant reduction in size of tumor size in
Abstract Id: YUGP4344
Treatment In Head & Neck Cancer Patients By Radiotherapy With/Without Weekly Chemotherapy And Its Side Effects:
Presenter- Dr. Suresh Mahajan

Treatment in Head & Neck Cancer Patients by Radiotherapy with/without weekly chemotherapy and its side effects: Mahajan Suresh Kumar, Baral Rajendra Prasad Department of Radiation Oncology, Bhaktapur Cancer Hospital, Nepal. Background: Head and Neck cancer is a common leading cancer seen among other cancer. Inadequate line of treatment is high in those patients who have used chewing tobacco, smoking, beetle nut and other risk factors. Patients usually present with ulcer, pain, dysphasia, horseness of voice in site of head & neck regions. Method and Materials: From Jan 2014 to Dec 2015, 175 patients with head and neck cancer disease were enrolled in which male: female ratio of 2.6:1. Most of age between 60-69 years (32.57%) was the highest range among other age groups. Other were between 50-59 years (25.71%), 70-79 years (21.14%), 40-49 years (14.28%), 80-89 years (4%) and 30-39 years (2.28%) respectively. Patients were diagnosed as case of carcinoma of larynx (21.14%), parotid sinus (21.14%), larynx (9.14%), Nasopharynx (6.85%), Tonsil (6.28%), Floor of mouth (4%), Buccal mucosa (2.28%), Lower lip (1.71%), Maxillary (1.71%), Nasal cavity (1.14%) and Parotid gland (1.14%) respectively. Results: Stage IVA (46.28%), III (25.71%), II (18.28%), IVB (5.14%) and I (4.57%) of patients were treated with radiation dose 66 Gy/33 fractions of tele cobalt 60 with/without weekly platinum base chemotherapy. 110 patients received concurrent chemotherapy as well as 65 patients received radiotherapy only. During treatment period, 13 patients had sever mucositis and grade III to IV skin reactions observed in last week of radiotherapy treatment as well as most of patients had mild to moderate of disease is high in those patients who have used chewing tobacco, smoking, beetle nut and other risk factors. Taste, dryness of mouth observed after two weeks of radiotherapy treatment. Conclusion: Hence, symptomatic treatment gives a lot of relief, subside and cure for side effect of Radiotherapy treatment in head and neck cancer patients.

Abstract Id: YUGP4346
Laparoscopic Rt Radical Nephrectomy For Wilm'S Tumor ( For Best Video Presentation)
Presenter- Dr. Rakesh Sharma
Co-author - Dr. Ashwin, Dr. Yugandhar Reddy, Dr. T. Subramanyeshwar Rao

Laparoscopic Right Radical Nephrectomy for Wilm’s Tumor in Paediatric patient Rakesh M Sharma, Ashwin Girdhar, Yugandhar Reddy, T. Subramanyeshwar Rao Department of Surgical Oncology, Basavataramak Indo-American Cancer Hospital & Research Institute, Hyderabad. Introduction - Laparoscopic Right Radical Nephrectomy for Wilm’s tumor is safe procedure Material and Methods - • A case of 3 yr old female presented with pain and abdominal distension • She underwent CT scan and diagnosed to have 11 x 12 cm Rt Renal mass • Labs – Normal, S. Creatinine – 0.3 mg/dl. • Received 4 cycles of Chemotherapy • Post chemotherapy CECT s/o 7x7 cm Rt Renal mass • Chest X-ray – Normal Patient in Rt lateral position with a standard Transperitoneal Laparoscopic 5 port technique for Right sided Renal mass Specimen retrieval through Rt iliac approx. 5cm incision Result – Duration of surgery 120 minutes. Total blood loss – 30 ml. Postoperative creatinine was normal. Patient discharged on 4th postoperative day. Conclusion – Transperitoneal laparoscopic radical nephrectomy (TrLRN) for Wilm’s tumor is a safe and effective treatment in well selected patient. It prevents the morbidity and prolonged recovery period associated with open procedure.

Abstract Id: YUGP4348
Perineural Invasion: A Predictor Of Extracapsular Spread In Carcinoma Tongue
Presenter- Dr. Syed Mustafa Ahmed
Co-author - Dr. Hemanth

PERINEURAL INVASION: A PREDICTOR OF EXTRACAPSULAR SPREAD IN CARCINOMA TONGUE BACKGROUND: Perineural invasion (PNI) is associated with an increased risk of local recurrence and cervical metastasis and is an independent predictor of survival of the patients with squamous cell carcinoma of tongue. Extracapsular spread (ECS) is also an important predictor of locoregional recurrence and survival. Very few studies have addressed the association between PNI and ECS. We herein report the association between PNI and ECS. METHODS: Three hundred and thirty patients of carcinoma tongue were operated from January 2010 to December 2012 at our institute. Recurrent, post RT salvage, and non squamous histology cases were filtered and finally 193 patients’ medical records were selected for the present retrospective study. RESULTS: Out of 193 patients, 163 (84.4%) were PNI negative and 30 (15%) PNI positive. The sex distribution, grade of tumor, margin status, stage of tumor and other parameters were identical in both the groups. PNI positive group had higher positive nodes (56.6% vs 39%) though it was not statistically significant (p = 0.106). The number of positive lymph nodes with extracapsular invasion was significant higher in PNI positive group in 40% as compared to PNI negative group which had 16.5% (p = 0.0372). Also lymphovascular space invasion (LSVI) was also significantly higher in PNI positive patients (p = 0.002). Depth of tumor infiltration was stratified into 3 groups, group 1 with tumor infiltration 1-3 mm, group 2 with 4-7 mm and group 3 with 8mm and above. PNI positive group had statistically higher number of group 3 tumors (i.e., tumor infiltration of 8mm and above) (p = 0.0157). CONCLUSIONS: Patients with squamous cell carcinoma of tongue with PNI positive had significantly more pathological nodes with extracapsular spread. Also PNI positive group had significantly higher lymphovascular space invasion and increased thickness of tumor.

Abstract Id: YUGP4352
Demographic And Lifestyle Determinants In Oral, Cervical And Breast Cancer Screening In North East Females In Delhi-Ncr.
Presenter- Dr. Dipika Bumb
Co-author - Awdhesive yawah, Jyotshila Govil, Preet dhillon

Background: Cancer incidence rates are the highest in the Northeast (NE) region, where differences in patterns of tobacco and alcohol consumption, diet, sexual behaviours and marital trends contribute to these patterns. We aim to evaluate the female migrant population from NE, for prevalence of risk factors and precancerous lesions to understand patterns in unique populations. Methods: Oral, breast and cervical cancer screening were conducted by the Indian Cancer Society, Delhi for Northeast migrant females aged 18 years and older residing in Delhi/NCR region. Screening consisted of an oral visual exam, clinical cervix , PAP smears and clinical breast exam with mammography as indicated. Informed consent and a structured questionnaire was interviewer administered. Cancer awareness talks were delivered by cancer survivors before each screening camp. Results: The sample size was (n=239) with a mean age of 39.9 (8.8) years with 74.3% females form Manipur. 63.9% females were delivered by cancer survivors before each screening camp. Informed consent and a structured questionnaire was interviewer administered. Cancer awareness talks were delivered by cancer survivors before each screening camp. Results: The sample size was (n=239) with a mean age of 39.9 (8.8) years with 74.3% females form Manipur. 63.9% females were delivered by cancer survivors before each screening camp. Informed consent and a structured questionnaire was interviewer administered. Cancer awareness talks were delivered by cancer survivors before each screening camp. Results: The sample size was (n=239) with a mean age of 39.9 (8.8) years with 74.3% females form Manipur. 63.9% females were delivered by cancer survivors before each screening camp. Informed consent and a structured questionnaire was interviewer administered. Cancer awareness talks were delivered by cancer survivors before each screening camp.
Malignant Mixed Mullerian Tumour Of Uterus : A Rare Entity -

Assessment of 2 Cases

Presenter- Dr. Vaishnavi Perumareddy
Co-author - Dr. Geeta S Narayan, Dr. Rashmi Shivananjappa, Dr. Bhanumathy G

INTRODUCTION: After curative treatment for patients with carcinoma esophagus, they are at high risk for recurrences after treatment. Hence post treatment follow-up and surveillance is needed. We have investigated post treatment recurrence patterns and co-related with prognostic factors in patients who had received curative treatment for carcinoma esophagus. OBJECTIVE: To assess the recurrence patterns for carcinoma esophagus patients treated with curative intent.

METHODS AND MATERIALS: A total of 65 patients were studied retrospectively from January 2015 to March 2017 who had received curative treatment for carcinoma esophagus in Department of Radiotherapy at Vydehi Institute of Medical Sciences and Research Centre. Patients have been divided into 3 groups where Group-I had received Neo-adjuvant chemo-radiation followed by surgery, Group-II had received Definitive chemo-radiation and Group-III had undergone surgery followed by chemo-radiation or radiation alone. In patients treated with Definitive and Adjuvant setting, the total dose given was 5000cGy to 6000cGy, in Neo-adjuvant setting, total dose was 4140cGy. Chemotherapy given was Cisplatin and 5-Fluoro-uracil in Neo-adjuvant and Definitive setting, Paclitaxel and Carboplatin were given in Adjuvant setting. RESULTS: With a median follow up of 6 months, 65 patients who were studied retrospectively, 39 patients were Male and 26 patients were Female. Tumor was located in cervical in 5, upper thoracic in 12, mid thoracic in 26 and lower thoracic 23 patients. 4% of the patients were Adenocarcinoma on Histopathology, Half of the patients analyzed had positive lymph nodes either radiologically or pathologically. All patients had received chemotherapy, 10 patients had received Adjuvant treatment, 11 patients received Neo-adjuvant treatment, 44 patients received Definitive treatment. Patterns of recurrences with respect to Age, Histopathology, Number of lymph nodes, Staging were analyzed. Median survival and progression free survival were calculated. INTERPRETATION & CONCLUSION: Results will be updated in the presentation.
Abstracts

HISTOLOGIES. 18 PATIENTS UNDERWENT TAH + BILATERAL BSO, 2 PATIENTS UNDERWENT RADICAL HYSTERECTOMY AND 1 PATIENT UNDERWENT TRACHELECTOMY. THE STUDY EVALUATED OVERALL SURVIVAL AND DISEASE FREE SURVIVAL AND CORELATED WITH VARIOUS PROGNOSTIC FACTORS INCLUDING AGE, TYPE AND GRADE OF HISTOLOGY AND STAGE. SIXTEEN PATIENTS ARE ALIVE WITHOUT DEASEASE AT THE TIME OF ANALYSIS THE COMPLETE RESULTS WILL BE UPDATED IN THE PRESENTATION.

Abstract Id: YUGP4363
Prognostic Impact Of Lymphocyte, Monocyte Count, Lymphocyte/Monocyte Ratio And Presence Or Absence Of Peritoneal Disease On Outcomes In Gastric Cancer Patients From A Tertiary Care Centre Of South India
Presenter - Dr. Esha Jafa
Co-author - CHARLES, BISWAJIT DUBASHI, SMITA KAYAL

BACKGROUND- Inflammation seems to play a critical role in the development and progression of numerous cancers. It has been postulated that increased release of proinflammatory cytokines produces a systemic inflammatory response reflected in changes in circulating markers of inflammation, such as C-reactive protein and white blood cells. There are several studies suggesting that the total white cell blood count as well as neutrophils, lymphocytes, monocytes, and the neutrophil-to-lymphocyte (NLR), ratio LMR(lymphocyte, monocyte ratio ) can predict survival in a number of cancers. Gastric cancer remains a difficult disease to treat hence we aimed to find out variables which could predict outcomes.

AIM- We aimed to analyse any significant prognostic role of LMR and monocyte ,lymphocyte counts or any other factor in gastric cancer in a region with a high incidence of the tumor. MATERIALS AND METHODS- Data was collected retrospectively and analyzed for 50 locally advanced and metastatic gastric cancer patients from 2015-2016. Several clinicopathologic variables were studied. Data was analyzed using SPSS 21.0, Chi-square test, Independent samples t’ test,multivariate cox proportional hazards model were used. RESULTS- Receiver operating characteristic curve analysis was used to draw the cut-offs for grouping patients into low and high LMR. We stratified the patients into 2 groups on the basis of pretreatment LMR with a cutoff value of 4.8 (group 1: LMR < 4.8; group 2: LMR > 4.8). On univariate analysis, monocyte count and lymphocyte count had no significant prognostic impact (p=0.838,p=0.235) nor did the pretreatment LMR had any impact on outcome even in multivariate analysis. Among other factors analysed, the only factor that was significantly related to outcome in univariate analysis was the presence of peritoneal disease. Absence of peritoneal disease was significantly associated with higher chances of survival (p=0.025).

Presence of peritoneal disease was significantly associated with higher chances of survival. To obtain the best possible dose distribution to the cervix and the surrounding normal tissues, applicator placement must be optimal. The risk of uterine perforation with the blind insertion ranges from 2-14%, according to different studies. The applicator has to be removed and reapplied in such cases which delays the treatment and requires anaesthesia. Repeated imaging required for verification of applicator position and treatment planning delaying the procedure and increasing the cost. One technique of verifying real-time tandem insertion is intraoperative real time ultrasonography. An American survey shows that it has been practiced only in 42% of ICBT applications in carcinoma cervix. The procedure is rarely employed in developing countries. In such scenario, in our study we attempt to study the role of real time ultrasound guidance in optimal tandem placement in brachytherapy for carcinoma cervix and its impact on dosimetric coverage.

INTRODUCTION - Cervical cancer is the second most common malignancy in women aged 15-44 years in India. Brachytherapy forms an integral part in the curative management of cervical cancers and significantly improves survival. To obtain the best possible dose distribution to the cervix and the surrounding normal tissues, applicator placement must be optimal.The risk of uterine perforation with the blind insertion ranges from 2-14%, according to different studies. The applicator has to be removed and reapplied in such cases which delays the treatment and requires anaesthesia. Repeated imaging required for verification of applicator position and treatment planning delaying the procedure and increasing the cost. One technique of verifying real-time tandem insertion is intraoperative real time ultrasonography. An American survey shows that it has been practiced only in 42% of ICBT applications in carcinoma cervix. The procedure is rarely employed in developing countries. In such scenario, in our study we attempt to study the role of real time ultrasound guidance for intracavitary brachytherapy procedure in carcinoma cervix. Primary objective 1) Comparison of number of false passages, re-applications, conversion into ISBT procedure. 2) To compare dose coverage of HRCTV(D90) in patients undergoing ultrasound guided tandem insertion and in patients undergoing tandem insertion without ultrasound guidance. 3) Comparison of D 0.1cc, D 1.0cc, D 2cc doses of rectum and bladder in the 2 groups MATERIALS & METHODS: 38 patients with histologically proven carcinoma cervix (International Federation of Gynecology and Obstetrics, FIGO stage IB-IIIB) were prospectively randomized using lottery method to arm A (USG arm): 19 patients and arm B (control arm): 19 patients after completion of concurrent chemoradiation. In Arm A patients underwent ultrasound guided uterine tandem insertion for intracavitary brachytherapy while in Arm B patients underwent tandem insertion without ultrasound guidance. Thereafter all patients had the pretreatment LMR had any impact on outcome even in multivariate analysis. Among other factors analysed, the only factor that was significantly related to outcome in univariate analysis was the presence of peritoneal disease. Absence of peritoneal disease was significantly associated with higher chances of survival (p=0.025).

Presence of peritoneal disease was significantly associated with higher chances of survival. To obtain the best possible dose distribution to the cervix and the surrounding normal tissues, applicator placement must be optimal. The risk of uterine perforation with the blind insertion ranges from 2-14%, according to different studies. The applicator has to be removed and reapplied in such cases which delays the treatment and requires anaesthesia. Repeated imaging required for verification of applicator position and treatment planning delaying the procedure and increasing the cost. One technique of verifying real-time tandem insertion is intraoperative real time ultrasonography. An American survey shows that it has been practiced only in 42% of ICBT applications in carcinoma cervix. The procedure is rarely employed in developing countries. In such scenario, in our study we attempt to study the role of real time ultrasound guidance for intracavitary brachytherapy procedure in carcinoma cervix. Primary objective 1) Comparison of number of false passages, re-applications, conversion into ISBT procedure. 2) To compare dose coverage of HRCTV(D90) in patients undergoing ultrasound guided tandem insertion and in patients undergoing tandem insertion without ultrasound guidance. 3) Comparison of D 0.1cc, D 1.0cc, D 2cc doses of rectum and bladder in the 2 groups.

ABSTRACT PURPOSE- To evaluate the role of real time ultrasound guidance in optimal tandem placement in brachytherapy for carcinoma cervix and its impact on dosimetric coverage.

Abstract Id: YUGP4365
A Report Of Acute Toxicities Of Intensity Modulated Radiotherapy (Imrt) In Post-Operative Patients Of Carcinoma Cervix And Endometrium
Presenter - Dr. Mohammad Ali
Co-author - Prof. Kamal Sahni, Dr. Madhup Rastogi, Dr Sambit S Nanda

Introduction: Post operative radiotherapy is an established adjuvant treatment after radical hysterectomy for selected cervical and endometrial cancer patients. The conventional whole pelvic radiotherapy (WPRT) technique exposes most of the contents of true pelvis (including small bowel) to radiation. IMRT is a form of 3D conformal radiotherapy in which a computer-aided optimization process is used which potentially may lead to improved tumor control and reduced normal tissue toxicity. The effectiveness of IMRT has been validated in several anatomical sites such as head & neck and prostate cancer treatment. Aims and Objectives: To assess the acute toxicities in post-operative patients of carcinoma cervix and endometrium treated with IMRT technique. Materials and method: Prospective, interventional, single arm study including 15 patients was carried out between dec-2015 to Feb-2017. Post-operative patients of carcinoma cervix and endometrium without any residual disease were included in the study. Contrast enhanced tomography simulation was done with full bladder. Radiotherapy was given as IMRT with a dose of 45-50.4 Gv at 1.8-2 Gv per fraction was given as 5 fractions per week with concurrent cisplatin (35-40 mg/m2) weekly (when indicated) followed by intravaginal brachytherapy. Results: The treatment was well tolerated with 3(20%) patients developing grade 2 while 7(46.6%) patients developing grade 1 lower gastrointestinal toxicity. 3(20%) patients experienced grade 1 leukopenia. 5(33%) patients suffered from grade 1 skin reactions. 4(26.6%) patients developed grade 1 while 2(13.3%) patients developed grade 2 genitourinary toxicities. No grade 3 or 4 hematological, lower gastrointestinal, genitourinary or skin toxicity occurred in any patient. Conclusions: IMRT has acceptable early acute toxicity profile in post-operative patients of carcinoma cervix and endometrium. Follow up of patients in our study would further define its role.
underwent CT simulation for brachytherapy planning. HRCTV and organs at risk i.e rectum and bladder were then delineated and dose prescribed to HRCTV for High dose rate (HDR) intracavitary brachytherapy to a dose of 21-24 GY in 3 or 4 fractions. After planning, dosimetric evaluation was done for both the groups and comparison done with respect to D90 for HRCTV and D0.1cc, D1.0cc and D2cc of rectum and bladder. RESULTS: 19 patients each will be studied in the arm A and arm B. In the USG arm none of the patients had uterine perforation or reapplication till date whereas in the control arm 1 patient had uterine perforation and had to undergo reapplication. The dosimetric parameters being studied are D90 coverage of HRCTV, and D0.1cc, D1.0cc and D2.0cc doses of bladder and rectum and the same will be compared between the 2 groups. CONCLUSION: Trans-abdominal ultrasound being a widely available, cost effective and real time imaging modality can be routinely used in the uterine tandem application in carcinoma cervix for optimal applicator placement and to avoid false passage and reapplication and is found to help in reducing the doses to the rectum and bladder. Key words: carcinoma cervix, ultrasound, intracavitary brachytherapy

Abstract Id: YUGP4375

Concordance Of Detecting Egfr Mutation By Circulating Tumour Free Dna Versus Tissues Biopsy In Nsclc: Study Design Presenter - *Dr. Senthil Rajappa*
Co-author - Ashok Vaid, Kumar Prabhash, Ullas Batra

Background: Numerous studies favour mutation testing of tumor sample DNA from patients with non-squamous advanced NSCLC to confirm appropriateness for EGFR TKI treatment. NSCLC is diagnosed in most cases on small tissue samples that may not always be sufficient for EGFR mutational assessment to select patients for first and second generations’ TKIs therapy. In patients without tissue availability at presentation, the analysis of cell free DNA (cfDNA; also referred to as ctDNA) derived from liquid biopsy samples, in particular from plasma, represent an established alternative to provide EGFR mutational testing for treatment decision making. cfDNA mutational analysis is a clinically congruent way to check the presence of EGFR mutations and predict its counter effect to EGFR TKIs. Similar objective response rates and progression-free survival have also been observed between patients with EGFR mutation-positive NSCLC detected by testing of tissue/cytologic samples and patients with EGFR mutations detected in their cfDNA. AIM and Objectives: To assess the level of concordance between EGFR mutation status obtained from tissue and also determine the EGFR mutation frequency (including mutation subtypes: exon 19 deletions and the L858R) in patients with advanced NSCLC (aNSCLC) of adenocarcinoma. Method: This is a multicentre, prospective, diagnostic, observational study of EGFR mutation status in advanced NSCLC patients (locally advanced and/or metastatic disease) with adenocarcinoma to be conducted at 15 sites from different geographical regions across India. The study targets to enrol 268 patients over a period of 6 months. The study will enrol patients with histologically/cytologically confirmed, systemic, treatment naïve, locally advanced NSCLC (stage III A/B according to the American Joint Committee on Cancer Staging system, 7th edition) unsuitable for curative treatment or chemo-radiotherapy OR with metastatic disease (stage IV). This will be a single visit study. No study medication will be prescribed or administered as a part of study procedure. Result and Conclusion: This study will provide useful data among Indian patients in order to improve local diagnostic practice, enable wider access to cfDNA mutation testing, and provide more patients with the opportunity to receive therapies personalized to the mutation status of their tumours.

Abstract Id: YUGP4377

“Dosimetric Evaluation Of Dose Received By Dysphagia Aspiration Related Structures (Dars) And Its Effect On Swallowing In Patients Of Head & Neck Malignancies Treated Using Intensity Modulated Radiotherapy”
multivariate regression analysis to identify predictors of dysphagia. In order to look for the differences among various groups (groups with grades of dysphagia) Analysis of variance (ANOVA) test was done. In all the above statistical tools the probability value .05 is considered as significant level. RESULTS: The mean age was 55 years and mostly were males (93%). Majority of the patients. The most common histologic differentiation was moderately differentiated (47%) type. Majority of the patients had tumors originating in the oropharynx (22/30) and most patients had stage III tumors (80%). All patients were treated using concurrent chemoradiotherapy using 66-70 Gy in 33 to 35 fractions, with weekly cisplatin based chemotherapy. The mean dose to the PTV PRIMAR D95% was 6486.70 Gy and PTV PRIMARY 02% was 7114.43 Gy. The mean dose to the PTV NODE D95% was 5858.57 Gy. The mean dose to the pharyngeal constrictor was 57 Gy. The percentage volume (mean) of V30 was 92.23%. Similarly, V40 was 88.60%, V50 was 80.64%, V60 was 60.20% and V65 was 36.72%. For patients to develop grade 1 oesophageal/pharyngeal toxicity, the mean dose received by the pharyngeal constrictor was 52 Gy. For grade 2 toxicity to develop it was 61 Gy, and 68 Gy for Grade 3. This had a statistical significance with a p-value of 0.016. The mean dose to the larynx was 55 Gy. The percentage volume (mean) of V30 was 92.07%, V40 was 85.51%, V50 -73.92%, V60 - 66.17% and V65 - 18.18%. For patients to develop grade 1 oesophageal/pharyngeal toxicity (RTOG acute radiation morbidity scoring) the mean dose to be received by the larynx was 49 Gy. For Grade 2 toxicity to develop it was 59 Gy, and 65 Gy for Grade 3 toxicity. This had a statistical significance with a p-value of 0.034. The mean dose to the oesophagus was 45 Gy. The percentage volume (mean) of V30 was 79.74%. The percentage volume (mean) V40 was 72.71%, V50 55.73%, V60 27.15% and V65 7.5%. For patients to develop grade 1 oesophageal/pharyngeal toxicity, the mean dose received by the oesophagus was 38 Gy and for Grade 2 toxicity to develop it was 52 Gy and 55 Gy for Grade 3 toxicity. The combined statistical significance couldn’t be met, as the p value was 0.078. The mean dose to the base of tongue was 57 Gy. The percentage volume (mean) of V30 was 91.71%. Similarly, V40 was 86.51%, V50 was 77.13%, V60 was 61.36% and V65 was 33.38%. For patients to develop grade 1 oesophageal/pharyngeal toxicity, the mean dose received by the base of tongue was 53 Gy and for Grade 2, 3 toxicity to develop it was 61 Gy. The combined statistical significance couldn’t be met, as the p value was 0.239. CONCLUSION: This prospective observational study has shown that a relationship does exist between the dose received by the swallowing structures and dysphagia, thereby acting as a prime factor deciding the quality of life. A probable mean limiting dose could be arrived at, as suggested by earlier literature, for pharyngeal constrictors, which is <80 Gy: Also the volume receiving 75 Gy, associated with greater risk of dysphagia/aspiration should also be reduced. From the limited studies done on larynx, the mean dose is to be kept between 40-45 Gy and the limiting max dose 63 Gy, failing which, could result in Grade III or more dysphagia. Most studies including ours, emphasize the need for contouring and delineating the swallowing structures, and diligent planning to optimize their dose, without compromising the target dose for improving the quality of life of these patients.

Abstract Id: YUGP4381
Techniques To Achieve Optimal Cytoreductive Surgery In Peritoneal Carcinomatosis - Techniques Of Systematic Total Peritoneectomy (Video Presentation)
Presenter - Dr. Ashwin Rajagopal
Co-author - Ashwin Rajagopal, Dr. Ashwin Rajagopal

VIDEO PRESENTATION Malignant peritoneal disease can lead to significant debility due to bowel obstructions, ascites, and cancer cachexia. Combined treatment involving peritoneectomy procedures, multivisceral resections, and hyperthermic intraperitoneal chemotherapy (HIPEC) has reportedly resulted in survival benefit for peritoneal surface malignancies. The differences among centers in clinical indications, surgical procedures, and intraperitoneal chemotherapy techniques still hamper any meaningful conclusions regarding the best surgical and comprehensive management of these patients. The surgical treatment involves extensive cytoreduction on visceral and/or parietal peritoneal surfaces. In most centers, organ resections are performed only if necessary to preserve sufficient postoperative function, and parietal peritoneectomy is limited to surfaces involved by visible tumor. At laparotomy the extent of peritoneal carcinomatosis was recorded according to the peritoneal cancer index (PCI). Aggressive surgical cytoreduction was then undertaken to leave the patient with no visible disease. The main characteristic of our institution’s approach consists of performing Systematic Total Peritoneectomy i.e (both macroscopically involved and normal surfaces), by means SEVEN of parietal peritoneectomy procedures (right diaphragmatic peritoneectomy, left diaphragmatic peritoneectomy, pelvic peritoneectomy, Glisson Capsulectomy, parietal anterior peritoneectomy, greater omentectomy, and lesser omentectomy.) Small and scattered localizations on the visceral surface were resected by local excision/electrocoagulation. In case of massive and/or deeply infiltrating disease, visceral resections were performed, including cholecystectomy, splenectomy, sigmoid, right or total colectomy and hysterectomy with salpingo-oophorectomy in women. Peritoneectomy procedures combined with HIPEC offer promising long-term survival in patients with diffuse peritoneal ovarian carcinomatosis. They achieve high adequate primary and secondary surgical cytoreduction rates with acceptable morbidity and mortality. We have performed over 450 cases of CRS at our center in India from 2013. The video presentation depicts our technique of performing Optimal aggressive CRS. Keywords: Cytoreductive surgery, Optimal Cytoreduction, Peritoneal carcinomatosis

Abstract Id: YUGP4383
Perioperative And Oncological Outcome Of Nephron Sparing Surgery In T1B Renal Cell Carcinoma
Presenter - Dr. RAJIV PAUL
Co-author - AMITABH SINGH, SUDHIR K RAWAL,

Background- Nephron sparing surgery (NSS) is standard of care for the treatment of localized renal cell carcinoma. The oncological equivalence and better functional outcome of partial nephrectomy compared to radical nephrectomy in RCC of size less than 4 cm has been reported widely. But its role in RCC of size 4-7 cm remains controversial. Objective- To present our experience of nephron-sparing surgery for T1b renal cell carcinoma in RGCI&RC. To evaluate the perioperative and oncological outcome of NSS in T1b RCC. Methods- The records of 32 patients who underwent partial nephrectomy for RCC of size 4-7 cm in our institute from February 2010 to May 2017 were reviewed retrospectively. Data were collected on patient demographics, surgical indications, tumour characteristics, perioperative complications, changes in serum creatinine level, time to recurrence and time to death. Cancer specific survival (CSS) and overall survival were estimated. Results- The mean patient age was 56 yrs. In 16 patients, the renal masses were detected incidentally on routine check-up. Most of the masses were exophytic (21 out of 32 patients), located in upper or lower poles (24 patients) and renal sinus or PCS uninvolved (26 patients). The mean RENAL score and PADAUA scores were 7 (4-10) and 8 (6-13); 16 patients (50%) underwent robotic NSS, 15 patients underwent open NSS and laparoscopic NSS was done in only one patient. The average intraoperative blood loss was 200 ml and (6%) patients required perioperative blood transfusion. Three (9%) patients developed acute kidney injury in perioperative period, of whom only one patient progressed to CRF and required repeated dialysis and others were managed conservatively without haemodialysis. The median pre-operative serum creatinine was 1.14. The median post-operative (on day 3) serum creatinine was 1.21. The change in serum creatinine was not significant (p=0.29). Two patients developed urine leak perioperatively and both required DJ stenting. Majority subtype was clear cell carcinoma (24 patients, 75%) and other subtypes were oncocytoma (5 patients), papillary (2 patients)
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Abstract Id: YUGP4387
Family Functioning After Pediatric Cancer Diagnosis - A Narrative Study From Parents Perspective
Presenter - *Ms. Bincy Mathew*
Co-author - Dr. V. Surendran, Shijina Shajahan,

Background: Annually in India 40,000 children being diagnosed with cancer and it has a profound impact on both the child as well as on the whole dimension of the family. Mothers are immersed with their emotions while fathers, keep it confined though they feel the same psychological distress. Moreover, it has thrown a disrupted family function and a huge economic imbalance in the family. Therefore the present study is to explore the parents experience on family transition when their child is diagnosed with cancer. Methods: A qualitative research was conducted among ten parents (10 fathers & 10 mothers) using purposive sampling after obtaining their informed consent. Data saturation was achieved after conducting in-depth interview using a semi structured questionnaire. The interviews were audio recorded, transcribed and analyzed using thematic analysis. Results: On analysis of data, five major themes emerged - Closeness in communication (couples reported growing closer while dealing with cancer); Financial burden (direct cost for multiple treatment modalities and loss of daily wages); Sexual intimacy (perceived deterioration in the sexual relationship); Fear of uncertainty (risk perception associated with cancer) and Alterations in the family functioning (shift in the family dynamics since there was a lot of care task involved). Conclusion: Findings highlight that most parents experienced positive as well as negative impact due to cancer diagnosis, though they do not consider themselves to be suffering. Understanding these issues would help us to devise specific psychological interventions for parents and caregivers which in turn improve the quality of life.

Abstract Id: YUGP4391
Targeting The Cancer Stem Cells In Tumors : An Invitro Study
Presenter - *Dr. Shalomi Bhattacharya*
Co-author - , , ,

Recent evidences on cancer biology suggest that a subset of cells called cancer stem cells are present within the tumor mass which possess tumorigenic capacity. These are the cells responsible for propagation, relapse and metastatic dissemination. These cells have certain stem cell-like properties, e.g. quiescence, self renewal, asymmetric division, and multidrug resistance which allow them to evade tumor growth and evade conventional therapies. The idea that many cancers are organized as hierarchies sustained by cancer stem cells (CSCs) at their apex has generated a lot of excitement in many quarters of the cancer research community. Cancer stem cells appear to be preferentially resistant to both standard chemotherapy and radiotherapy. However, the small percentage of CSCs in the tumor makes it difficult to isolate We have generated a population of CSC-like cells in vitro in various cell lines to study and specifically target these cells which remain elusive in vivo. We observed that the CSCs undergo epithelial to mesenchymal transition in their phenotype and the commonly used chemotherapeutic agents like cisplatin or mTOR inhibitors show limited efficacy against the CSC. We have identified several inhibitors which can target the CSCs based on the pathways critical to the activity and survival of cancer stem cells. Targeting the CSCs may help in increasing the overall disease free survival and recurrence cancer. CSC-targeted treatments face a number of potential hurdles, including normal stem cell toxicity and the acquisition of treatment resistance, which must be considered in order to maximize the chance that such therapies will be successful. In the absence of surrogate clinical markers that adequately reflect the biology of the disease, survival should remain a primary endpoint of therapeutic efficacy when studying new treatments.

Abstract Id: YUGP4393
Can Gefitinib Improve Survival In Patients With Brain Metastasis Arising From A Lung (Nsclc) Primary – A Single Institution Retrospective Audit
Presenter - *Dr. Rahul Ravind*
Co-author - Dr.Vijaya Bhaskar, Dr.Shekhar Patil, Dr.Shashidhara

Corresponding Author: Dr.Rahul Ravind, Radiation Oncologist, HCG Cancer Hospital, Bangalore, Karnataka, India E-mail: dr rahul@yahoo.com BACKGROUND: Lung cancer is the most frequent site of origin for brain metastases and is a common occurrence in patients diagnosed with Non Small cell lung cancer (NSCLC). Approximately 40% of all patients with lung cancer suffer from brain metastases in the course of their disease. The standard therapy for brain metastasis is whole brain radiotherapy, and more aggressive approaches such as surgery or radiosurgery are tried on a subset of patients. The role of systemic therapy is controversial in this setting. Newer drugs like Gefitinib, an oral drug—an inhibitor of epidermal growth factor receptor (EGFR)-associated tyrosine kinase has demonstrated efficacy in a subgroup of patients with non-small-cell lung carcinoma (NSCLC) who fail conventional chemotherapy. AIM/PURPOSE: The aim of our study is to retrospectively analyze the patterns of care and role of gefitinib in patients diagnosed with carcinoma lung (NSCLC) presenting to us with brain metastasis. MATERIALS AND METHODS: A single institution, retrospective analysis of all patients with a primary diagnosis of carcinoma lung (NSCLC), presenting with brain metastasis. Patients treated in our institution from 2010 -2014 were analyzed and data were recovered from electronic medical records, follow up charts and radiotherapy treatment charts. RESULTS: A total of 30 patients were analysed. All were Stage IV disease with brain metastasis from a lung primary. Mean age of diagnosis is 53 years and more were male patients (19:11). All were diagnosed to have NSCLC. Majority of the patients had co morbidities like hypertension and or DM-II. EGFR mutation status was positive in 12 patients. All patients received whole brain radiotherapy with a standard dose of 30 Gy in 15 fractions. Eleven patients received Gefitinib as maintenance therapy. At the time of analysis 20 patients expired. Mean survival (30 patients) was 10.74 months. Mean survival in patients taking Gefitinib was 18.39 months. CONCLUSION: Brain metastasis from NSCLC has a poor prognosis. The results of standard therapy for brain metastases in this setting is disappointing, gefitinib appears to be a possible new treatment option as it is active in patients with brain metastasis. However, this needs to be validated in prospective randomized control trials.

Abstract Id: YUGP4395
A Detailed Analysis Of The Learning Curve: Robotic Assisted Pelvic And High Para-Aortic Lymphadenectomy For Endometrial Cancer - Single Institution First Indian Study.
Presenter - *Dr. Sushil Kumar*
Co-author - Dr Somashekkar SP, Dr Ashwin KR, Dr Rohit Kumar

Introduction: Endometrial cancer is fourth most common malignancy worldwide. Minimally invasive techniques are widely adopted approach for radical hysterectomy with pelvic and para-aortic lymphadenectomy in endometrial cancer. Robotic radical
hysterectomy with lymphadenectomy has clinical advantages over an open approach, such as less blood loss, decreased morbidity, improved quality of life, shorter hospitalization and faster recovery. Robotic surgery overcomes the drawbacks of traditional laparoscopy due to advantages of robotic 3D view, more precise visibility of operative field, fatigue resistant properties and improved dexterity. There is a convincing need for quality assessment to ensure patient safety and adequate clinical outcomes mainly during learning phase of a robotic surgical technique. Materials and method: This is a prospective non-randomized observational study designed to analyze the learning curve for robotic assisted pelvic and para-aortic lymphadenectomy for endometrial cancer patients. Between 2011 to 2013, 131 consecutive endometrial cancer patients underwent type-I extrafascial hysterectomy with pelvic and high para-aortic lymphadenectomy using the da Vinci robotic surgical system at single quaternary care Indian cancer institute. For lymph nodes retrieval data, the point at which as per AJCC-TNM staging, time taken to reach, recommended minimum number of lymph nodes at each segment of pelvic and para-aortic lymphadenectomy was plotted and analyzed. The surgery was performed by same surgeon in all cases. Results: Target number of pelvic lymph nodes 12 was achieved by ninth case, and consistently, more number of lymph nodes were removed. Target number of para-aortic lymph nodes 10 was achieved at eighteenth case. Conclusion: Our study confirms the proficiency and efficiency of robotic surgical approach in treatment of endometrial cancer, with adequate lymph nodes retrieval, and offers a safe and useful alternative to conventional surgical techniques with shorter learning curve.

Abstract Id: YUGP4397
Preoperative Chemoradiation in Carcinoma Oesophagus: An Analysis Of Clinical & Dosimetric Outcomes
Presenter - Dr. Parveen Kumar
Co-author - Dr. Sajal Kakkar, Mr. Varinder Chabraa, Ms. Radhika Jain

Purpose of Study: Preoperative Chemoradiation (CRT) is increasingly being used in patients with locally advanced resectable non-cervical Carcinoma Oesophagus patients. It results in 25-30% pathological complete response (pCR) rate and improved survival. We report the response rates & acute toxicity of this protocol, and dosimetrically compare hybrid radiation plans [3-dimensional conformal radiotherapy (3D-CRT) plus Intensity Modulated Radiotherapy (IMRT)] with all-IMRT or VMAT plans in terms of volume of lung treated to low doses while delivering conformal doses. Materials and Methods: Thirty Six patients were included in the study. Treatment protocol included external beam radiotherapy (Hybrid Plan: Phase-1 3D-CRT: 36Gy in 20fractions followed by Phase-2 IMRT: 14.4Gy in 8fractions, 5 days/week) for 5weeks with concurrent weekly Inj. Carboplatin (AUC2) and Inj. Paclitaxel (50mg/m2), followed by surgery. The phase-2 plans were optimized to reduce lung, heart & spinal cord doses. The hybrid plans were dosimetrically compared with all-IMRT & all-VMAT plans to same doses. Dose–volume histograms were evaluated for the planning target volume, total lung and heart doses. Lung volumes V5(Volume of lung receiving 5Gy), V10, V13, V20, V30 and mean lung dose(MLD) were compared for each plan. Results: Out of 36 patients, 21 underwent surgery. 15 patients either refused surgery or were found inoperable. Ten patients achieved pCR(47.6%). The most common acute hematological toxicity was neutropenia in 18 patients and non-hematological toxicity was anorexia in 14 patients. None of our patients experienced postoperative complications or 30-day mortality. Hybrid plans treated significantly smaller lung volumes to low doses than IMRT & VMAT plans and significant reduction was for V5,V10 and V13 values & smaller reductions were also found for MLD. IMRT & VMAT Plans showed better PTV coverage and lower heart doses at the cost of higher low dose Lung volumes. Hybrid plans treated much larger extra planning target volumes to prescribed dose levels. Conclusion: Hybrid plans showed reduction in low dose lung volumes while maintaining conformity. High response rates were observed with this treatment protocol, but long term follow up is required to adequately assess clinical outcomes in terms of late toxicity & survival.

Abstract Id: YUGP4399
A Comparative Study Of Dosimetric Evaluation In Carcinoma Breast Between Volume Modulated Arc Therapy, Intensity Modulated Radiation Therapy And Conventional Radiotherapy.
Presenter- Dr. Parmeet Singh
Co-author - Parmeet Singh, Charu Garg, AK Anand

Aim: To dosimetrically compare and evaluate Volume Modulated Arc Therapy, Intensity Modulated Radiotherapy and Conventional Radiotherapy techniques in patients undergoing postoperative radiotherapy following modified radical mastectomy/Breast conservation surgery in breast cancer. Material & Methods: This study was conducted on 25 patients of carcinoma breast treated between January - October 2015. For each patient conventional, IMRT and VMAT plans were generated. Each Plan was evaluated and compared the coverage of D95%, Dmean, D2%and D5% of prescription dose, V95%, V107%, V110% and Vprescription were used as parameters to judge the hot spot and dose heterogeneity for CTV, PTV and nodal volumes; D95% and D5% were used for calculation of Homogeneity Index (HI). The dose to critical structure included the Ipsilateral lung (V10,V20, D25%,MLD), Contralateral Lung(V5,V10,MLD), Total lung(V20,MLD) Esophagus(V2%,Dmean), Heart(V20,V25,MHD),Opposite breast(Dmean), Spinal cord (Dmax), LAD(Dmean) ,DARS (d2%,Dmean). Results: Comparing the doses to the Breast CTV volumes, CTV D95% was comparable in IMRT and VMAT plans being 48.74±0.61Gy and 48.66±0.85Gy respectively and was less in conventional planning(45.96±1.27Gy). The coverage of IMRT and VMAT were better and statistically significant when compared with conventional plan. V95% which defined the volume(in %) receiving 95%(47.5Gy) of the dose was found to be 83.5±7.83% with conventional planning, 97.99±1.6% in IMRT and 97.7±1.6% in VMAT. IMRT was better than conventional. The result was statistically significant when IMRT or VMAT plans were compared with conventional plans but IMRT and VMAT plans were found to be comparable. D95% for CTV (chestwall+axilla) was found to be 45.67±1.9Gy in conventional plan, 48.5±0.57Gy in IMRT and 49.07±0.36Gy in VMAT plans. VMAT was better than IMRT and conventional plan and the results were significant. The IMRT plans when compared with conventional plans were also found to be significantly better. V95% was found to be 82.5±12%, 97.5±1.4% and 96.2±1.7% in conventional, IMRT and VMAT plans respectively. IMRT planning was better than Conventional plans and the results were statistically significant. However IMRT and VMAT plans were comparable. In conventional plans HI was 0.18 , IMRT was 0.15 and 0.12 in VMAT plans . The results were statistically significant with HI for VMAT better than IMRT and conventional plan. Thus proving that the VMAT plan has more homogeneous dose distribution than both IMRT and VMAT. Conformity index, CI in conventional plans was found to be 0.57 , for IMRT it was 0.76 and 0.8 for VMAT plans . The results were statistically significant with CI for VMAT better than IMRT and conventional plans. l l Lung V10Gy% was 52.35±7.7% in conventional plan, 77.9±3.3% with IMRT and 67.7±12.3% with VMAT. As expected the low dose volumes was significantly less with conventional plan as compared to IMRT and VMAT plans. The doses for VMAT were less than IMRT plan and the result was statistically significant,V20Gy% was 45.19±8.5% in conventional plan whereas it was much less 34.85±5.4% in IMRT and 29.6±3 % in VMAT. The results were statistically significant with VMAT plan proving better than IMRT and conventional plans. C/L Lung V10Gy% was also much less with conventional planning 0.2% and as compared to IMRT and VMAT plans the results were statistically significant. V10Gy was less in IMRT (4.2%) as compared to VMAT(7.5%) plan and the result was statistically significant (P value 0.005). C/L Lung mean dose was 1.57±0.7Gy in conventional plan and higher in IMRT 3.7±1.04Gy.

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and 4.77±0.76Gy in VMAT plans. The results were significant with conventional better than IMRT and VMAT. Total lung dose V20Gy was found to be more in conventional plan (23.28±4.98%) and was less in IMRT and VMAT which was 18.23±3.8% and 15.33±1.95% respectively (p=0.002). Total Lung MLD was 12.63±2.2% in conventional plan as compared to 11.88±1.5% in IMRT. It was less in VMAT 11.57±1.02% (p = 0.004 ). The VMAT and IMRT plans were found to be comparable. V25Gy% Heart was also least in VMAT planning 5.4% as compared to IMRT(6.9%) and conventional plans(12.58%). The result was statistically significant with VMAT better than IMRT and conventional, thus proving that VMAT is the better plan to reduce heart doses. MHD was 9.05±6.07Gy in conventional plan, 11.09±3.9Gy in IMRT and 10.4±4.2Gy in VMAT plans. It was statistically significant for conventional plan when compared to IMRT. VMAT and IMRT plans were comparable. DARS D2% was 41.83±13.6Gy in conventional planning whereas it was 40.09±12.9Gy with IMRT and 35.23±12.31Gy with VMAT. Both IMRT and VMAT were better than conventional plan and results were statistically significant( p<0.05 ). DARS Dmean was 5.7±2.6Gy in conventional plan. It was 9.4±5.1Gy in IMRT and 7.08±2.7Gy in VMAT. Results were statistically significant with conventional plan better than VMAT and IMRT. D2% for Esophagus was found to be 39.7±10.1Gy in VMAT whereas it was higher in IMRT 40.77±9.6Gy and 41.8±12.8Gy in conventional plan. The difference was not statistically significant. Esophagus mean dose was least for conventional plans(11.74Gy) than with IMRT(12.90Gy) and VMAT(14.38Gy).IMRT and conventional were comparable but VMAT was statistically better when compared to IMRT. The Dmax doses for spinal cord were minimum for IMRT(22.25±6.1Gy) as compared to VMAT(28.41±6.6Gy) and conventional plans(35.52±16.2Gy). The results were significantly better for IMRT as compared with the rest two. Opposite breast Dmean was least with conventional plan 2.1±1.5Gy. While it was 2.34±1.2Gy in IMRT plan and 4.16±0.93Gy in VMAT plan. Difference was statistically significant with conventional plans. Conclusion : VMAT technique is superior to the IMRT and conventional techniques due to its better chest wall/breast, axilla and SCF coverage with lesser Cold and hot spots. It significantly reduced heart, lung , spinal cord , LAD , DARS and esophagus doses as compared to IMRT and conventional techniques but at the cost of increased the volume of tissue receiving low doses. Long term follow up is needed to determine whether the improvements in dose homogeneity will translate into clinical improvements by way of disease control and reduction in toxicity. Also future consideration of hybrid techniques should be done to achieve better CTV/PTV coverage and also reduce low lung dose volumes.

Abstract Id: YUGP4407
Solitary Plasmacytomas- A Single Institutional Experience
Presenter - Dr. Nikhil Sebastian
Co-author - Arvind Murthy, Sunita Susan Varghese, Patricia S

BACKGROUND: Solitary plasmacytoma is a localized tumor comprised of a single clone of plasma cells in the absence of myeloma defining features (anemia, hypercalcemia, renal insufficiency, or multiple lytic bone lesions). AIM: A retrospective study was done to analyze the outcome of patients with plasmacytoma treated in our Institute from Jan 2008 to Dec 2016. METHODS: Review of the medical records of patients with solitary plasmacytoma treated in our center from January 2008 to December 2016 was done using Electronic Medical Records and RT charts. Descriptive analysis was done on parameters such as age, gender and dose of radiotherapy. Progression to myeloma, overall survival and progression free survival were analyzed by Kaplan- Meier method using SPSS version 20.0.0.0. RESULTS: The number of patients analyzed was 48. The mean age at diagnosis was 45 yrs (20 to 75) and male to female ratio was 6:1; 27 % were extramedullary plasmacytomas. Extramedullary sites included nasal cavity (12.5%), cervical nodes (6.25%), duodenum (4.1%) and oropharynx (2%). The most common extramedullary site was nasal cavity whereas the most common medullary site was thoracic vertebrae. The mean dose of RT was 46.92 Gy (39.6 to 63.6 Gy). The median follow up was 5.5 years ranging from 1 to 98 months. The median overall survival has not yet been reached and 44 of them were alive at last follow up. The mean progression free survival was 3.77 years. Progression to myeloma occurred in 12.5 % and the mean time to conversion was 2.15 years. None of the extramedullary plasmacytomas had shown progression to myeloma. CONCLUSION: Radiotherapy is radical treatment for plasmacytoma. Radiotherapy offers local control and prevents from progression to myeloma. The outcome of plasmacytoma treated with radiotherapy was in concordance with hitherto published literature. KEYWORDS: Solitary plasmacytoma, radiotherapy, myeloma

Abstract Id: YUGP4408

A Unique Single Docking Ultralow Anterior Resection Technique With Single Stapled Transanal Specimen Retrieval – An Innovation In Robotic Rectal Surgery.
Presenter - Dr. Sushil Kumar
Co-author - Dr Somashekhkar SP, Dr Rohit Kumar,

INTRODUCTION: Rectal cancer is one of the common cancers in India. Surgical resection is the mainstay of treatment for majority of patients. It involves more than three quadrants which is technical challenge in robotic surgery. Most difficult part of this surgery is splenic flexure mobilization, usually requires different extra port setup and dual docking. We modified port placement which requires only single docking and port hopping without any change in cart or operating table position. MATERIAL AND METHODS: Patient position: Supine position with modified lithotomy, legs abducted and slightly bent at knee and tilt towards right keeping sand bag below left pelvis. Complete head down, reverse trendelenberg with right tilt allows small bowel to be displaced away from colon and rectum. Port position: Robotic camera port, 12 mm: 3-4 cm right and above umbilicus. Robotic instrument arm port, 8 mm (R1): minimum of 8 cm from the camera port, on the right spinoumbilical line at the crossing of the mid-clavicular line. Robotic instrument arm port, 8 mm (R2): minimum of 8 cm from the camera port, on the left spinoumbilical line at the crossing of the mid-clavicular line. Robotic instrument arm port, 8mm (R3): suprapubic just lateral to obliterated umbilical ligament under vision. Robotic instrument arm port, 8mm (R31): about palm breadth superior-lateral to anterior superior iliac spine. Surgical steps: Identification and ligation of inferior mesenteric artery. Identification and ligation of inferior mesenteric vein. Medial to lateral dissection. Splenic flexure mobilization. After port hopping pelvic dissection. RESULTS: Splenic flexure and descending colon mobilization; and pelvic dissection with single docking without any change in position of patient Cart or operating table. Anastomosis with use of single circular stapler. No use of extra assistant port or stapler. CONCLUSIONS: Robotic rectal surgery is emerging technique in India. As surgeon and robotic team gain experiences surgery become easy with small modifications in setup . Magnified and 3-D view with endovorist movements of robotic arms help to achieve better oncological outcome by complete total mesorectal excision (TME).
Cisplatin – Report On Survival Analysis And Toxicity Profile
Presenter - Dr. Parveen Ahlawat
Co-author - Munish Gairola, Archana Mayank, Kanika Sharma

Background: Definitive concurrent chemoradiation (CCRT) is the standard of care for unresectable/operable locally advanced head and neck cancer (LAHNC). Cisplatin is the most studied and used concurrent agent in this setting. However, adverse effects caused by cisplatin are of concern, especially when cisplatin is given in high doses. Cetuximab, a monoclonal antibody against epidermal growth factor receptor (EGFR), is one such agent that has been in this research recently. Materials and methods This is a retrospective analysis of 32 consecutive patients with LAHNC who were older or had significant comorbidities (borderline/established renal dysfunction, uncontrolled cardiac comorbidities, diabetes, hypertension or significant liver dysfunction) who were treated with definitive intensity modulated radiotherapy (IMRT) and concurrent weekly standard dose schedule of cetuximab. Results and discussion: The mean follow up was 30.3 months. 59.3 % patients were found to have residual disease at 3 months post CCRT response evaluation. The median and 3 years DFS were 12.45 months and 15.4%. The median and 3 years OS were 34.11 months and 44.5%. Acute toxicities such as mucositis, dysphagia, dermatitis and acneiform rash of grade 3 were seen in 58.3%, 32.7%, 7.2% and 5.2% respectively. 80% patients completed planned number of cycles of cetuximab. There were 4.7 days of unplanned interruptions in radiotherapy. 17% patients were found to be feeding tube dependent for more than 6 months.

Abstract Id: YUGP4411
Cfam : A Novel Flap Applications In Oral Cancer.
Presenter - Dr. Vikas Gupta
Co-author - Dr Chandrashekhar rao, Dr Hemant, Dr Ahmed

Background: Reconstruction is an integral part of the surgical management of oral cavity cancer. Local flaps are one of the options in reconstruction of small to moderate sized defects of oral cavity. Methods: We used perforator based local tissue from the face and neck which is supplied by facial vessels and is named as Cervicofacial- Facial Artery Myocutaneous flap (C-FAM flap) for reconstruction of oral cavity. Results: 36 patients underwent C-FAM flap reconstruction in different subsites of oral cavity without loss of a single flap and acceptable functional rehabilitation. Out of 36 patients , 28 patients were carcinoma tongue, 1 floor of mouth, 2 were lower alveolus, and 2 patients were carcinoma retromolar trigone , 3 patients with carcinoma of buccal mucosa. Conclusion: C-FAM flap is robust in its vascularity, reliable, and pliable which has to be one of the armamentarium for the oral cavity reconstruction.

Abstract Id: YUGP4415
Adjuvant Hypofraction Radiotherapy In Breast Cancer –Early Experience In A Tertiary Cancer Institute.
Presenter - Dr. MD AFTAB ANSARI
Co-author - MD AFTAB ALAM ANSARI, T M SINGH,

BACKGROUND: Adjuvant radiotherapy (LRRRT) is an important part of breast cancer management. Almost all Breast conservation patient and large number of post mastectomy patients require adjuvant radiotherapy.Conventional fraction radiotherapy over 5 weeks with or without tumor bed boost remain standard of care. Recently published START trial has shown new standard of care in adjuvant radiotherapy in Breast Cancer. PATIENTS AND METHODS: Patients who received hypofractionated RT to the breast or chest wall with or without regional nodal irradiation were reviewed.Period of study was between August 2014 and July 2016. 35 patients were treated of which 32 were available for analysis.Radiation dose given was 40 Gy@2.67 Gy/fraction, 15 fractions over three weeks on a Linac with 3DCRT or FF-FIF IMRT. RESULTS: Adjuvant radiotherapy 40 Gy in 15 fractions administered within 3 weeks is safe and effective for most breast cancer patients who need adjuvant radiotherapy.

Abstract Id: YUGP4423
A Case Of Eosinophilic Granuloma
Presenter - Dr. ADVAIT MK
Co-author - Dr SHYAMJI RAWAT, DR TAPESH POWNIKAR,

A 29 year old male patient presented with complaints of severe headache and swelling in posterior part of left temporal region since one month. He was investigated with CT Brain which showed a well defined lytic lesion in calvaria involving left temporal bone predominantly seen involving inner table suspicious of eosinophilic granuloma. Surgery – (excision of the lesion ) was done . Intraoperatively the lesion was found to be a lytic lesion involving calvaria with invasion of dura and destroying cortical soft bone and was soft and suckable. Tissue was send for histopathological examination and the findings were consistent with eosinophilic granuloma. The patient was then given postoperative radiotherapy total of 18 Gy in 10 cycles. EG is characterised by single or multiple skeletal lesions, and predominantly affects children, adolescents, and young adults. Solitary lesions are more common than multiple lesions. When multiple lesions occur, the new osseous lesions appear within one or two years. Any bone can be involved, the more common sites include the skull, mandible, spine, ribs, and the long bones.[2–3] The solitary bone lesion may be asymptomatic, or it may cause bone pain because of the expansion of the medullary bone; pathological fractures may ensue.[4] The distinctive morphological lesions of the entire group of Langerhans histiocytosis disorders consist of expanding erosive accumulations of histiocyes, usually within the medullary cavity. Symptoms include localised pain, tenderness, swelling, fever, and leukocytosis. Lesions usually begin to regress after approximately three months, but they may take as long as two years to resolve. Eosinophilic granuloma (EG) has got a good prognosis and may spontaneously regress; it is extremely radiosensitive.[5] Eosinophilic granulomas are considered a benign histiocytosis that occurs mainly in adolescents and young adults. Clinically, unifocal lytic lesions are found in bones such as the skull, ribs and femur. Because of this, bone pain and pathologic fractures are common.[1] Eosinophilic granuloma (EG) is the benign form of three clinical variants of langerhans cell histiocytosis (LCH). The other two variants are Letterer-Siwe disease and Hand-Schüller-Christian disease.[2] The clinical and radiographic findings are often not specific enough to determine the diagnosis. Cytology is very helpful in arriving at the diagnosis of eosinophilic granuloma of the bone.[6] Morphologically the key feature is the identification of Langerhans cells with characteristic grooved, folded, indented nuclei in the appropriate milieu that includes variable numbers of eosinophils and histiocytes including multinucleated forms, often appearing similar to osteoclasts or tauton like giant cells, neutrophils and small lymphocytes.[6,8] The concentration of the eosinophilic infiltrate varies from scattered mature cells to sheet-like masses of cells. Occasionally, areas of bone necrosis may interrupt the cellular infiltrate. The foamy cells may also be amass ed in clumps, which are of no clinical significance because these clumps represent phagocytosis of lipid debris. Any bone can be involved. The skull, long bones of the upper extremities and the flat bones are affected in descending order of frequency.[6] Solitary lesions are more common than multiple ones. When the lesions are multiple, new osseous lesions occur within one or two years but the condition is still classified as EG. Radiologists need to be aware that additional EG of the bone occurring as long as four years after initial diagnosis, should be interpreted as a localised form of Langerhans cell histiocytosis. This differentiation is important because the prognosis is more favourable with focal disease with multifocal disseminated disease, which involves organs other than the skeletal system. Similar lesions may occur within the lungs, skin, and stomach, either as a unifocal lesion or as part of multifocal
Abstract Id: YUGP4425

Report Of Acute Toxicity In Patients Of Muscle Invasive Carcinoma Of Urinary Bladder Treated With Volumetric Modulated Arc-Based Therapy (Vmat)

Presenter- *Dr. Ramakant Tiwari*
Co-author - Madhup Rastogi, Ajeeet K Gandhi, D Dalela

Introduction: Concurrent chemo-radiotherapy (CTRT) as a component of trimodality therapy (TMT) is a reasonable treatment option in muscle invasive bladder cancer (MIBC). The role of advanced radiation techniques in this setting is still not well established. Intensity modulated radiotherapy (IMRT) allows improved tumor coverage and better normal tissue sparing, thus potentially minimizing gastrointestinal (G.I), genitourinary (G.U) and bone marrow toxicities. Volumetric modulated Arc therapy (VMAT) is a form of IMRT that employs dose delivery using continuous arcs, reducing treatment delivery time. Aims and Objectives: To assess the feasibility and acute toxicity in patients of MIBC treated with VMAT technique. Materials and method: This study was a prospective, interventional, single arm study. 20 patients having histologically proven MIBC (T2 -T4a, N0-2, M0), after transurethral resection of bladder tumor were recruited from dec-2015 to march-2017. Contrast enhanced computed tomography simulation was done with empty bladder. Total dose of 60-66Gy at 1.8-2Gy/ fraction as 5 fractions/ week to the primary tumor and 45-54Gy at 1.6-2Gy/fraction to nodal disease was delivered using VMAT technique along with concurrent Cisplatin (35-40 mg/m2) weekly. Acute toxicities were assessed as per RTOG criteria and hematological toxicities were assessed using CTCAE (version 3.0) Results: Nineteen patients were male and one female with median age of presentation being 62 years. 12 (60%) patients had stage II disease, 4 (20%) patients each had stage III and stage IV disease with a median Karnofsky performance status of 90. Median RT duration was 46±2 days with treatment interruption in only 1 patient due to grade 3 haematological toxicity. 1 patient had grade 3 while 4 (20%) patients had grade 2 anemia. 8 (40%) patients experienced grade 2 leukopenia. Acute grade 2 GI and GU toxicities were noted in 7 (35%) and 2(10%) respectively. 2 (10%) patients suffered from grade 1 skin reactions. No patient had grade 3 or 4 acute GI or GU toxicity. Conclusions: VMAT has acceptable early acute toxicity profile in patient of MIBC treated with CTRT. Follow up of patients in our study would further define its role.

Abstract Id: YUGP4427

Cytoreductive Surgery In Good Prognostic Ovarian Cancer, Worth The Effort??

Corresponding author: Dr Shylasree TS MD, DNB,FRCoG, Tata Memorial Hospital, Mumbai Low grade serous ovarian neoplasms are characterized by young age of presentation, relative chemoresistance and longer survival than their high grade serous ovarian counterparts. Similarly sex cord stromal ovarian neoplasms are characterized by intermediate malignant potential and tendency of late recurrences. Cytoreductive surgery (CRS) is the main stay of treatment for this group. We report CRS with perioperative outcomes and economic feasibility in Indian setting, at TMH, Mumbai. Eight patients with extensive abdominal disease underwent CRS over a period of 12 months (July 2016-June 2017). The median age was 40 years. Six patients had low to intermediate grade serous ovarian cancer and two patients had sex cord tumor. All serous tumors tested positive for ER, weak positivity for p53 with low MIB index. Six out of 8 patients had received chemotherapy with no response prior to referral. Mean weighed PCI was 13 (9-25). All patients had complete cytoreduction with CC-0/1. The median operating time was 9.5 hrs. 7 patients underwent total peritonectomy. 7 patients needed multiple GI resections. Median blood loss was 2.7 L. Median postoperative ventilation required was 1 day, Median ICU stay was 2 days and hospital stay was 16 days. No major intraoperative complications were observed. Seven patients had minor (1-2) postoperative complication, one patient had grade 3, one patient had grade 4 complication (SIRS, prolonged intubation, tracheostomy) There was no postoperative mortality. Median follow up period was 3 months (0-8). The average cost was approximately one lakh for general category and 9 lakhs for private category CRS has acceptable morbidity and is the only option in muscle invasive bladder cancer (MIBC). The role of advanced radiation techniques in this setting is still not well established. Intensity modulated radiotherapy (IMRT) allows improved tumor coverage and better normal tissue sparing, thus potentially minimizing gastrointestinal (G.I), genitourinary (G.U) and bone marrow toxicities. Volumetric modulated Arc therapy (VMAT) is a form of IMRT that employs dose delivery using continuous arcs, reducing treatment delivery time.
Abstract Id: YUGP4431

Outcome Of Postoperative Radiotherapy With Concurrent And Adjuvant Temozolomide In Anaplastic Gliomas – A Retrospective Study

Presenter- Dr. SHINEY MATHEW
Co-author - Dr. Arvind Murthy, Dr. Sunitha Susan Varghese, Dr. Patricia Sebastian

Background: Anaplastic gliomas (AG) are a heterogenous group of malignant brain tumours. There is recent evidence to support the use of adjuvant Temozolomide in AG. This study is a retrospective analysis of survival outcome in AG when treated with maximum safe resection followed by radiotherapy (RT) with concurrent and adjuvant Temozolomide. AIM: To evaluate the overall survival and progression free survival of patients with AG treated with RT and Temozolomide.

METHODS: We retrospectively reviewed the hospital records of patients with AG who received post-operative radiotherapy with concurrent and adjuvant Temozolomide in our centre from January 2008 to June 2015. We collected the data on patient factors, tumour factors, history and treatment related factors. All patients/family members were contacted to find out their current status. The overall survival and disease free survival were calculated using Kaplan Meier estimate. RESULTS: From January 2008 to June 2015, 129 patients with anaplastic glioma were treated in our centre with post-operative radiotherapy, concurrent and adjuvant Temozolomide. The median age was 35 years (23 to 66) and 75% were males. The most common histology was Anaplastic Oligodendroglioma (53% of ODG). Follow up ranged from 8 to 108 months with a median of 48 months. The median overall survival(OS) was 47 months and median progression free survival (PFS) was 43 months. 60% of patients were alive at four years. MGMT promoter methylation status and 1p19q co deletion status were available for 45 and 34 patients respectively. CONCLUSION: Concurrent and adjuvant Temozolomide improves overall survival(OS) 47 months and PFS(43 months) in anaplastic gliomas which was similar to that in our study.

Response Evaluation Criteria In Solid Tumors (RECIST) criteria after completion of first line chemotherapy at 4 weeks. Toxicity was graded according to Common Terminology Criteria for Adverse Events version 4.0 (CTCAE) criteria grading. The study was accepted by the Institutional Ethics Committee. Statistical Analysis was done using SPSS 20 statistical software applying chi-square test for categorical variables and student t test for continuous variable. Results: Among 82 patients enrolled, 52 were given pem/carb while 30 were given pac/carb. Majority of patients were males, 82% and 85% respectively in pem/carb and pac/carb group (p value 1). The mean age of patients was 61 yrs vs 60 yrs in pem/carb and pac/carb group (p value 0.49). ECOG status did not differ between the two groups. In pem/carb group 72% had stage 3B disease and 28% had stage 4 while in pac/carb group 85% had stage 3B and 15% had stage 4. In pem/carb group 75% were smokers compared to 80% in pac/carb group. Primary outcome analyses could be done for 62 patients (32 patients in pem/carb group and 30 patients in pac/carb group). In pem/carb group, none had complete response, 22% had partial response, 63% had stable disease and 16% had progressive disease while in pac/carb group, none had complete response, 27% had partial response, 53% had stable disease and 20% had progressive disease (p value 0.98). Toxicity profile analysis found that for pem/carb vs pac/carb group, anemia was reported in 31% vs 30%, thrombocytopenia in 25% vs 33%, neutropenia in 28% vs 33% and sensory neuropathy in 28% vs 27%. Conclusion: Tumor response and toxicity profile did not significantly differed between pem/carb vs pac/carb regimen.

Abstract Id: YUGP4435

Analysis Of Human Papilloma Virus In Oral Squamous Cell Carcinoma Using P16

Presenter - Dr. Naveen Sanchety
Co-author - Dr. Ashutosh Chauhan, Dr Anmol Chandele

Aims: The aim of this study is to evaluate the expression of human papilloma virus (HPV) in oral squamous cell carcinoma (OSCC) and to correlate the association of HPV in histological grades of OSCC using p16 (p16INK4a) immunohistochemistry (IHC). Subjects and Methods: This study consists of 103 histological diagnosed cases of OSCC (45-well differentiated oral squamous cell carcinoma [WOSSCC], 33-moderately differentiated oral squamous cell carcinoma [MDOSCC] and 25-poorly differentiated oral squamous cell carcinoma [PDOSSCC]). The sections were subjected to IHC procedure using p16. Two parameters in immunohistochemical p16 expression were evaluated by 3 observers based on the criteria by Galgano M. Tetal (a) percentage of p16 positive cases (b) pattern of p16 staining in various grades of OSCC. Statistical Analysis Used: Kappa test. Results: Totally, 103 samples of OSCC, p16 positivity was noted in 71/103 (68%). Of 71 positive cases, p16 staining was positive in 22/45 (49%) of WDOSCC, 26/33 (78%) in MDOSCC and, 23/25 (92%) PDOSSCC. Incidentally, we also found single dispersed cell staining in WDOSCC, patchy staining in MDOSCC and more diffuse staining pattern predominant in PDOSSC. Conclusions: Our study revealed an association between HPV and OSCC. Diffuse staining pattern was noted in PDOSSC, which in turn depicts the increase viral load, which might have an influence on its aggressive behavior.
Abstract: To dosimetrically compare Volume Modulated Arc Therapy, Intensity Modulated Radiotherapy and Conventional Radiotherapy techniques in terms of target coverage for patients undergoing postoperative radiotherapy following modified radical mastectomy/ Breast conservation surgery in breast cancer. Material & Methods: This study was conducted on 25 patients of carcinoma breast treated between January - October 2015. For each patient conventional, IMRT and VMAT plans were generated. Each Plan was evaluated and compared the coverage of D95%, Dmean, D2% and D5% of prescription dose, V95%, V107%, V110% and Vprescription were used as parameters to judge the hot spot and dose homogeneity for CTV, PTV and nodal volumes. D95% and D5% were used for calculation of Homogeneity Index (HI). Results: Comparing the doses to the Breast CTV volumes, CTV D95% was comparable in IMRT and VMAT plans being 48.74±0.61Gy and 48.66±0.85Gy respectively and was less in conventional planning(45.96±1.27Gy). The coverage of IMRT and VMAT were better and statistically significant when compared with conventional plan. V95% which defined the volume(in %) receiving 95%(47.5Gy) of the dose was found to be 83.57±17.63% with conventional planning, 97.99±1.6% in IMRT and 97.71±1.83% in VMAT. IMRT was better than VMAT and conventional planning. The result was statistically significant when IMRT or VMAT plans were compared with conventional plans but IMRT and VMAT plans were found to be comparable. D95% for CTV (chestwall+axilla) was found to be 45.67±1.9Gy in conventional plan, 48.5±0.57Gy in IMRT and 49.07±0.36Gy in VMAT plans. VMAT was better than IMRT and conventional plan and the results were significant. The IMRT plans when compared with conventional plans were also found to be statistically better. V95% was found to be 82.5±12%, 97.5±1.4% and 96.2±10.7% in conventional, IMRT and VMAT plans respectively. IMRT planning was better than Conventional plans and the results were statistically significant. However IMRT and VMAT plans were comparable. In conventional plans HI was 0.18 , IMRT was 0.15 and 0.12 in VMAT plans . The results were statistically significant with HI for VMAT better than IMRT and conventional plan. Thus proving that the VMAT plan has more homogeneous dose distribution than both IMRT and VMAT. Conformity index CI in conventional plans was found to be 0.57 , for IMRT it was 0.76 and 0.8 for VMAT plans . The results were statistically significant with CI for VMAT better than IMRT and conventional plans. Conclusion : VMAT technique is superior to the IMRT and conventional techniques due to its better chest wall/ breast, axilla and SCF coverage with lesser Cold and hot spots

Abstract Id: YUGP4443
Laparoscopy Assisted Low Anterior Resection (Video)
Presenter - "Dr. Indra Singh Chaudhary"
Co-author - Jeewan Ram, Sanjeev Misra, Ajay Yadav
Video presentation of the steps and technique of the laparoscopy assisted low anterior resection in a patient of the middle 1/3rd rectal cancer.

Abstract Id: YUGP4447
Quality Of Life Impairment In Patients With Head And Neck Cancer And Their Caregivers: A Comparative Study
Presenter - "Dr. Naveen Sanchety"
Co-author - Dr Ashutosh Chauhan, Ms Anuradha Dhasmana
Introduction: Head and neck cancer represents 3% of all the types of malignant neoplasms and squamous cell carcinoma (SCC) is responsible for 90% of these cases. There have been some studies evaluating the quality of life of these patients, but little is known about the physical and emotional effects on their caregivers. Objective: To evaluate the quality of life of patients with head and neck cancer and their caregivers by applying validated questionnaires. Methods: Seventy patients with advanced tumors (SCC stage III or IV) and their 70 caregivers were included. Specific questionnaires (Coop/Winca, EORTC QLQ-C30, EORTC H&N35, Coop/Winca, and Caregiver Strain Index - CSI) were applied during routine medical consultations. Results: Of the 70 patients, 58 were males and 52 had stage IV tumors, with mean age of 56.6 years.45.2% had primary in oral cavity; 36.7% in the oropharynx rest in hypo and laryngopharynx. The functional cognitive, physical, and emotional scales were the most affected. Pain, fatigue, and sleep disorders were the most prevalent symptoms. Of the 70 caregivers, 50 were females and 82% were the primary caregivers. 66.7% of the caregivers had high levels of stress, mainly related to the feeling of incapacity. The comparison between patients and caregivers demonstrated that the two groups had similar quality of life impairment: physical fitness (p = 0.487), mental health (p = 0.615), daily activities (p = 0.793), social activities (p = 0.301), changes in health (p = 0.849), and overall health (p = 0.168). Conclusion: Quality of life impairment is similar between patients and their caregivers. This result demonstrates that not only the patients show quality of life impairment, but their caregivers also have it and at similar proportions.

Abstract Id: YUGP4443
Diminishing Role Of Surgery In Small Liver Lesions: Are Ablation Techniques Equivalent To Surgery?
Presenter - "Dr. Prashanth Chowdary"
Co-author - Jagadeesh Krishnamurthy, Shivakumar Swamy, Sudhakar Sampangi
Introduction: Surgery forms the mainstay of treatment for most primary liver tumours and metastatic lesions when resectable. With advancement in surgical and anaesthetic techniques, the morbidity associated with hepatectomies have been lowered. Local or thermal techniques have come into vogue and have been shown to have acceptable outcomes. The authors of this study have analyzed the patients who have undergone ablation of liver lesions and assessed their outcomes. Aim: To evaluate the efficacy of less invasive techniques namely Radiofrequency ablation and Microwave ablation in treating primary and secondary liver tumours. Materials and methods: This study was done in HCG Hospital, Bangalore between December 2015 and July 2017. Patients with primary hepatic tumours and metastatic liver lesions measuring less than 5cm in diameter who underwent Radiofrequency ablation (RFA) or Microwave ablation (MWA) were evaluated and findings noted. Only one patient with tumour >5cm was included in view of recurrence after surgery and preclusion of re-surgery due to lack of consent for the same. Results: A total of 20 patients underwent RFA or MWA of liver lesions during the study period. Of the 20 patients, 17 were male and 3 were female. The patients were between the ages of 36 and 78 years of age with the mean age being 60.5 years. The indication for ablation was Hepatocellular carcinoma in 13 patients, Colorectal metastases in 2 patients and other causes such as metastases from Gastric GIST, Neuroendocrine tumours, Adenocarcinoma of pancreas, stomach or GE Junction. Most lesions were under 5cm in diameter and 100% ablation was achieved in all but one patient. All patients had pain as their only complaint post procedure. There has been no incidence of any major complication. None of the patients who have undergone complete ablation have had evidence of local recurrence on follow-up. Conclusion: Management of liver lesions by ablation techniques, wherever applicable, is the way forward as it is associated with lesser morbidity and shorter hospital stay and has better acceptance among patients when compared to surgical resection. Keywords: ablation techniques; hepatocellular carcinoma; liver neoplasms

Abstract Id: YUGP4445
Reversal Of Renal Failure In Multiple Myeloma: Retrospective Analysis
Presenter - "Dr. Jagdeep Singh"
Co-author - Naresh Jadhav, Mrinali P, Biswajit Dubashi

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Introduction: Multiple Myeloma is a monoclonal disorder associated with involvement of renal system in approximately 20-40% of newly diagnosed cases. The incidence and mode of presentation is slightly variable in India as compared to the Western World presenting with more advanced renal involvement and anemia. Renal dysfunction usually improves after treatment. In this study the patients of multiple myeloma presented with renal failure at diagnosis and its reversal with treatment was retrospectively analyzed. Material & Methods: Patients of multiple myeloma registered in the Department of Medical Oncology RCC JIPMER Puducherry from November 2013 till September 2016 were retrospectively analyzed. A total of 62 patients were registered, among whom 16 (25.8%) patients presented with renal dysfunction at diagnosis with serum creatinine >2mg/dl. Investigations were collected from the Hospital Information Systems. Results: Out of 62 patients registered, 16 had renal dysfunction. The median age of presentation of patients with renal involvement was 63 years, with male to female ratio was 2.2:1. Out of 16 patients, 7 had co-morbidities; hypertension in 3, diabetes mellitus in 3 and one had both diabetes with hypertension. ISS stage distribution was as follows: Stage III in 10, stage II in 5 and stage I in one patient. The haemoglobin range was from 3.9-10.5 g/dl with a mean of 7.0±1.73 g/dl, blood urea level was 20-160mg/dl with a mean of 75.6±11.78 mg/dl, serum creatinine level 2-7mg/dl with mean of 3.2±0.95 mg/dl and serum calcium level 7.5-14±2±0.6 mg/dl. 8 patients had complete reversal of renal dysfunction, 1 had partial recovery, 4 had persistent renal dysfunction and no data was available for 3 patients. 12 patients received bortezomib based treatment out of which 5 had complete and 1 partial reversal while 4 received non-bortezomib (lenalidomide) based chemotherapy out of which 3 had complete reversal of kidney function. Average number of cycles for reversal of renal dysfunction was 3.6. Grade 2/3 toxicities of neuropathy, diarrhea and neutropenia were observed during chemotherapy. Of all the patients with renal involvement no patient received any form of renal replacement therapy. Conclusion: Renal failure is a common presentation in patients with multiple myeloma, which reverse with both bortezomib and non-bortezomib based therapies. Adequate treatment with chemotherapy can cause significant reversal of renal dysfunction in patients with multiple myeloma.

Abstract Id: YUGP4455
Oncological Outcomes Following Percutaneous Nephrostomy (PCn) in Advanced Cervical Cancer
Presenter - Dr. Devyani Mahajan
Co-author - Devyani Mahajan, Shylasree TS, Nitin Shetty

Oncological Outcomes following Percutaneous nephrostomy (PCn) in advanced cervical cancer: Devyani Mahajan, Shylasree TS, Nitin Shetty, Suyesh Kulkarni, R Kerkar, Amita Maheshwari, Umesh Mahantshetty, Supriya Chopra, Jaya Ghosh, Jyothi Bajpai, Seema Gulia, Sudeep Gupta. Corresponding author: Shylasree TS MD,DNB, FRCOG MATERIALS AND METHODS: Fifteen patients with advanced cervical cancer underwent PCn followed by ureteral catheterization in the year 2016 at Tata Memorial Hospital and their notes were retrospectively reviewed. All of them were stage III B and above with impaired renal function. RESULTS: Out of 15 patients 9 had stage III B, 4 stage IV A and 2 in stage IV B disease. All the patients required PCn followed by ureteral catheterization for obstructive uropathy due to advanced disease. Four patients out of 15 were fit for treatment with curative intent, the remaining 11 patients were treated with palliative intent only, in the form of chemotherapy/palliative RT. Four Patients who were fit for radical treatment had stage IIIB disease and the mean age was 47 years. Three could complete radical treatment (two had CTRT, one had Radical RT). One patient progressed during the treatment. The average time taken from planning of treatment till execution of the treatment was 31.3 days (14 days – 60 days), and the average time taken to complete the treatment was 89 days (62 – 116 days). The delay in commencement and prolongation of the treatment was mainly due to the PCn and DJ stenting done to relieve obstructive uropathy. The mean creatinine value before PCn was 3.56 (6.9 – 1.4). Out of 3 who completed radical treatment, 2 had persistent residual disease at the end of the treatment and were prescribed palliative treatment. One patient who completed radical treatment recurred after DFI of 11 months with distant metastases and retroperitoneal nodes. The remaining 11 patients were fit only for Palliative or symptomatic care following PCn with a mean age of 63.3 yrs. Five patients were III B disease, 4 were in stage IV A and 2 in stage IV B at the time of diagnosis. The average time taken from the treatment plan till execution of palliative treatment was 48 days (20 – 140 days), and it took average 114 days to complete the treatment with the range (29 – 311 days). 3 of these 11 patients expired within a mean on 6.3 months and rest 8 patients were lost to follow up. CONCLUSIONS: Relieving obstructive uropathy in advanced cervical even though technically feasible does not translate to improved oncological outcomes and still carries dismal prognosis in majority of patients. Advanced age or advanced disease appear to be poor prognostic factors. Best supportive care with focus on quality of life should be offered to such patients. Unnecessary interventions are neither clinical nor cost effective in patients with advanced cervical cancer with obstructive uropathy.

Abstract Id: YUGP4459
Role Of Post Mastectomy Radiation In Early Stage Breast Cancer Patients With 1-3 Positive Axillary Lymph Nodes.
Presenter- Dr. Balasubramanian Venkitaraman
Co-author - Prof Sridive V, Dr Swaminathan,

Objective: To evaluate the role of post mastectomy radiation on overall survival (OS) in early stage breast cancer patients with 1–3 involved axillary lymph nodes and the effect of various other patient and tumour related factors on survival. Methods and materials: Retrospective analysis of data of early breast cancer patients (T1N0, T2N0, T1N1, T2N1, T3 N0), treated at our tertiary cancer centre, between 2008 and 2012 was done. Analysis of patient, tumour characteristics and outcomes of treatment were done. Statistical analysis done using SPSS software. Results: A total of 182 patients were analysed from a total number of 776 patients with early stage breast cancer. Mean age 51.95 years. Mean number of nodes removed was 14.96 and mean number of positive nodes was 1.6. One node was positive in 56.6%, two nodes positive in 25.8% and three nodes positive in 17.6% patients. 39.5% patients had perinodal spread and 35.2% had lymphovascular space invasion. Most of the patients had grade 3 tumour (70.9%), hormone receptor were positive in 74.2%. Chemotherapy was delivered to 99.5%. Post mastectomy radiation was given to 42.3%. Statistically significant correlation was observed between PMRT and perinodal spread, number of nodes positive, LVSI and grade of tumour. 9 patients had locoregional recurrences. Distant metastasis was found in 25 patients 5 yr overall survival(OS) was 85% and 8 yr OS was 81%. 8 yr OS for patients receiving PMRT was 79% vs not receiving PMRT was 89% (p -0.071). On univariate analysis presence of perinodal spread, hormone receptor positivity and use of endocrine therapy were found to significantly affect the overall survival, however on multivariate analysis, presence of perinodal spread alone had significant effect (p0.021). Conclusion: In early stage breast cancer patients, having 1-3 metastatic axillary nodes, undergoing modified radical mastectomy, postmastectomy radiation did not have any differences in terms of Overall Survival. On multivariate analysis, presence of perinodal spread was the only factor influencing the overall survival. Longer follow up and larger sample size may be required to see if there is any benefit of PMRT in such patients.

Abstract Id: YUGP4461
A Prospective Comparative Study Of Health Related Quality Of Life And Fatigue Component In Hypofractionated And Conventional Fractionated Radiotherapy In Adjuvant Setting Of
Abstracts

Breast Carcinoma
Presenter: *Dr. ARNAB ROY
Co-author - PROF (DR) ALOKE GHOSH DASTIDAR, DR ARNIBAN ROY,
**Abstract Id: YUGP4475**

**Neo-Adjuvant Hydroxy Progesterone (Proluton) And Vitamin D3 (Arachitol) In Large Operable And Locally Advanced Breast Cancer – A Randomized Controlled Trial (Rct)**

**Presenter- Prof. Vani Parmar**
**Co-author - Vani Parmar, Rohini Hawaldar, Vaibhav Vanamali**

Background: A previous concluded RCT in operable breast cancer of single dose primary depot progesterone (hydroxy-progesterone caproate or Proluton in a dose of 500mg deep IM) had shown a significant disease free and overall survival benefit in high risk node positive operable breast cancer. There is evidence of Vitamin D3 active metabolite 1,25-dihydroxycholecalciferol (Arachitol in dose of 600,000 IU IM) being cytotoxic, anti-proliferative and apoptotic and that it potentiates anthracycline effect. We initiated a randomized trial to see the benefit of neo-adjuvant Proluton and Arachitol (in addition to neoadjuvant chemotherapy NACT) in a 2X2 factorial design in large operable and locally advanced breast cancer (NCT01608451). Safety and efficacy within the phase II study was reported in 2013 at the SABCS. We now report a follow up in 268 patients accrued to the study(NCT01608451). Patients and Methods: Two hundred and eighty eight patients were randomized prospectively in a 2X2 factorial design from 2010 to 2015. Patients were randomized to any one of the 4 arms: Arm A- control, Arm B- Arachitol, Arm C- Proluton and Arm D- both Arachitol and Proluton. The intervention was before each 3 weekly chemotherapy cycle for 4 cycles and last before surgery. Comparisons for analysis were carried out as received ‘Proluton versus not’ and received ‘Arachitol versus not’. Results: At a median follow up of 38 months, a total 77 events and 55 deaths have been observed. At 5-years, all patients put together, DFS was 72.7% and OS 79.8%. There was an absolute benefit of 1.8% (71.8% vs 73.6%, p=NS) in 5-year DFS with Proluton and 1.1% (72.2% vs 73.3%, p=NS) absolute benefit with Arachitol, not reaching any statistical significance. Interestingly, in non-responders, where the response in nodes to NACT is poorer, the magnitude of benefit of neoadjuvant Proluton and Arachitol appears to be larger, 5% benefit in DFS with Proluton (69.0% vs 64.6%) and 10% (72.4% vs 62.1%) with Arachitol. This apparently larger benefit is possibly due to a higher rate of events in these non-responders. The events and duration of follow up is still small to infer conclusively from this subset of patients. Conclusion: With more events over time and longer follow up, the trend similar to that noted in the post NACT poor responders needs to be observed carefully before reaching to any definite conclusion regarding the patients that may benefit from such an intervention.

**Abstract Id: YUGP4477**

**Health Care Providers’ Perceptions Of Psychological And Interpersonal Needs Among Cancer Patients During The End Of Life Care: A Qualitative Study**

**Presenter- Dr. Balasubramanian Venkitaraman**
**Co-author - Dr Anand Raja, Dr Sivakumar, Dr Venkatraman**

People diagnosed with cancer, and in palliative care, may have a range of interpersonal, psychological needs and unfinished business. These needs may be inadequately expressed, recognised or responded to by family members and health care providers. The present study aimed at exploring health care provider’s perception of psychological needs, interpersonal needs and experiences of unfinished business among terminally ill cancer patients during end of life care. The sample consisted of eleven health care providers including oncologists, physicians, counsellors, social workers, nurses and health volunteers from two different End of Life Care settings in Kamakata, India. A cross sectional qualitative research design was used for the study involving semi structured interviews and focused group discussions. Thematic analysis of the interviews and focused group discussions identified the following themes. In the domain of psychological needs, three categories of themes were identified; (i) patients’ experience and expression of negative emotions, (ii) mental health concerns and (iii) themes related to confronting mortality. There were six categories of themes identified under the domain of interpersonal needs; (i) wish for support and connection with family, (ii) sense of rejection, abandonment and threats from the family, (iii) wish for detachment and avoidance of the family network, (iv) need for sexual intimacy with the spouse, (v) building new connections in the hospice and (vi) health care providers’ engagement with patients. In the domain of unfinished business three categories of themes were identified; (i) types of unfinished business expressed by patients (ii) fulfillment of unfinished business and (iii) responding to unfinished business. Patient’s prominent unfinished business consisted of roles and responsibilities, repair and reconciliation, recapitulation and regrets about life choices, leaving a legacy and legal issues. The findings also highlighted care providers’ views on the need for training to address these concerns during the end of life care. The research findings have implications for responsive end of life care services and for comprehensive training of health care providers. Key words: Psychological needs, interpersonal needs, unfinished business, end-of -life care, terminal illness.

**Abstract Id: YUGP4479**

**Role Of Adjuvant Chemotherapy And Outcomes In Node Positive Penile Cancer: 5 Year Single Institution Analysis**

**Presenter - Mr. Nishal Pinto**
**Co-author - Kamini Bhati, Poonima Bhola, Prabha Chandra**

Penile cancer like oral squamous cell carcinoma and vulval carcinoma , shows an organized mode of spread initially to the regional nodes then to distant organs. Nodal involvement is one of the most important poor prognostic factor in penile cancer patients. There is limited data supporting the use of neoadjuvant chemotherapy , however role of adjuvant chemotherapy is not clearly defined. Materials and methods: A retrospective analysis of patients with node positive penile cancer(pN2/N3), treated at our tertiary cancer centre between 2011 to 2016, was done . Various patient , disease and treatment related factors were analysed to identify various factors relating to the survival outcome. SPSS version 17.0 was used for statistical analysis. Results: A total of 48 patient records were identified from a total of 234 patient records. Mean age of patients was 57.50 years. Among the tumour characteristics, 62.5% had grade two tumour, 29.2% grade 3 tumour. 18.8 % showed perineural invasion and 10.4% had lymphovascular space invasion. 70.8% of patients had pT2 tumour , 25% had pT3 tumour (AJCC 7.0).Among the nodal characteristics, 77% were pT3, 23% were pT2 on final histopathology. 70.8% had perinodal spread and 18.8% had iliac nodal involvement 24 patients(50%) received adjuvant
child was successfully treated and remained asymptomatic 6 years seen in January 2014 and remained asymptomatic. Results: The dose of 50 Gy/25 fr/5 weeks delivered. Following treatment, he was involved. He underwent local radiotherapy under anaesthesia. A total histochemical study showed a positive reaction with vimentin. There cell tumour (low grade infantile fibrosarcoma) was given. Immuno-figures are not seen. Vascularity was increased A diagnosis of spidle is seen. The nuclei are at places cigar shaped. However mitotic arranged in bundles and groups. At places whorl like arrangement soft tissue tumour showing prolifearive spindle cells. The cells were histo-pathological examination of the biopsied material reported a radiography (X-rays hand) showed a large, lobulated soft tissue mass Routine laboratory investigations & chest X-ray were normal. Plain found. Systemic examination did not reveal any abnormal findings. No axillary lymphadenopathy was tender, fungating, ulcerative soft tissue mass was noted in the left swelling of left hand. On examination a 4x4 cm firm to hard and non March -2009, with 3-month history of gradually progressive painless grade 2 neuropathy. 40 patients having completed a minimum of 1 year of follow up were considered for survival analysis. 16 patients had recurrent disease with regional nodal recurrence and systemic recurrence each accounting for 33.3% . 5 yr overall survival (OS) was 53%. Among various factors, iliac nodal involvement alone showed significant effect on OS .3 yr OS for iliac node positive was zero while that of iliac node negative was 79%. Adjuvant chemotherapy did not show any significant survival benefit. Conclusion: Iliac nodal involvement is the most important disease related factor affecting outcome of patients with penile cancer. Adjuvant chemotherapy though has been found to be safe, effectiveness is yet to be proven.

Abstract Id: YUGP4481
Title: Infantile Fibrosarcoma Of The Hand In A Child : A Case Report.
Presenter- *Prof. GOPAL MAHESHWARI
Co-author - , ,

ABSTRACT Infantile fibrosarcoma is a very rare tumour seen in the paediatric age group. It occurs mainly in the children below 5 years of age. About 200 cases have been reported in the literature. We herein present a case of infantile fibrosarcoma involving soft tissue of the hand in a 10 month old child. The patient was successfully treated with organ preservation surgery followed by local radiotherapy. KEY WORDS: INANTILE FIBROSARCOMA, PAEDIATRIC TUMOURS, SOFT TISSUE SARCOMA. Introduction: Fibrosarcoma constitutes 10-12% of all soft tissue sarcomas. It is a mesenchymal tumour seen both in adults and children. The term congenital, infantile and juvenile fibrosarcoma have been used synonymously to describe its occurrence between birth and 15 years of age. Infantile fibrosarcoma of is exceedingly rare. The available literature on this medical oddity is in the form of isolated case reports only. The purpose of this article is to add another case of infantile fibrosarcoma in a 10 month old male child, of which only 200 cases have so far been reported in the world literature. The child was we treated successfully with limb preserving surgery followed by local radiotherapy. Material and method: A 10-month -old child was brought to the hospital in the month of March -2009, with 3-month history of gradually progressive painless swelling of left hand. On examination a 4x4 cm firm to hard and non tender, fungating, ulcerative soft tissue mass was noted in the left hand mainly on the radial side. No auxiliary lymphadenopathy was found. Systemic examination did not reveal any abnormal findings. Routine laboratory investigations & chest X-ray were normal. Plain radiography (X-rays hand) showed a large, lobulated soft tissue mass in the left hand without erosion or destruction of the adjacent small bones of the hand. There was no evidence of soft tissue calcification or fat density was noted on plain radiography. An open biopsy and histo-pathological examination of the biopsied material reported a soft tissue tumour showing proliferative spindle cells. The cells were arranged in bundles and groups. At places whorl like arrangement is seen. The nuclei are at palces cigar shaped. However mitotic figures are not seen. Vascularity was increased A diagnosis of spidle cell tumour (low grade infantile fibrosarcoma) was given. Immuno-histochemical study showed a positive reaction with vimentin. There was no expression of the cytokeratin (CK) or epithelial membrane antigen (EMA). Thus, a final diagnosis of low grade fibrosarcoma of the left hand was established. The skin and resected margins were involved. He underwent local radiotherapy under anaesthesia. A total dose of 50 Gy/25 fr/5 weeks delivered. Following treatment, he was regularly assessed clinically and radiologically. The patient was last seen in January 2014 and remained asymptomatic. Results: The child was successfully treated and remained asymptomatic 6 years following the diagnosis. Conclusions: This is a very rare case of Fibrosarcoma involving hand of a child and successfully treated with surgery and radiotherapy.

Abstract Id: YUGP4483
Carcinosarcoma Of Ovary: A Single Institute Experience With Surgical Cytoreduction And Platinum Based Chemotherapy
Presenter- *Dr. Vandana Jain
Co-author - Rupinder Sekhon, Sudhir Rawal,

Objectives: Malignant Carcinosarcomas are rare and aggressive ovarian malignancies. Treatment recommendations include surgical cytoreduction followed by platinum based chemotherapy, and are based on retrospective studies or extrapolated from experience with high grade serous ovarian malignancies. The objective of our study was to present our experience with radical cytoreductive surgery and platinum based chemotherapy in the management of ovarian carcinosarcomas. Material and methods: A retrospective study was carried out on 20 patients of ovarian carcinosarcoma who underwent primary surgery at Rajiv Gandhi Cancer Institute and Research Centre from January 2005 till December 2016. Results: The mean age of patients was 52.9 years (range 28-68 years). 7 patients were nulliparous. 13 patients were postmenopausal. Abdominal pain was the most common symptom. Optimal cytoreduction to no gross residual disease could be achieved in 15 patients. 10 patients had heterologous histology. 4 patients had stage I disease, 3 patients had stage II disease, 12 patients had stage III and 1 patient had stage IV disease. 15 patients received platinum based adjuvant chemotherapy. Follow up period ranged from 15 days to 82 months. 9 patients developed recurrence and 10 patients died of disease during the follow up period. The 3-year DFS was 33.75% and the 3-year OS was 40.52%. On multivariate analysis, optimal cytoreductive surgery was associated with significantly improved overall survival. Conclusion: Radical surgery resulting in no visible disease followed by platinum based chemotherapy appears to improve outcome and survival in patients with ovarian carcinosarcomas.

Abstract Id: YUGP4487
Prognostic Factors In Carcinoma Endometrium: Role Of Adjuvant Chemotherapy
Presenter- *Dr. Jaspinder Kaur
Co-author - Pamela Kingsley, Parnmeet Singh, Jaineet Singh

Aim: Cancer of the endometrium is primarily a disease of the west, accounting for 6% of all tumours in women in the US. However, its incidence is steadily rising in India too. Prognostic factors have been identified in literature, including stage of the disease, myometrial invasion, , cervical infiltration, involvement of lymph nodes, lymphovascular invasion and lastly receptor status. This study aims to identify high risk patients who should be planned for adjuvant chemotherapy. MATERIAL & METHODS: This is a retrospective review of histopathologically proven patients of carcinoma endometrium treated with External Beam Radiotherapy in the Department of Radiotherapy, Christian Medical College & Hospital Ludhiana from 1st January, 2005 to 30th August, 2013. A total of 31 patients were analysed, ages ranging from 50 to 70 years. Twenty nine patients had undergone TAH with BSO prior to radiotherapy. Sixty seven percent had stage IB, 13% stage II, 13.3% stage III and 1 patient had stage IV disease. Endometroid cancer was the most common histopathology (43%), adenoscarcoma (37%), papillary adenocarcinoma (10%) and adenosquamous in 7% patients. All patients received EBRT delivering a midpelvic dose of 45-50 Gy/20-25 fractions/4-5 weeks followed by intravaginal brachytherapy. RESULTS: At end of follow up, 18 patients are locally well, 17% patients developed vault recurrence and 2 had para aortic nodal failure. Twenty three percent patients developed metastatic disease. Thirteen percent patients were treated with adjuvant hormonal therapy.
Abstracts

Abstract Id: YUGP4489

Quality Of Life Among Disease-Free Survivors Of Rectal Cancer Patients Assessed By The European Organization For Research And Treatment Of Cancer (Eortc) Qlq-C30 V-3 Questionnaire.

Presenter: Dr. AARANI DEVI
Co-author: DR ANAND RADHAKRISHNAN, DR K L JAYAKUMAR,

Background: The incidence of rectal cancer has been increasing in the recent years, both in younger and older age groups. Rectal cancer is one of the common treatable cancers. With multimodality treatment approaches, cure rates and the number of long term survivors have gone up recently. In such cohort, reducing treatment related toxicity and maintaining good quality of life is of prime importance. Studies reporting quality of life of surviving patients are sparse in Indian context and have very important impact in our health sector. Materials and methods: A cross sectional study was done among the disease-free survivors of rectal cancer treated during a 2 year period from 2014-2015 in the department of radiation oncology, Government Medical College, Trivandrum. The socio-demographic and clinical characteristics of patients including tumor localization, Tumor-Node-Metastasis (TNM) staging, Eastern Cooperative Oncology Group (ECOG) performance status, treatment received (surgery, pre-operative radiotherapy or concurrent chemo-radiation for rectal cancer, adjuvant chemotherapy) were recorded in a structured proforma. A structured questionnaire-based telephonic interview was conducted by the principal investigator. The Quality of Life (QoL) was assessed using QLQ-C30 version 3 questionnaire of the European organization for Research and Treatment of Cancer (EORTC). The QLQ-C30 was developed to assess QoL in cancer patients and has been validated and tested in different cultures and in various cancer populations. The questionnaire included 30 questions (items) forming five functional scales (physical, role, emotional, cognitive and social), three symptom scales (fatigue, nausea and vomiting, and pain) and a global health status/QoL scale. It also contained six single items (dyspnoea, insomnia, appetite loss, constipation, diarrhoea and financial difficulties). The time frame used for questionnaire was the past week. The questions constituting the global QoL scale are scored on a modified visual analogue scale from 1 to 7. The remaining 28 questions have four response categories: “not at all”, “a little”, “quite a bit” or “very much”. All calculations on the QLQ-C30 data were performed after linear transformation of the scores to a scale from 0 to 100. A high score for a functional scale represents a healthy level of functioning, a high score for the global health status represents a high quality of life, but a high score for a symptom item represents a high level of symptomatology. Student t test was used for analysis of continuous data and chi-square test for categorical variables. All statistical analyses were done with Statistical Package for Social Sciences (SPSS, version 20). Results: Analysis of 25 disease free survivors of rectal cancer, who were assessed at least 1 year after completion of treatment found that the patients had a median age 55 years (IQR 44-59), comprised of 14(56) males and 11(44%) females. All patients had ECOG performance status 0 or 1. CEA value less than 5 ng/ml was noted for 80% of patients. Low anterior resection was done for 20(80%) and abdomino-perineal resection was done for 5(20%) patients. Colostomy was done for 6 (24%). Neoadjuvant radiotherapy was given for 13(52%) and adjuvant radiotherapy was given for 9(36%). Three patients did not receive radiation. All multi-item scales and single-item measures of QLQ-C30 questionnaire were assessed independently. The mean score for global health status was 54.00. It was found that among the functional scale parameters, social functioning scored lowest (mean score 41.3) and physical functioning scored highest (mean 77.20). Role functioning, emotional functioning and cognitive functioning scores were 75.33, 53.33 and 65.33 respectively. Symptom scale scores were 34.66, 6 and 22.66 for fatigue, nausea and vomiting and pain respectively. Among the symptom items, diarrhea got the highest score (45.33) while dyspnea scored the lowest (1.33). It was found that financial difficulty score was 89.33. Comparison of scores between treatment sub-group is undergoing. Conclusion: The quality of life assessment found that among the survivors of rectal cancer patients, social functioning was affected the most and the reported higher score of bowel dysfunction may contribute significantly to the same.

Abstract Id: YUGP4491

Role Of 18-Fdg Pet Ct In Assessment Of Treatment Response To Neo-Adjuvant Chemoradiotherapy (Naccrt) In Carcinoma Esophagus

Presenter: Dr. Sankalp Singh
Co-author: Dr Niharika Bishist, Dr Sankalp Singh,

Introduction: The burden of carcinoma esophagus in our country is significant especially in the Pune-Mumbai-Banshi registries of Maharashtra where it is the second or third most common subsite of cancer. The role of 18-FDG PET/CT in prediction of response to NACRT has been extensively studied in retrospective and prospective studies but most of the database is of the West where adenocarcinoma is a much more common histology compared to squamous cell carcinoma (SCC). Similar data for SCC is very limited. Methodology: We present a retrospective analysis of a series of 45 cases of carcinoma esophagus who received NACRT of which 85%(41) were SCC. All patients who were included in the study underwent an endoscopic biopsy for histological confirmation of diagnosis and an 18-FDG PET-CT scan as part of pre-treatment work up. All patients received external beam radiotherapy on a Telecobalt machine to a dose of 41.4 to 45 Gy at 180cGy per fraction along with chemotherapy in the form of paclitaxel plus carboplatin (4 to 5 cycles) or cisplatin (4 to 5 cycles). All patients underwent a post NACRT response evaluation with an upper gastrointestinal endoscopy and a PET-CT at 04 weeks post treatment. All patients who remained operable and non-metastatic at second PET-CT were taken up for surgery. In patients who underwent surgery, the change in SUVmax value (dSUVmax) was compared against the post-operative Tumour Regression Grade (TRG) seen on histopathology. Results: Out of 48 patients, 43 patients came up for surgery. 35a patients showed a significant response to chemoradiotherapy on histopathology (TRG 1-3) while 06 patients showed little or no response (TRG 4-5). It was found that patients who had a decrease in SUVmax of 30% or more were more likely to show a TRG of 1 to 3. Conclusions: In Carcinoma esophagus, change in SUVmax of 30% or more is suggestive of good response to radio-chemotherapy and maybe a predictor of improved survival.

Abstract Id: YUGP4493

Predictive Power Of Different Biomarkers In Oral Squamous Cell Carcinoma For Lymph Node Metastasis

Presenter: Dr. Hemendra Mangal
Co-author: Prashob Karimi,

Introduction Oral cancer is the most common cancer among male in India. In an unpublished retrospective analysis of 70 head and neck cancer patients who underwent surgery, more than 60% were pT4 tumors. Biomarkers play important role in prognostication as these markers are derived through the tumor pathogenesis of oral cancer. Many biomarkers like p53, cyclin D1, EGFR (Epidermal Growth Factor Receptor), p16 and Bcl2 have been tested and have shown prognostic significance. As in other cancers tumor biology plays a role
in defining the behavior of the cancer and in this study expression of these biomarkers by IHC (Immunohistochemistry) testing on primary is correlated with lymph node metastasis. Material and method Fifty patients with histologically proven squamous cell carcinoma who underwent surgery with neck dissection were included. Patients received prior chemotherapy or radiotherapy, inoperable cases and other than squamous cell histology were excluded. IHC is carried out by polymer method for staining on paraffin blocks with biomarkers. 710 percent of cell with any intensity is considered positive and correlated accordingly for statistical analysis. Results Expression of markers on primary for P53, P16, Cyclin D, EGFR and Bcl2 is 56%, 42%, 32%, 40% and 58% respectively overall. Expression in node positive and node negative, 25 patients in each group for P53 was 24% and 30% (p = 0.39), cyclin D1 was 18% and 14% (p=0.54), EGFR was 16% and 24% (p=0.24), P16 was 22% and 20% (p = 0.77) and Bcl2 was 28% and 30% (p=0.77). Conclusion Biomarkers play a role in carcinogenesis of oral squamous cell carcinoma showing expression of p53, cyclin D, EGFR, p16 and Bcl2 studied but none of the markers could predict lymph node metastasis.

Abstract Id: YUGP4499
Retrospective Analysis Of Sequential Versus Concurrent Chemoradiation In Locally Advanced Carcinoma Esophagus At A Regional Cancer Centre Of Western India: Regional Cancer Center -Bikaner( Raj.)
Presenter: *Dr. KAMESH KUMAR HARSH*
Co-author - DR.NEETI SHARMA, DR.SAROJ KUMARI, DR.PARMILA KHATRI

Retrospective Analysis of Sequential Versus Concurrent Chemoradiation in Locally Advanced Carcinoma Esophagus at a Regional Cancer Centre of Western India: Regional Cancer Center -BIKANER( RAJ.) AUTHOR: Dr.Kamesh Kumar Harsh, M.D. (Radiation-Oncology), Assistant-Professor Acharya Tulsi Regional Cancer Treatment & Research Centre Bikaner (Raj.) Coordinator: Sharma N, Saroj K, Khatri PK, Jhakar S, Singhal M, Kumar HS. Acharya Tulsi Regional Cancer Treatment & Research Centre Bikaner (Raj.), E.Mail: dr.kameshharsh@gmail.com CONFlict-OF-INTEREST: NILLABSTRACT: Introduction: Esophageal cancer, which generally presents with advanced disease, has a poor prognosis. Surgery is the preferred initial treatment in cases of localized carcinoma esophagus. Many cases of esophageal carcinoma are non-candidate for radical surgery due to either advanced stage at initial presentation or medically unfit patient. Some patients refuse for radical surgery and chemoradiation can prove an equivalent alternative. The objective of this retrospective study was to compare the efficacy and tolerability of concurrent chemoradiation (radiotherapy with weekly cisplatin) and sequential chemoradiation (neo-adjuvant chemotherapy followed by radical radiotherapy) in such patients. Materials-and-Methods:- From 1st January to 31st December 2011, 150 patients of squamous cell carcinoma of esophagus who were non-candidate for surgery or refused for surgery were retrospectively analyzed. Two different treatment schedules of definitive chemoradiation were used in these patients. In one subset of patients(n=75) neo-adjuvant chemotherapy in the form of 3 cycles of Cisplatin and 5FU was followed by radiotherapy (BED=62.50Gy). Another subset of patients(n=75) had received chemoradiation including concurrent weekly Cisplatin with radiotherapy (BED=62.50Gy). The radiotherapy was delivered in the form of External Beam Radiotherapy and Intraluminal Brachytherapy in the form of HDR. Results: The 3 & 5 years overall survival (O.S.) and disease free survival (D.F.S) of localized carcinoma esophagus in sequential verses concurrent chemoradiation compared as follows: 3 year O.S. and D.F.S were as 19.1% v/s 20.6% and 6.8% v/s 8.2 % and 5 year O.S. and D.F.S. were 6.7% v/s 8.8% and 2.3% v/s 3.0% respectively. Patients who received sequential chemoradiation had early improvement in dysphagia as compared to patients who received concurrent chemoradiation.

Abstract Id: YUGP4501
Outcome Following Surgical Resection Of Primary Retroperitoneal Sarcoma: Experience From A Tertiary Care Cancer Centre.
Presenter: *Dr. KAMESH VERMA*
Co-author - Amit Gupta, Shraddha Patkar, Mahesh Goel

Introduction: Retroperitoneal (RP) sarcomas are rare tumours with mean annual incidence of approximately 2.7 cases per 106 persons. In view of proximity to adjacent viscera and major vessels it is often not possible to achieve wide resection margins similar to extremity sarcomas. Material and Methods: Being a tertiary care centre majority of cases referred to us are recurrent. We performed a retrospective analysis of primary retroperitoneal sarcoma patients who underwent surgery between October 2007 and February 2017. Analysis of factors predicting local recurrence, systemic recurrence and overall survival was performed. Results: A total of 45 patients were operated in the above time period. 36 (80.00%) patients underwent R0 resection whereas R2 resection was done in 4 (8.90%) patients. Contiguous organ resection was performed in 27 (60.00%) patients. 27 (60.00%) patients had grade III tumour. 21 patients (46.70%) had leiomyosarcoma and 14 (31.10%) patients had liposarcoma histology. 33 (73.30%) patients received radiotherapy (2 Neo-adjuvant, 31 adjuvant) and chemotherapy was given to 10 (22.20%) patients. Median follow up was 24.9 months (range 4.1 – 117.4 months). 8 (17.80%) patients developed local recurrence, 12 (26.70%) patients developed systemic disease. 13 (28.90%) patients died due to disease. Median disease free survival was 44.3 months and median overall survival was 87.4 months. On univariate analysis , size of tumour (p = 0.049) associated with local recurrence. Factors associated with systemic recurrence were grade of tumour (p =0.001) and use of chemotherapy (0.043). Conclusion: RP sarcomas are prone to recurrence both local and systemic even after aggressive surgical resection. Role of adjuvant therapy to prevent recurrence remains ill defined. Prospective studies with large sample size are required to further define factors predicting outcome after surgical resection in RP sarcomas to enable develop effective systemic therapy to prevent recurrence.

Abstract Id: YUGP4503
Kaposi’S Sarcoma Of The Stomach And Inguinal Lymph Nodes In A Known Case Of Hiv With Pulmonary Tuberculosis.
Presenter: *Dr. Kanica Chaudhary*
Co-author - Dr.Veena Ramasawmy, , , , ,
Background: Lung cancer outcomes are directly related to the stage at presentation, with outcomes generally worsening beyond stage 3A. Mediastinal staging is one of the most important aspects of work-up, and endobronchial ultrasound (EBUS) guided mediastinal lymph node (MLN) biopsy is the recommended modality for mediastinal staging. Typically, staging EBUS is done to define potentially resectable (< 3A) lung cancer. Aim: To define the incidence of potentially resectable lung cancer in a referral population, as assessed by the percentage of lung cancer patients qualifying for staging EBUS (potentially resectable, < 3A). Methods: This study was undertaken to analyze the percentage of staging EBUS done for potentially resectable lung cancer (< 3A). The EBUS database in our center was screened for patients with suspected malignancy with MLN (CT Chest or PET-positive from 2012 to 2017). EBUS-TBNA biopsy, with other procedures like transbronchial/endobronchial biopsy, and bronchoalveolar lavage was done. Cases with suspected/confirmed lung cancer were included in the analysis, and the percentage undergoing staging EBUS was calculated. Experienced bronchoscopists performed EBUS-TBNA with a 21/22 Gauge (G) needle, and samples included cytopathology, cellblock and cores for histopathology. Results: 135 patients were diagnosed to have lung cancer, of a total of 238 patients with positive malignant mediastinal lymph nodes (57.2%). Of the 135 lung cancer patients, only 15/135 (11.1%) qualified for staging EBUS-TBNA (stage < 3A), and the rest were > stage 3B. Conclusion: In our cohort of lung cancer patients referred for diagnosis and work-up using EBUS, only 11.1% patients qualified for staging EBUS (stage < 3A, potentially resectable), reflecting the low incidence of operable and hence curable lung cancer. Of note, the incidence of lung cancer in this referral population with malignancy and MLN was significantly high at 57.2%. The small percentage of patients qualifying for staging EBUS (potentially resectable) in our study, with the majority being > 3B attests to the advanced presentation of lung cancer in our country, a major negative factor impacting outcomes. Larger studies from multiple centers are required to validate these findings.

Abstract Id: YUGP4526

The Lateral Thoracodorsal Flap In Oncoplastic Breast Surgery

Presenter - *Dr. Saheer Neduvanchery
Co-author - Dr Prasanth Penamu, Dr Friji M T,

i. Background: Breast-conserving surgery is widely performed for the treatment of early-stage breast cancer. Immediate breast reconstruction after breast conserving surgery is still a challenge to breast surgeon/plastic surgeons. Interesting alternatives for the frequently used musculocutaneous flaps are local flaps, such as the lateral thoracodorsal flap developed by Holmstrom in 1986. This flap is simple to raise and involves no sacrifice of important muscular structures. This report aims to demonstrate the use of the lateral thoracodorsal flap in an immediate breast reconstruction for a patient, when the partial mastectomy defect site is laterally located.

ii. Objective: To assess the breast symmetry and shape and overall aesthetic results in patient undergone immediate breast reconstruction using lateral thoracodorsal flap after breast conserving surgery iii. Methods: The subjects of this study were 5 patients who underwent partial breast reconstruction with a lateral thoracodorsal flap. These patients were selected from among patients who underwent breast-conserving surgery and reconstruction in our hospital in the last two years. iv. Results: Satisfactory defect correction was accomplished in all patients with a natural ptotic breast shape. The lateral thoracodorsal flap procedure has the advantage of being similar in texture and color to the native breast; in addition, morbidity of the donor site is minimized without sacrificing muscles or nerves, a shorter hospital stay, and good aesthetic and functional results. v. Conclusion: The versatility of Lateral Thoracodorsal Flap and its simple execution make it an important option in the armamentarium of the Oncoplastic

Abstract Id: YUGP4507

Staging Ebus Exemplifies The Low Incidence Of Potentially Resectable Lung Cancer In A Referral Population In India – A Wakeup Call

Abstract Id: YUGP4505

Retrospective Evaluation Of Second Malignancies At A Tertiary Care Cancer Center In India

Presenter - *Dr. Rahul DL
Co-author - Dr.Santhosh.K.Devdas, Dr.Ram Charith Alva, Dr.Mohan kumar

INTRODUCTION - In the modern era with the advent of new improved diagnostic techniques and treatment modalities contributing to increased survival among cancer patients, there has been an increase in the incidence of second primary malignancies. AIM OF THE STUDY: To analyze the incidence and epidemiology of second primary malignancies at our center. MATERIALS AND METHODS – We conducted a retrospective study of 8557 patients registered under the Department of Medical oncology and Radiation oncology at Ramaiah medical college hospital, Bangalore from January 2008 to May 2017 of which 102 cases fulfilling the Warren and Gates criteria were included in the study. The time interval to differentiate synchronous and metachronous malignancy was six months. RESULTS - A total of 102 patients were analysed with a male: female ratio of 1.22.9. Synchronous malignancy: A total number of 33 cases were diagnosed with synchronous malignancies. The median age at diagnosis was 55.48 years. The most common malignancies was bilateral breast cancer which constituted 33.3% of the cases. The intent of treatment was palliative in 39.3%. Metachronous malignancy: A total of 69 cases were diagnosed with metachronous malignancy. The median age of diagnosis of first primary malignancy was 51.75 years and 58.2 years for second malignancy. The median time interval was 6.6 years. The most common 2nd malignancy was breast cancer(26%) which was preceded by contralateral breast cancer in 50% and nasopharynx in 16.6% . The 2nd MC metachronous malignancy was Stomach(8%) was preceded by lung cancer in 50% of patients. The intent was palliative in 2% of the 1st malignancies and 28.9% in 2nd malignancies. CONCLUSION- The incidence of second malignancies though considered rare(1.19% in our study), should be considered carefully in the patients who are cured of their primary cancer. Ways to reduce risk of second malignancies need to be explored.

Abstract Id: YUGP4524

S319
Abstract Id: YUGP4528
Intramedullary Chordoma Without Vertebral Bone Involvement A Rare Case Report
Presenter- *Dr. Harish kumar PR*
Co-author - Dr. Rajiv Bhatt, Dr. Pritesh Lohar, Dr. Rahul Misra

INTRODUCTION : Chordoma is a rare malignant neoplasm arising from the remnant of the primitive notochord. Half of them arise in sacrococcygeal region and one-third at the base of skull, typically clivus. Involvement of thoracic and lumbar spine is around 15%. Chordoma occurring in intramedullary portion of spinal cord is extremely rare and only two cases have been reported in literature. CASE REPORT : A 40 year old male patient presented with complaints of weakness in right lower limb for 1 month. Clinical examination showed a power of 4/5. MRI spine revealed a T1 hypointense and T2 heterointense lesion in spinal canal at the level of D11-D12. Patient underwent D11 to D12 laminectomy with subtotal excision of tumour. HPE and IHC showed the diagnosis as chordoma. Following surgery patient had defaulted and presented after 6 months with persistent weakness. Review MRI showed a recurrent lesion for which patient underwent surgery. Histopathological examination confirmed the diagnosis of chordoma. Patient was then planned for adjunct radiation therapy of 50 Gy at 1.8 Gy per fraction from D10-L1 and is on treatment Discussion Surgery is the mainstay of treatment with complete en bloc resection with negative margins achieve local control in 80% patients. However this is not achievable in majority due to critical location. In such cases failure rate maybe as high as 70% and adjuvant radiation is recquired. However chordomas are relatively radioresistant and doses >66 Gy may be neeede which might be difficult to achieve in critical locations like spine. Local control rates of 54% to 90% have been achieved by combined modality however late complications due to treatment are not infrequent and close followup of patients is needed. Chemotherapy has not played a role in management of chordomas.

Abstract Id: YUGP4529
Distress Screening For Cancer Patients - A Retrospective Single Institutional Study At Tertiary Cancer Center
Presenter- *Ms. Aneri Shah*
Co-author - Dr. Rajiv Bhatt, Dr. Pritesh Lohar, Dr. Rahul Misra

Objective Distress screening is one of the quality indicators in the oncology patient care & is recommended by NCCN Distress management guidelines, that all patients be screened at their initial visit, at appropriate intervals & as clinically indicated. We aimed to assess the prevalence of distress & to identify problems in its implementation in a tertiary health care center in semi-urban Indian context. Methods The distress thermometer (DT) and its 34-item problem checklist showing positive response proved useful in such cases, to determine requirement of Psycho-Oncological support. It indicates the need to ensure distress screening routinely for all the patients & to create awareness for early referrals. Also, male patients may not be voicing their emotional concerns, it does not put them at lesser consideration for distress screening/vigilance of emotional concerns.

Abstract Id: YUGP4532
Primary Abdominal Extraskeletal Osteosarcoma-A Rare Case
Presenter- *Dr. Rupali Aggarwal*
Co-author - Dr. Jatin Sarin, Dr. Rajan Sahu, Dr. Vineeta Sood

Purpose: Primary Abdominal Extraskeletal Osteosarcoma is a malignant mesenchymal neoplasm, arising from soft tissue that produces osteoid, without any contiguity to skeletal bones and is the result of metaplasia of the mesenchymal tissue. It is highly aggressive and extremely rare tumor, having poor prognosis with 5-year survival rate of approximately 25%. Currently, no promising therapeutic regimen exists to treat such tumors. We report one such case with very good response to postoperative chemotherapy. Case: A 72 years-old woman with past history of hypertension and percutaneous coronary angioplasty with stenting, presented with complaints of abdominal pain for 3 months. Clinically, there was an ill-defined, palpable abdominal mass. Whole Body PET-CT showed FDG avid multiple abdominal masses in relation to left kidney, small bowel, and peritoneum. Biopsy revealed Pleomorphic Malignant Tumor. She underwent Debulking (R2 Resection) - Exploratory Laparotomy, Excision of Mesentric Mass, Retroperitoneal Mass, Omentectomy plus Resection of Small Bowel and Right Colon with ileo-transverse Anastomosis. Peroperatively, there was a ruptured mesenteric mass in terminal ileum & Large retroperitoneal Mass behind right kidney, extending to paraspinal area and posterior abdominal wall muscles. Histopathology with Immunohistochemistry revealed High Grade Pleomorphic Sarcoma-Extraskeletal Osteosarcoma. Postoperative contrast enhanced computed tomography of Abdomen showed residual masses with respect to left kidney & left posterior peri-renal and para-renal space and another peritoneal mass in right lumbar region. Thereafter, she received 6 cycles of Systemic Chemotherapy with Inj. Ifosfamide & Inj. Epirubicin with complete metabolic response at end of treatment. Presently, patient is on regular follow-up with no signs of disease recurrence at 6 months. Conclusion: Primary Abdominal Extraskeletal Osteosarcoma is a highly malignant, rare neoplasm. Surgical Excision with R0 Resection is the only definitive treatment option. Historically, Adjuvant Chemotherapy or chemotherapy for residual disease has not shown durable response rates. But, our present regimen of chemotherapy with Inj. Ifosfamide & Inj. Epirubicin showed good results and can be an option for such patients, postoperatively.

Abstract Id: YUGP4534
Measurement Of Radiation Dose To The Fetus In A Case Of Pregnant Lady With Glioblastoma Multiforme On Postoperative Adjuvant Radiotherapy And Concurrent Temozolomide
Presenter- *Dr. SWETA KUMARI*
Co-author - Dr. TANVIR PASHA, Dr MUHAMMED ISMAIL SHARIEF, Dr. RAVI KUMAR M

PURPOSE: We intend to calculate the radiation dose that is being exposed to the fetus during the course of treatment in a pregnant female with glioblastoma multiforme (GBM) and analyse it to derive a conclusion to help the patient to decide on further course of management MATERIALS AND METHODS: A 28yr old lady with glioblastoma multiforme who was incidentally found to be pregnant during the course of treatment when she announced her history of 3 months of amenorrhea during weekly follow up after starting of

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adjuvant radiotherapy, urine pregnancy test was done and it came out to be positive. By the time pregnancy got confirmed, patient had already received 38Gy in 19 Fr along with 4 weeks of concurrent temozolomide and 10 weeks of antiepileptic medication (phenytoin 100mg TID). Patient was advised to continue radiotherapy and temozolomide was discontinued, patient’s antiepileptic was changed to oral levetiracetam 500mg twice daily. Dose going to the fetus was calculated with consent of patient by using OSLD (optically stimulated luminescence dosimeters) badges were placed at the level of fundus over anterior abdominal wall by ultrasound guided, at the cervix transvaginally, xiphisternum and pubic symphysis during radiotherapy. Landauer microstar reader was used for reading the OSLD chip. In view of multiple risk factors and exposure like Antiepileptic, Temozolamidie and Radiotherapy, risk of complications have been explained to the patient and patient’s attendants and they decided to terminate the pregnancy. Although USG done for anomaly scan on 18 weeks of gestation was normal. RESULT. OSLD reading for one day (xiphisternum:79.35mGy>fundus:45.9mGy>cervical external os:53mGy) Probable dose received after calculating for 30 fractions is (xiphisternum:79.35mGy>fundus:45.9mGy>cervical external os:15.9mGy) CONCLUSION Combination of multiple risk factors to fetus caused by Phenytoin(Class D) which includes increase incidence of major malformation like orofacial cleft, cardiac defects, fetal hydantoin syndrome and cognitive deficit. Temozolomide(Class D)can cause birth defects. Although the dose calculated in the study shows that the dose to the abdominal surface at the xiphisternum and fundus level was within the advised limit by ICRP 84/AAPM 50 In view of lack of evidence of safety of the fetus due to exposure of multiple agents like antiepileptic, Temozolamide and radiotherapy in 1st trimester, it may not be safe to continue the pregnancy

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**Abstract Id: YUGP4536**

**Multimodality Approach In Long Segment Esophageal Carcinoma In Indian Scenario - A Case Report**

*Presenter - Dr. ANURADHA P*

*Co-author - Dr. SASHIYALA, Dr. RAMESH S. BILIMAGGA, Dr. SHEKAR PATIL*

Esophageal carcinoma is one among the cancer types which are refractory to current treatment approaches and has poorer outcomes. In country like India, cost effectiveness should be considered. We treated a 35 year old female, who presented to our hospital with complaints of difficulty in swallowing to solids for 3 months. She was evaluated with esophagoscope done on 10.06.15 revealed growth at 23cm upto 32cm just above gastro esophageal junction- suggestive of carcinoma oesophagus. Biopsy from the lesion(13.07.2015, lab no. 2433-15,) revealed well differentiated squamous cell carcinoma. Patient under went ryles tube insertion 02.09.15. PETCT at (11.09.15) revealed long segment circumferential thickening of mid and distal thoracic esophagus extending to the GE junction and cardia of stomach, measuring 12.3 cm x 4 cm x 3.3 cm causing laminar narrowing(SUV-19.2), the mass is infiltrating the carina posterior walls of the main bronchi aortic wall around 120 degree of its circumference and indenting the posterior pericardium. Multiple metabolically active highest mediastinal(SUV-12.2), abdominal, bilateral level-IV lymphnodes. She received 3 cycles of of NACT with 3 weekly Inj.cisplatin and Inj. 5 FU from 14.09.15 to 26.10.15. Post NACT, CT scan(7.11.15) revealed partial response. She received radiation by 3DCRT technique with boost dose of 2000Gy in 10 fractions to the primary followed by 3960Gy in 22 fractions to primary and regional lymphnodes from 30.11.15 to 24.12.15 along with concurrent chemotherapy with 3 weekly Inj.Cisplatin and Inj.SFU. patient tolerated the treatment well. Patient completed 19 months post treatment and is asymptomatic til date. No abnormality detected in recent esophagoscope(4.07.17)

**Abstract Id: YUGP4542**

**Post-Chemoradiation Neck Dissection – Is There A Role For Lesser Surgery For Residual Neck Disease?**

*Presenter - Dr. Rajaram B V*

*Co-author - Dr Balasubramanian V, Dr Venktesh V, Dr Arvind Krishnamurthy*

Background Head and neck cancers continue to be one of the most common cancers in our country. There has been a shift in the treatment paradigm to chemoradiation (CTRT) to most subsites of head and neck cancers. Controversies exist in the management of the neck post CTRT. Most centers perform comprehensive neck dissection for residual neck disease. However, this surgery is very extensive for limited disease and associated with morbidity and reduced QOL. Method We undertook a retrospective study to assess the results of comprehensive neck dissection in patients with residual neck nodes post CTRT/radical radiotherapy for head and neck cancer. Patients included in the study were those with recurrent/residual neck nodes confined to one or contiguous levels with complete resolution of the primary cancer. Results A total of 104 patients underwent surgery between 2005 and 2011. CTRT was given in 81 (78%) patients and radiotherapy in 23 (22%) patients. Radical neck dissection was done in 67 (65%) patients and modified radical neck dissection in 37 (35%) patients. The pre-operative stage was 5 patients stage I/II, 41 patients stage III and 58 patients stage IVa. The pathology of the neck dissection showed no residual disease in 40 (38.5%) patients and limited residual disease corresponding to a single level of lymphnode was seen in 50 (48.1%) patients. Post-operative complications were seen in 25 (24%) patients. The median duration of drain was 7.56 days and hospital stay was 11 days. Conclusion Majority of patients (86%) undergoing comprehensive neck dissection for limited neck disease had an extensive procedure resulting in increased morbidity and hospital. A lesser surgery such as selective neck dissection or super selective neck dissection can be considered in a select group of patients to reduce the complications of surgery at the same time not compromise the oncologic outcome.

**Abstract Id: YUGP4544**

**Practical Distress Management In Head And Neck Cancer Patients Prior To Start Of Palliative Chemotherapy.**

*Presenter - Dr. KUSHAL GUPTA*

*Co-author - Kushal Gupta, Vijay Patil, Vanita Noronha*

OBJECTIVE The study reports the incidence of distress, factors associated with it and a practice strategy to resolve distress in head and neck cancer patients starting palliative chemotherapy. METHODS Adult head and neck cancer patients planned for palliative chemotherapy underwent distress screening prior to the start of treatment as a part of this single arm prospective study (CTRI/2015/11/006392). Patients who had a distress score above 3 on the NCCN distress thermometer were initially counselled by the clinician. Patients who continued to have high distress post clinician counselling, were referred to psychologist and started on palliative chemotherapy. Post counselling, distress was measured again. Binary logistic regression analysis was done for finding factors associated with high baseline distress. The relation between baseline distress and compliance was tested using the Fisher’s exact test. RESULTS 200 patients stage III and 58 patients stage IVa. The pathology of the neck dissection showed no residual disease in 40 (38.5%) patients and limited residual disease corresponding to a single level of lymphnode was seen in 50 (48.1%) patients. Post-operative complications were seen in 25 (24%) patients. The median duration of drain was 7.56 days and hospital stay was 11 days. Conclusion Majority of patients (86%) undergoing comprehensive neck dissection for limited neck disease had an extensive procedure resulting in increased morbidity and hospital. A lesser surgery such as selective neck dissection or super selective neck dissection can be considered in a select group of patients to reduce the complications of surgery at the same time not compromise the oncologic outcome.
Abstract Id: YUGP4546
Impact Of Lumen Occlusion On Outcomes In Rectal Adenocarcinoma
Presenter- Dr. Devayani Niyogi
Co-author - Rajesh Shinde, Avanish Sakiani, Ashwin DeSouza

Background Rectal carcinoma presenting with intestinal obstruction has historically been associated with poorer outcomes. However, most of these studies were published before the neoadjuvant chemoradiation era. Methods: This is a retrospective analysis of a prospectively maintained rectal carcinoma database. 199 consecutively treated patients with rectal adenocarcinoma presenting to us over a period of one year were evaluated. They were classified as lumen occluding or non lumen occluding depending upon their colonoscopy findings. Overall survival, progression free survival, curative surgical resection rate and other outcome variables between the two groups were compared using the SPSS software. Results: The two groups had similar demographic profiles. Median follow up time of the study cohort was 34.9 months. The median overall survival (OS) of the group with non-occlusive tumors was 39.65 months while that of the lumen occlusive tumors group was 29.69 months. This difference was found to be statistically significant (p = 0.000) on univariate analysis but not on multivariate analysis. The median progression free survival (PFS) was 42.18 months in the non occlusive tumors group while it was 18.07 months in the lumen occlusive tumors group. This difference in PFS was significant (p = 0.03) both on univariate and multivariate analysis. Patients with lumen occlusion had significantly higher R+ resection rates. (p=0.016) Recurrence rates between the two groups were comparable. Conclusion: In today’s era of neoadjuvant therapy as standard of care for rectal cancer, lumen occluding growths no longer portend a poorer prognosis in terms of overall survival. However, patients with lumen occlusion do tend to have higher progression rates with a smaller proportion undergoing curative surgery with negative margins. Lumen occluding growths after curative resections have comparable locoregional recurrence rates.

Abstract Id: YUGP4549
Second Primary Malignancy At A Tertiary Cancer Hospital : Our Experience
Presenter- Dr. Kanishka Siddhartha
Co-author - Dr Shravan Shetty, Dr Raman K Deshpande, Dr Sanjay Sharma

Introduction: The incidence of double malignancy is not uncommon. Recently there has been an increase in the number of patients diagnosed with multiple primary cancers. This trend can be attributed to improved diagnostic techniques, prolonged life span and the increased incidence of long term survival of patients with malignancy. Most multiple primary cancers are double primary cancers. The second primary malignancy (SPM) is a second de novo malignant neoplasm with a known cancer. Warren & Gates first gave the criteria for the diagnosis of SPM. An SPM can be synchronous or metachronous. When the SPM is diagnosed within 6 months of the primary tumor, it is known as synchronous malignancy and the term metachronous is used when the SPM is diagnosed more than 6 months after the diagnosis of the primary tumor. Materials and Methods: This was a retrospective study conducted in the Department of Surgical Oncology in a tertiary cancer center between August 2013 and July 2017. A total of 3700 cases of cancer were analyzed, out of which cases which presented with histological proven synchronous and metachronous primary as per the Warren and Gates criteria were included in the study. Results: A total of 15 cases were encountered in the 4 year study period. Out of them five patients were in the metachronous category and ten patients were in the synchronous category as the second primary malignancy was detected mostly during clinical evaluation of the patients for the primary malignancy. In the present study, most commonly diagnosed synchronous malignancies were carcinoma colon and renal malignancies, while in metachronous malignancies, carcinoma breast was most common. Majority of the cases were in the 6th-7th decade. Conclusion: Second primary malignancies are not very rare. Hence, greater awareness of this is required during pretreatment and follow-up evaluation among both cancer patients and their treating clinicians. Key words: Metachronous, second primary malignancy, synchronous, multiple primary cancers.

Abstract Id: YUGP4554
An Unusual Presentation Of Cns Germ Cell Tumor: Case Report
Presenter - Dr. Sarvan Bodepudi
Co-author - Dr ANIL KUMAR, Dr NALINI KILARA

Background: Primary germ cell tumors (GCT) of the central nervous system (CNS) are a rare and heterogeneous group of neoplasias with distinct histological subtypes. In adults, the most common sites are the anterior mediastinum, retroperitoneum, and the pineal and suprasellar regions. In infants and young children, intracranial GCTs and sacrococcygeal teratomas are more common than other locations. Intracranial GCTs arise almost exclusively from midline locations. The two most frequent sites are the pineal gland and the suprasellar regions, with pineal tumors occurring nearly twice as often as suprasellar GCTs. Suprasellar tumors — Suprasellar GCTs most commonly present with hypothalamic/pituitary dysfunctions, including diabetes insipidus, delayed puberty, or precocious puberty, isolated growth hormone deficiency, or other aspects of hypopituitarism (central hypothyroidism, adrenal insufficiency). Objectives: To report an unusual presentation of intracranial GCT. Design/Method: Case report Case report: A 11-year-old girl presented with unilateral progressive loss of vision for one month. MRI brain revealed a well-defined lesion in the floor of the 3rd ventricle/hypothalamus region. Optic chiasma and Right distal optic nerve showed oedematous changes. Differential diagnosis like Germinoma or Glioma were considered. She had no other focal neurologic deficits or signs of endocrinopathy. Biopsy from lesion was suggestive of Grade I Germinoma, IHC was positive for PLAP. She received 2 cycles of NACT with Cisplatin & Etoposide followed by IMRT (2520cGy/14Fr/5Fr/wk ? 1980cGy/11Fr Boost) to ventricles. She had also received one cycle adjuvant chemotherapy with Cisplatin & Etoposide. Response assessment MRI showed complete resolution of lesion with residual oedema. Post treatment patient had improved vision and is on regular follow-up. Discussion: Patients with suprasellar GCTs often have chronic subtle symptoms, and their tumors are diagnosed incidentally on imaging studies performed for unrelated reasons. Suprasellar GCTs can also cause ophthalmologic abnormalities such as decreased visual acuity from chiasma or optic nerve compression or visual field deficit (classically, bitemporal hemianopia). It is unusual for suprasellar tumors to have acute onset, rapid progression, unilateral symptoms and absence of endocrinopathy. Conclusion: Our case is unique for the acute onset, unilateral visual disturbances, absence of endocrinopathy. Keywords: Germinoma, Intracranial Germinoma, Supra-cellular tumors, Hypothalamus, Optic Chiasma, IMRT.

Abstract Id: YUGP4555
Cognitive Database For Neurooncology: Unearthing The Merits Of One’S Own Realtime Powerful Institutional Data.
Presenter - Dr. HARESH KP
Co-author - SUBHASH GUPTA, ANIL SRIVASTAVA, RAVI CHAMRIA

Background: In neurooncology we deal with a variety of diagnoses like Glioma, ependymoma, medulloblastoma, pinealoblastoma, PNET, etc. The treatment of each of these cancers are different. Presently, the treatment is largely based on evidence from literature. During our discussion with patients we quote the results of standard studies. We forget for a moment that these results are from ideal conditions in fit patients enrolled in clinical trials. These results may not be reproducible
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in real world. Any institution will have enough number of patients of each diagnosis. We are not realising the power of data of our own patients. The main reason behind this is lack of computerisation and ignorance. Material and methods: With this idea in mind we joined hands with Indo US Cancer Knowledge Alliance (IUCKA) OHSL, IBM Watson (USA), and Prolitus Technologies to develop a database of our own neurooncology patients. Computerization of data: Data is captured in well structured forms including history, physical examination, investigations, surgical details, histopathology report, special staining, adjuvant radiotherapy, adjuvant chemotherapy, status at follow up visits and so on. A powerful cognitive software is developed. The powerful database is going to look into whole collection in realtime and going to provide guidance for treatment based on the results from our own cases. Each patient entering into the database is going to guide a future patient if the index patient characteristics matches to the patient. Suppose we have 500 cases of GBM in our database with reasonably good follow up. Once a new patient's case is entered into the system, the software is going to pull the information from similar patients in the system. This can predict the local control and survival for the index case which is going to get treated in our settings. We have also added some novel features to this software to make our day to day work easy. The software will also give rule based intelligent guidance for treatment. This means that we are blending the standard guidelines with the database. For example, once a GBM patient is entered into the system, it will suggest for surgery followed by concurrent chemo-radiation with the standard doses for RT and chemotherapy. The system will also advice the physician of the target volumes used for contouring. In a case of medulloblastoma it will suggest for craniospinal irradiation with doses, volumes, adjuvant and concurrent chemotherapy doses. The system will be able to send messages/emails for treatment visits or followups. The system can also identify the patients who are lost to followup . Once a patient comes to the hospital on a particular day, and patient puts his/her thumb on the thumb reader, the software can automatically redirect to the patients page displaying a short summary of the case and showing what the patient has come for on that day. Suppose patient has come for 4th cycle of adjuvant chemo, the system will ask to check for the blood results and to enter the weight. This will also ask whether the patient had any toxicities. If everything is fine, and once we put the weight in the particular field, the system will give the prescription for next cycle of chemotherapy to be taken as printout. The system can provide ready made data for publications at any point of time. The cloud based operation and offline access makes this even more attractive. Conclusion: Present day powerful computing tools can guide the treatment of an individual patient utilising the results of previous similar patients treated in the same environment. These results are more relevant than the literature ones. Computerization will also make our workflow very simplest and help to avoid errors and saves the physician time in busy clinical settings.

Abstract Id: YUGP4557
Evaluation Of Post Operative Outcome Of Surgically Treated Patients With Spine Metastasis: A Single Institution Experience Of 110 Cases
Presenter- Dr. Suraj Hindiskere
Co-author - Dr Pramod S. Chinder, Dr Amrith Mascarrenhas, Dr Srinath Doddarangappa
Purpose: To evaluate postoperative outcomes and survival rates of patients surgically treated for symptomatic spinal metastasis from a variety of primary tumours. Method: From March 2011 to May 2015 a total of 110 cases were treated surgically. The indication for surgery was based on the presence of symptomatic spinal metastasis or unbearable pain or instability of the spine. Neurological status (Frankel grading), Karnofsky performance scale, VAS score for pain was calculated prior to the operative procedure and the same was reassessed postoperatively. Patients with life expectancy more than 3 months with no active foci of local or systemic infection were operated upon. There was no exclusion based on the type of tumour. Result: Mean age was 59.4 years (range: 39-76years). The median interval between diagnosis of primary tumour and surgery was 2.7 years. 83 patients had neurological deficits. Pre-operative local radiation was given in 52 cases. 87 patients had an unstable or potentially unstable spine. Average pre-op VAS score was 7.8. Before the surgery 28 patients were non-ambulant and more than 50% of the study population were of Karnofsky index 50 and 60. Preoperative embolization was required in 8 patients and intra-operative in 2 patients. Posterior decompression and Stabilization was performed in 103 patients (92.72%), posterior decompression only in 2, anterior decompression, corpectomy and Vertebral body reconstruction in 3 patients and Vertebroplasty was performed in 8 patients, adjuvant to Posterior decompression and stabilization. Evaluated at 2 weeks, 2 months and 6 months and 1 year post op. 91% had improvement by at least 1 Frankel grade by 8 weeks. No cases of worsening/ new onset neurological deficits were seen. At 2 months, average VAS score improved from 7.8 to 3.1 (p=0.02) and average Karnofsky improved from 58.18 to 69.23 (p=0.001). At 6 months, 6/28 non-walkers (Frankel C-E) were ambulant and at 1 year 68% had no deterioration of Frankel grade. At final follow-up, 13% had succumbed to the primary disease. Conclusion: Our findings suggest that there is a significant improvement in the quality of life, functional status and pain, following simple surgical decompression and spinal stabilization irrespective of the prognosis of the patient. Surgery also prevents impending vertebral column collapse and new or worsening of cord injury. The complication rates and the risk involved with the surgery were found to be negligible contrary to the conventional belief.

Abstract Id: YUGP4559
Placental Site Trophoblastic Tumor
Presenter- Dr. Sumangala Galli
Co-author - Geeta Acharya, Premalatha T S, Kiran A Kulkarni
INTRODUCTION- Placental site trophoblastic tumor (PSTT) is a rare form of gestational trophoblastic disease accounting for 1-2% of trophoblastic tumors. Common presentation is irregular vaginal bleeding. PSTT originates from the intermediate trophoblasts in the placenta. Age >35 years, interval since antecedent pregnancy of over 2 years, deep myometrial invasion, stage III or IV, maximum hCG level >1,000IU/L, extensive coagulative necrosis, high mitotic rate, and the presence of cells with clear cytoplasm were signi?cant prognostic factors. The standard treatment for PSTT is hysterectomy as it is fairly resistant to chemotherapy. Single agent chemotherapy is not effective for PSTT and a regimen of multiagent chemotherapy for choriocarcinoma (EMA/CO, MEA, EP/EMA) is recommended. CASE REPORT- A 35-year-old PRL3 woman presented with 2 months of heavy menstrual bleeding. Her last pregnancy was delivered by spontaneous vaginal delivery 11 years ago She was tubectomised. On examination she had mass protruding through cervical Os and 10 weeks uterus. Ultrasound and MRI showed 9x8 cms heterogenous mass protruding in the cervical canal. Initial beta hcg was 9498. HPR of the mass showed PSTT. She was treated with total abdominal hysterectomy and retroperitoneal lymphnode dissection. Immunohistochemistry showed a mixed intermediate trophoblastic tumour with components of epithelioid trophoblastic tumour and placental site trophoblastic tumour. She received 6 cycles of adjuvant chemotherapy with etoposide, methotrexate, actinomycin, and cisplatin (EMA-EP). On follow up patient is disease free for 9 months.

Abstract Id: YUGP4561
A Randomized Controlled Trail Comparing Clinical Response Between Hypofractionated Versus Conventional Fractionated Radiotherapy In Early Stage Carcinoma Larynx
Presenter- Dr. Pandimit Lepcha
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Co-author - Prof Dr Asit Ranjan Deb, Dr Amitava Mannia, Dr Bappaditya Chhatui

BACKGROUND: Diagnosed in early stage, laryngeal cancer is a curable disease with single modality therapy, either surgery or radiation. The 5 year survival for all stages combined is 65%, making laryngeal cancer one of the most curable cancers of the upper aero-digestive tract. OBJECTIVE: The primary objective of this study is to assess / compare the clinical response between hypofractionated versus conventional fractionated radiotherapy in early stage laryngeal cancer, loco-regional control, Disease free survival at one year post treatment and acute and late toxicities. MATERIALS AND METHODS: Between January, 2016 and June, 2017, at Department of Radiotherapy, Medical College, Kolkata, 88 patients with early stage carcinoma larynx were treated with Conventional and Hypofractionated RT. Histopathologically proven ,male and female, age between 18-70 years, AJCC 7th edition, 2010, T1 & T2 disease were included in the study. Radiotherapy dose- 55Gy in 20 fractions in 4 weeks. All patients were treated in Cobalt 60 machine. Median treatment time was 28 days (range 23-35 days)

RESULT: Locoregional control after primary RT was 96%. Disease free survival at 1 year was 80%. Toxicities: Acute and Late were comparable. CONCLUSION: Hypofractionated RT is comparable to Conventional RT in terms of Loco-regional control and Disease free survival. “Department of Radiotherapy, Medical College, Kolkata, 88 college street, kolkata-700073 Phone- +91-9632338752 Email: pandimitlepcha02@gmail.com

Abstract Id: YUGP4569

A Large Pleural Based Tumour – Liposarcoma Of Pleural Cavity – A Case Report
Presenter - Dr. Bharathi Raja
Co-author - Prof Dr Gopi, Dr Syed Afroze Hussain, Dr K Bharathi Raja

Primary liposarcoma of pleural cavity is an extremely rare tumour. Only about twenty cases of primary liposarcoma have been reported yet. We report a case of 55 year old female patient complaining of right sided chest pain with cough for past six months. Her chest x-ray shows right sided opacity and CT imaging shows heterogeneously enhancing mass lesion occupying right thoracic cavity with the collapse of ipsilateral lung. We have done a right thoracotomy and excision of the mass lesion. Post operatively, it was reported as sclerosing form of well differentiated liposarcoma. We present this case for its rarity.

Abstract Id: YUGP4570

Small Cell Carcinoma Of Uterine Cervix- Biological Behavior And Treatment Results.
Presenter - Dr. RUMELI ROY
Co-author - NIBEDITA BISWAS, BODHISATTWA DUTTA, BARNINI GHOSH

SMALL CELL CARCINOMA OF UTERINE CERVIX- BIOLOGICAL BEHAVIOR AND TREATMENT RESULTS. INTRODUCTION: Carcinoma of the uterine cervix is the most common cancer in Indian (rural) women and the fifth most common cause of cancer deaths in women. Small cell carcinoma is a rare histology of cervical cancer associated with a worse prognosis and a predilection for nodal and distant metastasis. OBJECTIVE: To evaluate the clinicopathological presentation, biological behavior, treatment options and their clinical outcome for primary small cell carcinoma of the cervix. METHODS: Retrospective analysis of the modes of presentation, associated clinicopathological features, treatment outcomes and response pattern in patients with biopsy and IHC proven primary small cell carcinoma of the cervix presenting at the OPD of Radiotherapy, Medical College and Hospital, Kolkata from January 2012 till December 2016 is done.

RESULTS: Five patients with primary small cell carcinoma of the cervix with average age 35 years presented at different stages. Two patients were in IIA FIGO stage, one in IB FIGO stage and two patients were in IIB FIGO stage. Three patients (IB, IIA) underwent Wertheim’s hysterectomy. All the five patients received concurrent CTRT along with weekly cisplatin followed by intracavitary brachytherapy. One of the patients with FIGO IIA disease showed progressive disease and bone metastasis while receiving concurrent chemoradiotherapy. During follow up one patient (IIB) defaulted, another one (IIB) had extensive bone and lung metastasis at 12 months and remaining two patients (IB, IIA) had no relapse or metastasis and are on routine follow up. CONCLUSION: Primary small cell carcinoma of uterine cervix is a rare disease. Early-stage presentation and use of chemo-radiation were independent prognostic factors for improved survival. Most of the patients with higher percentage Ki 67 score were frequently characterized by the development of widespread hematogenous metastases and loco-regional recurrence outside irradiated fields. Here the role of neo-adjuvant/ adjuvant chemotherapy should be evaluated. Hence, primary Small Cell Carcinoma Cervix is overall associated with poorer prognosis.

Abstract Id: YUGP4573

A Study Of Frequency, Age And Sex Distribution Of Various Malignancies Reporting To A Regional Cancer Centre In Bihar
Presenter - Dr. Shraddha Raj
Co-author - Shraddha Raj, Dinesh K Sinha, Rajesh K Singh

Introduction: India is a country of diversity. The distribution of diseases including malignancies amply reflect variations in the geographical factors, ethnicity, climate, food habits, and lifestyle of the population. We are presenting the data from a Regional Cancer Centre in the Gangetic heartland. Materials and methods: This descriptive study aims to present the frequency, age and sex distribution of various malignancies in this region. Records of Hospital Based Cancer Registry(HBCR) of the year 2016 of RCC were analysed and subjected to statistical tests and were tabulated. Results: Out of a total of 4086 patients subjected to evaluation, Hepatobiliary cancers topped the Overall list (19.4%) with Gall bladder Cancers alone (14.31%) being the commonest, followed by Haematological malignancies (12.6%), Breast (10.9%), Oral Cavity (8.6%), Lung (6.9%), Cervix (6.6%), CNS (2.06%), Prostate (1.8%), Bone (1.8%), Rectum (1.6%), Colon (1.4%) and so on. Cancer Breast was the commonest malignancy among females (21.63%) while Cancer of the Oral Cavity was the most common among males (14.08%). Ca Gall Bladder showed a significant female preponderance (p<0.0001) whereas Brain (p=0.01), Bone (p<0.001), Oral Cavity (p<0.001), Larynx (p<0.001) and Haematological malignancies (p<0.001) showed a male predilection. The mean age of presentation was significantly higher for males in Breast (mean M-61yrs, F-47.66yrs, p<0.0001), Gastric (mean M-54.98yrs, F-49.15yrs, p<0.05) and HepatoBiliary sites (mean M-56.35yrs, F-51.89yrs, p<0.0001). Conclusion: Oral Cavity cancer is still the commonest among males, which may be attributed to rampant oral tobacco use in this region. Among females, the scenario of Breast Cancer is consistent with the entire country. However, Gall Bladder cancer, which is a deadly disease with very poor prognosis, has strikingly exceeded all other common malignancies in this RCC cancer Registry. It has got a significant female predilection and it appears significantly earlier in life in females. This poses us to an alarming situation. There is an urgent need to know more about the etiopathogenesis of this disease and to conduct multi-institutional research at various levels to find a suitable prevention and management for improved survival rates. Conflicts of interest none

Abstract Id: YUGP4575

Treatment Outcomes Of Carcinoma Vulva : A Single Institution Experience
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Presenter - Dr. Harjot Kaur Bajwa
Co-author - Rohith Singareddy, Krishnam Raju Alluri, Mahendra M Reddy

Aim: To evaluate outcomes in patients with vulval cancer treated with surgery, with or without postoperative radiotherapy or radiotherapy alone. Materials and methods: The hospital records were retrospectively analyzed from February 2007 to May 2016. All patients that had biopsy proven carcinoma vulva were included for analysis. Surgery was done by radical vulvectomy with or without lymph node dissection. Radical radiotherapy dose was 60 Gy (photons alone or with electron boost). Adjuvant radiotherapy was administered in case of node positivity, perinodal spread or positive or close margins. Acute toxicity was graded according to RTOG grading. Results: A total of 76 patients were diagnosed as squamous cell carcinoma of vulva. The median age was 59 years (29-82 years). 59 patients were treated by radical vulvectomy and 17 patients by radical radiotherapy. Most common stage was IB followed by stage II. Adjuvant radiotherapy was administered in 6 patients. 13 patients (22%) underwent inguinal lymphadenectomy. At a median follow up of 35 months (3 – 126 months), 49 patients (64.4%) were alive, 27 died (25 cancer related deaths) and 6 patients were lost to follow up. Local recurrence rate was 26.4% in radical surgery arm whereas 47% patients recurred locally in radical radiotherapy arm. Distant metastasis rate was 4% (3 patients). Adjuvant radiotherapy resulted in a local control rate of 83.4% compared to 73.4% in surgery alone arm. In patients treated by radical radiotherapy, incidence of grade 2 and 3 acute dermatitis was 70 percent and 45 percent respectively. Conclusion: Radical vulvectomy resulted in favourable local control rates in early stage carcinoma vulva. Radical radiotherapy can be considered in inoperable cases or patients with comorbidities.

Abstract Id: YUGP4577
Laparoscopic Ovarian Transposition (LOT) In Young Women Diagnosed With Non-Gynaecological Malignancy: Looking Beyond Oncological Outcomes
Presenter - Dr. Shweta Rai
Co-author - Shweta Rai, Dr. Rajendra Kerkar, Dr. Reena Engineer

Introduction: Any malignancy which requires radiotherapy to pelvis leads to irreversible ovarian failure in premenopausal women. Ovarian transposition offers a modality to salvage the ovaries for hormone and reproductive function in such women. However the prognosis of primary disease also determines the clinical and cost effectiveness of this procedure. This is a retrospective analysis of prospective database of young women undergoing laparoscopic ovarian transposition (LOT) for non-gynaecological cancers. Method: Database of all women undergoing LOT for non-gynaecological malignancy at TMH from August 2013 to January 2017 was reviewed. Laparoscopic ovarian transposition was undertaken in all patients requiring pelvic radiotherapy. Women with normal ovaries on CT/ultrasound scan and no peritoneal disease on laparoscopy underwent standard laparoscopic transposition technique taking care to secure ovaries 2 - 3 cms above the umbilicus. Results: The study identified 36 women in whom LOT was performed following informed consent. Of them 28 women (77.8%) had rectal cancer, other indications included bone and soft tissue tumors (5), lymphoma (1) and primitive neuroectodermal tumors (1). Median age of women was 24.2years (Range 8yrs-35yrs). 61 % were nulliparous. Sixteen women (44.4%) were unmarried. None of them had family history of cancer. Thirty two of them were post menarchal with regular periods. One was premenarchal and three had amenorrhoea (lactation (2) and postchemotherapy (1). Two women had unilateral transposition as they were planned for unilateral side wall radiation. Six women had laparoscopic diversion stoma along with LOT. Post-operative course was uneventful with an average hospital stay of 48 hrs. There was no delay in starting definitive radiotherapy for cancer because of ovarian transposition. Ten women had completed treatment and were disease free at the time of analysis. Median disease free interval was 15 months (2months-8months). Ten were still undergoing primary treatment. 16 women had either recurrent disease or succumbed to disease keeping with the 3 year survival of around 50% for locally advanced rectal cancer in India. Follow up data of >6months for ovarian function was available for 5 women. Three women had resumed normal periods, two were still amenorrheic with hormone levels in menopausal range and were given HRT. Out of these two one was a case of follicular lymphoma treated with RCHOP regimen and radical radiotherapy to paraaortic nodes. The other was a case of chondroid tumor of pelvic bone who received radical radiotherapy to the dose of 72Gy. Conclusion: Laparoscopic ovarian transposition is a feasible and feasible option to protect ovaries prior to pelvic radiotherapy and carries minimal surgical risk with no delays in definitive treatment. The data is not mature on long term hormone and fertility outcomes. Mid and Long term oncological outcomes should be balanced with quality of life and cost effectiveness.

Abstract Id: YUGP4579
Extra Nodal Follicular Dendritic Cell Sarcoma Of Mesentery Eroneously Diagnosed As Gastrointestinal Stromal Tumors (Gist): Importance Of Immunohistochemistry Markers
Presenter - Dr. Amit Gupta
Co-author - Dr Shraddha Patkar, Dr Ayushi Sahay, Dr Mahesh Goel

Introduction: Extra-nodal follicular dendritic cell sarcomas are an uncommon entity, first reported in 1994 in head and neck cases. Extra-nodal dendritic cell sarcomas are commonly misdiagnosed and underreported. Follicular dendritic cell sarcoma was not even considered as a differential diagnosis, due to limited use of immunohistochemistry (IHC) in the past. Material and Methods: We report, an interesting case of 28 year old gentleman who had presented to our hospital in 2013 with a history of being operated for mesenteric disease keeping with the 3 year survival of around 50% for locally advanced rectal cancer in India. Follow up data of >6months for ovarian function was available for 5 women. Three women had resumed normal periods, two were still amenorrheic with hormone levels in menopausal range and were given HRT. Out of these two one was a case of follicular lymphoma treated with RCHOP regimen and radical radiotherapy to paraaortic nodes. The other was a case of chondroid tumor of pelvic bone who received radical radiotherapy to the dose of 72Gy. Conclusion: Laparoscopic ovarian transposition is a feasible and feasible option to protect ovaries prior to pelvic radiotherapy and carries minimal surgical risk with no delays in definitive treatment. The data is not mature on long term hormone and fertility outcomes. Mid and Long term oncological outcomes should be balanced with quality of life and cost effectiveness.

Abstract Id: YUGP4581
Limb Saving In Shoulder Girdle Sarcoma With Endo-Prosthetic Implant Tikhoff Linberg Surgery
Presenter - Dr. Zubair Ahmed
Co-author - Brig (Dr) Sanjay Kapoor, VSM, Col (Dr) A K Tyagi, Gp Capt (Dr) Pradeep Jaiswal

Introduction- Approximately 95% of patients with tumors of the shoulder girdle can be treated with limb-sparing resections . The Tikhoff–Linberg resection and its modifications are limb-sparing surgical options for bone and soft-tissue tumors in and around the.
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proximal humerus and shoulder girdle. Portions of the scapula, clavicle, and proximal humerus are resected in conjunction with all muscles inserting onto and originating from the involved bones. Careful preoperative staging and selection of patients whose tumor does not encase the neurovascular bundle, or invade the chest wall, are considered. Optimal function is achieved with muscle transfers and skeletal reconstruction. A prosthesis is used to maintain length and stabilize the shoulder and distal humerus following resection. A stable shoulder with normal function of the elbow, wrist, and hand is achieved following most shoulder girdle resections and reconstructions performed. CASE REPORT 1- osteosarcoma right upper humerus 21yr/M, presented with Pain Right Shoulder onset jan 2015. Evaluation- X-ray right shoulder s/o upper end humerus mass with bone erosion. MRI Right Shoulder/CEPT Thorax – Heterogenous enhancing expansile lesion involving greater tuberosity of humerus and extending to proximal shaft having cortical break and extraosseous extension. Biopsy- osteogenic sarcoma. Patient received 6#NACT (Ifosfamide+Adriamycin+Cisplatin). Post NACT underwent Extra capsular Type VB Resection of upper end humerus, with modular endoprosthetic reconstruction. Final HPE- Osteogenic sarcoma 100% Necrosis. Case Report 2- Rhabdomyosarcoma Right upper end humerus 21yr/M, Right shoulder pain and swelling right shoulder onset sep 2015. Evaluation: X-ray Right shoulder- Multiple osteolytic lesion causing cortical and medullary bone destruction with moth eaten appearance and periosteal reaction involving head and proximal 1/3 shaft of humerus. MRI Right shoulder/CEPT Thorax- poorly circumscribed lytic sclerotic lesion involving upper half humerus length of 14cm, associated soft tissue component 4.0x5.0cm abutting deltoid, long and short head of biceps, supra and infraspinatus. Biopsy- Malignant mesenchymal tumour. Received NACT(Doxorubicin, cisplatin and methotrexate). Post NACT underwent Extra capsular Type VB resection of upper end humerus with modular endoprosthetic reconstruction. Final HPE- Rhabdomyosarcoma. Case Report 3- Ewings sarcoma Left scapula. 18yr/M , symptomatic with swelling left upper back and shoulder onset july 2014. Evaluation: Tru-cut biopsy s/o Ewings sarcoma/PNET M1C-2 and FLI-1 Diffusely +ve. Synaptophysin and S-100 Focal +ve. CD 31- Neg. CECT Thorax/PET-CT scan- Avid soft tissue mass lesion left scapula 10x8cm (SUV-9.3). MRI Left Shoulder-Large lobulated mass lesion with partial destruction of scapular body, spine, and glenoid, infiltrating subscapularis, supra and infraspinatus measuring 10x8cm Serum LDH- 475 Received Primary treatment NACT 5#VAC/4# IE. Post NACT underwent classical Tikhoff Linberg (Type IVB Malawar)-Resection of complete scapula with involved soft tissue, distal 2/3 clavicle, upper End Humerus with Scapular and Humeral Endoprosthetic Reconstruction. Final HPE- No residual tumour. OPERATIVE TCHINIQUE. 1. A utilitarian incision is utilized. The anterior component is an extended deltopectoral incision that exposes the pectoralis major muscle, which is then released and retracted towards the chest wall. This exposes the axillary contents and permits exploration and safe dissection of the vascular, neural and infracavicular plexus. 2. An extra-articular resection is performed. Thus, the axillary nerve is identified and transected. The musculocutaneous nerve is identified and preserved. The radial nerve, which crosses the humerus posteriorly at the level of the deltoid insertion, is preserved. 3. Approximately one-half to two-thirds of the humerus is resected. 4. An extra-articular resection is performed by exposing the glenohumeral joint both anteriorly and posteriorly. The scapula is osteotomized medial to the coracoid along with the distal portion of the clavicle. The resected specimen consists of the proximal one-half of the humerus, the glenohumeral joint, and the distal clavicle en-bloc. 5. A modular replacement proximal humeral prosthesis is utilized to reconstruct the skeletal defect by fixation of prosthesis into remaining distal humerus, and stabilizing head of prosthesis to scapula using Dacron Mesh and tape providing static suspension. 6. Dynamic suspension is provided by transfer of the cut end of short head of the biceps muscle to the stump of the clavicle that allows elbow flexion. 6. Muscle groups are tenoised to pectoralis major and osteoarticularised bone of scapula provides soft tissue cover to prosthesis and prevents skin problems and secondary infections. RESULTS 1. Its nearly 6month to 1 yr post surgery in these cases. Patients of Ewings and Rhabdomyosarcoma are receiving their adjuvant chemotherapy. 2. Oncologically histological margins were free of disease in all 3 patients. Patient with osteosarcoma is disease free 1yr post surgery. 3. No tumour complications/ recurrence noted till date. 4. None of them had neurological or vascular complications or SSI or Flap necrosis. 5. Functional range of motion of hand , forearm and elbow are unaffected. Hand dexterity(Fine motor skills) were normal. Case 1 is able to drive 24 wheeler vehicle. Shoulder Abduction was 30-40 deg in case 1( Abductor mechanism partly preserved), whereas in Case 2,3 no shoulder abduction possible(wide resection in view of soft tissue involvement). 6. Musculoskeletal Tumour society staging system(MSTS Scoring)- 80%(Range 68-90%). Patient age/sex Type of tumour stage Type of resection Compication Status on F/U Function outcome Length of F/U Recurrence 21/M Osteo-sarcoma I IVB Nil NED 90% 1YR NO 21/M Rhabdomyo- sarcoma III VB Nil NED 68% 6M NO 18/M Ewings sarcoma III VB Nil NED 70% 6M NO DISCUSSION The treatment of many musculoskeletal neoplasms has changed from radical ablative surgery toward limb salvage. Tumors of the shoulder girdle are challenging the surgeon to preserve function and cosmesis without compromising local tumor control. In past the reconstruction of skeletal defects created by resection of the proximal humerus includes arthrodesis, osteoarticular allografts, and autogenous grafts. The Tikhoff-Linberg procedure is indicated in tumors of the scapula, proximal humerus, lateral clavicle, or of the periscapular soft tissue where tumor invasion of the subchondral bone, the joint capsule, synovial membrane, or the entire joint is evident on preoperative studies. Prerequisites for the procedure are that the tumor does not extend to the axillary neurovascular bundle, to the chest wall, or the lymph nodes. Conclusion Most sarcomas of the shoulder girdle involving the proximal humerus can be managed with reconstruction of the created defect under preservation of the shoulder joint. Our experience shows that this procedure, though challenging and complex, can be practiced regularly on properly selected cases of shoulder girdle sarcoma, with gratifying results.

Abstract Id: YUGP4583

Cell Free Circulating Tumour Dna (Cftdna) - In Laryngeal Carcinoma-A Further Directives As Diagnostic Marker Presenter- Dr. C K Fareena Taj Co-author - Dr Kurian J Pthur, Dr Shubha Supriya A, Dr A Sathish Cell-free circulating tumor DNA (CFTDNA) – in Laryngeal Carcinoma-a future directives as Diagnostic marker. Fareena Taj C K, Kurian J Pthur, Shubha Supriya A, A. Sathish, Khaleel I A, Naveen T, Sridhar P, Siddanavar P, Suma*, Govardhan H B Dept. Of Radiation Oncology, * Dept. Of pathology. Kidwai Memorial institute of Oncology (KMIO), Dr M H Marigowda Road, Bangalore, Karnataka-560029. Background: There are many diagnostic modalities are developed or under development to improve the diagnostic ability and to prognosticate in patients with laryngeal carcinoma. Cell-free circulating tumor DNA (CFTDNA) is one among them. In this study we are aiming to know the diagnostic ability at diagnosis and at early recurrence of Cell-free circulating tumor DNA (CFTDNA). Also to know its utilization in prognostication and to guide for genomically matched therapy. Methods and Material: A total of 20 patients with squamous cell carcinoma of larynx were tested prospectively with 50 gene tumor panel in a NABL accredited laboratory. 4 ml serum was collected, CFTDNA was isolated and they were checked for single nucleotide variants (SNVs) genes/ copy number variants (CNVs) by using NGS and tumor ffpe blocks were again rechecked by NGS or PCR for the same genetic alterations. Results: Average patient age was 69.5 (range 49-79) and all patients were laryngeal carcinoma. In 18(20%(90%) patients, CFTDNA was detected and sufficient to carry under NGS. Out of 50 genes, around 5 genetic alteration were detected. Mean genetic alteration was 6.75(2-11). In 7/20 (35%) patients more than 8 genomic alteration detected, 8/20(40%) patients had 5-8 genetic alteration, remaining 5/20(25%) patients had
Abstract Id: YUGP4585

A Rare Case Of Carcinoma Rectum Presenting Initially With Proptosis
Presenter- Dr. PRUDHVIRAJ MASAPU
Co-author - Dr.E.Prahalaad, Dr.N.V.S.Praveen, Dr.Siva Sankar Kote

A 40-year-old male came with complaints of sudden protrusion of right eye in April 2017. MRI brain suggested tuberculous etiology of the right greater wing of sphenoid with orbital extension. A decompans craniorotia was done to reduce protrusion of the right eye. The histopathological report suggested mucin secreting adenocarcinoma. The patient had a past history of few episodes of blood stained stools. On per rectal examination, a circumferential growth is felt and its lower extent is 4cm from the anal verge. Biopsy of the lesion in rectum was performed. Histopathological features coincided with the intracranial lesion that is mucin secreting carcinoma. The patient received palliative radiotherapy to the intra cranial lesion, and further planned with palliative chemotherapy. Conclusion: Mucin secreting adenocarcinoma anywhere in the body should raise the suspicion of the rectal primary and probe the clinician for a colorectal examination.

Abstract Id: YUGP4591

Clinicopathological Features Of Triple Negative Breast Cancer: A Perspective Analysis
Presenter- Dr. PRAMOD CHANDOLIA
Co-author -

Abstract: Aim • The aim is to study various clinicopathological features of TNBC in Northern part of INDIA. Background: • Molecular classification of breast cancer is based on gene expressing profile. • They subgroup [luminal A, luminal B, HER2, and basal like] have distinct gene expression pattern and phenotypical characteristics. • TNBC shares phenotypical features with basal like breast cancer, which is in turn the most aggressive and with worst outcome. • There is a growing evidence of the heterogeneity of such entity on the molecular level that may cause discrete outcomes • They are associated with aggressive histology, poor clinical outcome, associated with BRCA1 mutation and unresponsive to endocrine therapy and short survival. Material And Method: • Study Design: Hospital based retrospective, descriptive type of observational study. • Study place: Dept. of general surgery SMS hospital Jaipur. • Study population: 338 cases of diagnosed breast cancer. • Statistical Analysis: Descriptive statistics. Result: • Total breast cancer patients studied = 338 • 30 patients [9.7%] were found to have TNBC • Most [56.6 %] were before the age of 45 years. • More common in pre menopausal women[60 %] • Most of TNBC [96.6 %] had histological features of IDC Conclusions: TNBC represents around 10 % of breast cancer in the rectal primary and probe the clinician for a colorectal examination.

Abstract Id: YUGP4595

Cell-Free Circulating Tumor Dna (Cftdna) – In Ossephageal Carcinoma- A Future Directives As Diagnostic Marker.
Presenter- Dr. KURIAN J PUTHUR
Co-author - Kurian J Puthur, Fareena Taj C K, Shubha Supriya A

Back ground: There are many diagnostic modalities are developed or under development to improve the diagnostic ability and to prognosticate in patients with oesophageal carcinoma. Cell-free circulating tumor DNA (CFTDNA) is one among them. In this study we are aiming to know the diagnostic ability at diagnosis and at early recurrence of Cell-free circulating tumor DNA (CFTDNA) and also to know its utilization in prognostication and to guide for genomically matched therapy. Methods and Material: A total of 20 patients with squamous cell carcinoma of oesophagus were tested prospectively with 50 gene tumor panel in a NABL accredited laboratory. 4 ml serum was collected, CFTDNA was isolated and they were checked for single nucleotide variants (SNVs) genes/ copy number variants (CNVs) by using NGS and tumor fine blocks were again rechecked by NGS or PCR for the same genetic alterations. Results: Average patient age was 65.3 (range 49-75) and all patients were squamous cell carcinoma. In 17/20(85%) patients, CFTDNA was detected and sufficient to carry under NGS. Out of 55 genes, around 10 genetic alteration were detected. Mean genetic alteration was 2.7(0-5). In 9/20 (45%) patients, more than 3 genomic alteration detected. Conclusions: CFTDNA can be easily demonstrable and can be used as non-invasive diagnostic tool in oesophageal carcinoma. Further, to create proper genetic module as diagnostic and prognostic marker-continuation of the study in large scale with different race, ethnicity and country required.

Abstract Id: YUGP4597

A Rare Case Of Massive Fungating Ewings Sarcoma Of Scapula Treated By Limb Salvage Surgery
Presenter- Dr. Sunraj Hindiskere
Co-author - Dr Pramod S. Chinder, Dr Srinath Doddarangappa, Dr Utkarsh Pal

Background: Ewings Sarcoma is a rare and highly malignant small round cell tumour that primarily affects the skeletal system. It accounts for 4 to10% of all types of bone cancers and is the second most common bone tumour of childhood and adolescence, usually seen between 5-30 years of age with a male preponderance of 1.6:1. The Ewings sarcomas usually arise in the metaphysis or diaphysis of long bones of extremities, It may affect any bone but is frequent in femur, ilium and tibia. The skull, vertebra, scapula and short tubular bones of hand and feet are rarely involved. Primary bone tumours of the scapula are more likely to be malignant than benign. An extensive review of the literature showed only a few reported cases of the Ewings sarcoma of the scapula. This case report elucidates the importance of professional knowledge of the relevant aspects of Ewings sarcoma as we present a case of massive fungating non-metastatic Ewings sarcoma of the right scapula. Material and Methods: A 24year old girl presented to us with a massive fungating mass over the left shoulder and upper back. The swelling was insidious in onset and gradually progressing over the past two years. An ulcer developed over the swelling about 3months prior to the presentation which progressed rapidly in size. CT scan and MRI of the shoulder and upper back showed a large 15x30x27cms osteolytic lesion arising from the left scapula with multiple fluid levels and areas of necrosis and soft tissue infiltration, however, the posterior chest wall was not involved. PET scan showed no signs of distant metastasis. Results and Conclusion: Following two episodes of selective arterial embolization, the patient was managed by a multimodal approach including En-bloc excision of the tumour mass with total scapulectomy and adjuvant chemotherapy and radiotherapy. The defect over the back following resection was filled by a latissimus dorsi free pedicle flap. Patient on follow up had a satisfactory functional range of motion of the left shoulder and a full range of motion of left elbow, wrist and fingers. On final follow up of 1year, the patient showed no signs of recurrence or metastasis. Even in cases of unusual Ewings sarcoma, the mainstay treatment should include multi-agent chemotherapy and aggressive surgical treatment and radiotherapy. In such aggressive and massive tumours, good surgical technique results in a salvageable limb which is of utmost importance in any musculoskeletal tumour surgery.
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Abstract Id: YUGP4601
Pattern Of Pancreaticobiliary Cancers At Institute Of Liver And Biliary Sciences, New Delhi
Presenter- Dr. Puja Sahai
Co-author - Hanuman Prasad Yadav, Namita Sharma, Shiv Kumar Sarin

Pattern of pancreaticobiliary cancers at Institute of Liver and Biliary Sciences, New Delhi Puja Sahai, Hanuman Prasad Yadav, Namita Sharma, Shiv Kumar Sarin Departments of Radiation Oncology, Medical Oncology, Hepatology Institute of Liver and Biliary Sciences (ILBS), New Delhi, India Objective: To evaluate the pattern of pancreaticobiliary cancers registered at our institute over a period of 1 year. Materials and Methods: We identified patients diagnosed with pancreaticobiliary cancers in 2016. We retrospectively collected and analysed the demographic and diagnostic details of the patients. Results: A total of 120 patients were diagnosed with pancreaticobiliary cancers in 2016. The demographic and diagnostic details of all patients were summarized. The median age of the patients was 57.5 yrs (range, 29-82 yrs). There were 59 males while 61 females. The distribution of patients among sites were as follows: intrahepatic bile duct (n=6), extrahepatic bile duct (n=16), gall bladder (n=61), periampullary (n=33), and pancreas (body) (n=4). The subsites of extrahepatic bile duct cancer included hilar (n=15) and distal (n=1). The subsites of periampullary cancers consisted of ampulla (n=10), distal CBD (n=6), head of pancreas (n=14), second part of duodenum (n=1), and not specified (n=2). A female preponderance (n=38) was observed in the case of gall bladder cancer while male predominance (n=24) in the case of periampullary cancers. The morphology was adenocarcinoma in the majority of the patients. Other types of morphology were observed in the case of gall bladder cancer i.e., adenosquamous carcinoma (n=2), small cell carcinoma (n=2), and mucinous adenocarcinoma (n=1). With respect to periampullary cancers, morphological types were as follows: adenocarcinoma (n=28), mucinous adenocarcinoma (n=1), colloid adenocarcinoma (n=1), neuroendocrine tumor (n=2), not specified (n=1). The number of patients with non-metastatic disease was as follows: intrahepatic bile duct (n=1), extrahepatic bile duct (n=11), gall bladder (n=29), periampullary (n=24), and pancreas (n=1). The remaining patients had presented with metastatic disease. Conclusions: Gall bladder was the most common site among pancreaticobiliary cancers registered at our institute. The majority of cholangiocarcinomas were of hilar origin. Pancreatic involvement was more common in the head region. Well-designed site-specific clinical trials need to be formulated on pancreaticobiliary cancers.

Abstract Id: YUGP4605
Endometrial Carcinoma- 4 Year Experience From A Tertiary Cancer Center in North Kerala
Presenter- Dr. ASWATHI KRISHNAN M
Co-author - Dr. Sangetheeta K. Nayanar, Dr. Indu Sarath, Dr. Sampada B Dessa

Endometrial carcinoma is one of the commonest gynaecologic cancers. It is the sixth most commonly diagnosed cancer among women worldwide and its incidence is on the rise. Most of the cases present at an early stage. Patients who present with aggressive tumors usually have disease spread beyond uterus at the time of presentation. Endometrial carcinomas are broadly classified as Type 1 and Type 2 carcinomas. Overall outcome of endometrial carcinomas depends on the stage and histologic grade. Type 1 carcinomas show 5 year disease free survival of 80% and type II carcinomas 45%. This retrospective study was conducted using the data from the years 2013 to 2016 in a tertiary referral center to check the prevalence of endometroid and serous carcinoma in northern Kerala. Totally 105 patients were considered and the age ranged from 36 to 80. Out of this, the percentage of patients with endometroid carcinoma was 72.4 percentage and 20 percentage had serous carcinoma. The rest of the cases consisted of MMT, Clear Cell Carcinoma etc. The median age of all the patients considered was 58. The median age of the patients with endometroid carcinoma was found to be 58.5 and that of patients with serous carcinoma was 56. The LVI percentage was observed at 7%. The most commonly observed grade was G1, going well above 80%.

Abstract Id: YUGP4607
Retrospective Audit Of Internal Mammary Lymph Node Dissection In Breast Cancer- Is There A Role In Current Multi-Disciplinary Management?
Presenter- Dr. Pragnya Chigurupati
Co-author - dr shalaka joshi, dr nita nair, mr rohit

BACKGROUND: Internal mammary lymph node (IMLN) is also a first echelon basin for lymphatic drainage from breast. But, there is substantial controversy over its management. It is not usual practice to surgically address the IMLN. Historically, randomized trials have failed to demonstrate a survival benefit from surgical IMLN treatment, but the studies have multiple caveats. Currently, the modality used to treat IMLN is radiotherapy with survival benefit for the inner quadrant tumors. With positive axillary nodes, there is up to 40% incidence of IMLN involvement, with inner quadrant and multi-centric tumors more likely to have positive IMLN. N2b and N3 disease constitutes 10-15% of our patient population and hence addressing the IMLN is a dilemma we face in Indian breast cancer patients. METHODS: We conducted a retrospective audit of patients who have undergone IMLN dissection (IMLD) between 2000-2015 at our institution. The IMLN were addressed by Chamberlain’s procedure. Complete data was available for 120 patients and was retrieved from hospital Electronic Medical Records. RESULTS: Of the 120 patients whose data was reviewed, the median age 53.5 years (range 24-81). Sixty-eight (56.7%) patients underwent upfront surgery and 52 (43.3%) were operated post chemotherapy. Tumor quadrant related incidence was found to be 87 patients, 38 (43.6%) inner, 26 (30%) outer and 23 (26.4%) were central or multicentric tumors. Among these 87 patients, the inner and central quadrant tumors were more likely to have positive I MLN lymph nodes (p 0.033). Overall, in 60% (73/120) of cases IMLN was identified and 32.87% (24/73) were positive, the others having only fibrofatty tissue. The number of IMLN...
Abstract Id: YUGP4613

Is Signet Ring Or Poorly Differentiated Histology A Contraindication For Inter-Sphincteric Resection: Results From Single Centre Retrospective Study From India.

Presenter - Dr. BALU MAHENDRA K
Co-author - KAMLESH VERMA, ASHWIN DESOUZA, ASHISH POKHARKAR

Background and Introduction: Inter-sphincteric resection is done in patients who have low rectal cancer with uninvolved anal sphincters. At present, there is a paucity of data regarding the risk of recurrence in poorly differentiated rectal adenocarcinoma after undergoing inter-sphincteric resection (ISR). Objective To determine whether signet ring or poorly differentiated rectal cancers are associated with increased risk of local recurrence after Inter-sphincteric resection.

Study Design: Retrospective review from a prospectively maintained database of patient who underwent surgery for carcinoma rectum.

Inclusion Criteria: Patients with adenocarcinoma of rectum, for whom information about grade and signet ring morphology was available and underwent ISR. Exclusion Criteria: 1. Previous cancer in the pelvic region which required treatment by Surgery / chemotherapy/ Radiotherapy. 2. Patients who underwent surgery outside. RESULTS: 139 patients underwent ISR for low rectal adenocarcinoma from Feb 2013 to March 2017. Information regarding grade and signet ring morphology was available for 133 patients. Median follow up period was 24.1 months. Analysis of local and systemic recurrence patterns of these patients are in table 1. Table 1: Pattern of recurrences in Rectal adenocarcinoma S. No. Recurrence Type Signet ring cell histology Poorly Diff. Histology Mod. Diff. Histology Well Diff. Histology Total 1. No Recurrence 10 (62.5%) 16 82 4 112 2. Local recurrence 0 3 0 3 3. Systemic Recurrence 6 2 10 0 18 Total 16 18 95 4 133 Local recurrence patterns were analysed using Pearson Chi-square test and no significant difference between local recurrences with regard to histology was observed (p = 0.110). Conclusion: Poorly differentiated or signet ring histology are not associated with high risk of local recurrence after inter-sphincteric resection. Most of the recurrences after inter-sphincteric resection are systemic hence sacrificing sphincter (Abdomino- perineal resection) in hope of achieving better disease control is not justifiable if marginal gain can be achieved after ISR.

Abstract Id: YUGP4617

Pelvic Exenteration For Primary And Recurrent Pelvic Malignancies: A Retrospective Study With A Comparison Of Rectal And Non-Rectal Cancer

Presenter - Dr. Shiva Kumara
Co-author - Kapil dev, Dr Ramachandra, Dr K V Veerendrakumar

Title: Pelvic exenteration for primary and recurrent pelvic malignancies: A retrospective study with a comparison of rectal and non-rectal cancer Shiva Kumara, Kapil Dev, C Ramachandra, Prof KV Veerendrakumar Introduction Complete surgical resection is an important predictor of long-term survival in locally advanced as well as in recurrent rectal cancer. Total pelvic exenteration was initially recognized for residual or recurrent gynaecological malignancies, however, it has been performed in primary or recurrent cancer of the cervix, rectum, vagina, uterine corpus, vulva, prostate, bladder, and for pelvic sarcoma. Although, such radical surgical approach to rectal cancer and other pelvic organ cancers have a significant morbidity but impressive results in improvement in loco-regional control of disease. Material & Methods Forty-three patients with various pelvic pathologies underwent TPE between 2011 and 2015, including 25 with rectal cancer (21 primary and 4 recurrent), 9 with cervical cancer (3 primary residual and 6 recurrent), 3 with endometrial carcinoma (2 primary and 1 recurrent), 4 with sarcoma (2 primary and 2 recurrent), 2 with urinary bladder cancer. Patients were divided into two groups based on pathology: colorectal (n=25) versus non-colorectal (n=18) malignancies. Demographics,
operative reports, pathology reports, peri-operative events, and outcomes were analysed. Comparison of the two groups was performed using student’s t-test and Fisher’s exact test. Survival curves were constructed using the Kaplan–Meier method and compared using the log rank test. Results Thirty-four patients underwent total pelvic exenteration, 4 anterior exenteration and 5 posterior exenteration. The median follow-up was 19 (range, 1–39) months. Operative time, intra-operative blood loss, mean ICU stay, peri and post-operative morbidity were similar in both groups. Rectal cancer group had higher rate of complete resection (60% versus 50%, p=0.04). QOL was better in rectal cancer group patients. Median local-regional recurrence free period was longer in rectal cancer group (16.3 versus 7.2 months, p=0.001). Survival difference was found associated extent of resection in R0 and R1, 26.3 versus 11.2 months. Conclusion Rectal cancer patients undergoing pelvic exenteration surgery have better survival when compared with patients with pelvic malignancies of other origins. The extent of resection demonstrated a significant impact on oncological outcome in R0 resection compared with R1 and R2 resections. Despite compromised QOL and high morbidity rate, mortality rates can be optimized with careful patient selection.

Abstract Id: YUGP4619
An Unusual Case Of Left Shoulder Mass
Presenter - Dr. Ram Niwas Mittal
Co-author - - -

Introduction Muscle masses can be of different forms and differential diagnosis is wide ranging. The most common tumors are lipomas, cysts, haemangiomas, liposarcomas, myxomas, desmoid, rhabdomyosarcoma and metastasis. Among these, lipomas are the most frequently occurring soft tissue neoplasms. Primary hydatidosis of muscle is a very rare entity and that presenting in deltoid is even rarer. Presence of rice bodies in such parasitic mass is even rarer. Multiple radiological modalities are needed to differentiate benign mass like that of parasitic origin from a malignant one and involvement of onco-radiologist is important in such cases. Case 40-year-old, male presented with a painless swelling in the region of left shoulder and upper arm for the last 2 years. The swelling was gradually increasing in size. On examination, there was a diffuse, soft swelling over anterolateral aspect of left shoulder and upper arm. There was no sensory or motor deficit. On workup, ultrasound revealed a large, lobulated, hypoechoic lesion, in the anteromedial & anterolateral region of left shoulder. MRI also revealed similar findings with signal intensity component involving deltoid muscle. On FNAC, thin yellowish fluid was aspirated and diagnosed as benign cystic lesion. On exploration, it was found to be a thick walled cystic lesion, encircling the lateral, anterior and medial aspect of upper humerus. Lesion was completely excised. In the process of excision, the lesion got ruptured at one site from where multiple, small whitish soft nodules popped out. Post-operative period was uneventful. Final histopathology report came as parasitic cyst. Conclusion A hydatid cyst is a parasitosis formed mainly due to E.granulosus. Intramuscular primary hydatidosis is very rare as larvae are not able to survive in muscle due to muscular contraction thereby leading to lactic acidosis. Our case is unique, interesting and rare because of rice body formation secondary to parasitic tumor of deltoid muscle. Although MRI is quite specific but in our case, none of the imaging modalities could detect and define rice bodies and nature of the mass. This case highlights the diagnostic dilemmas faced and highlights the importance of operating surgeon, onco-radiologist, team work and patient specific diagnosis. Details of first author Dr Ram Niwas Mittal M.S (General Surgery), Fellowship (Pursuing) in Head and Neck Oncology (IFHNS) Senior Consultant, Department of Surgical Oncology, Ramkrishan Mission Sewashram charitable hospital, Vrindaban, Mathura, UP. Contact address: D-11, RKMS Hospital, Swami Vivekananda Marg, Vrindaban, Mathura, Uttar Pradesh, India 281121 E-mail – rmmittaldr@gmail.com

Abstract Id: YUGP4621
Fate Of Incidental Gall Bladder Cancers: A Single Center Experience
Presenter - Dr. ADITI AGGARWAL
Co-author - SRIVASTAVA A, SALUJA S, KISHORE S

Background—Gall bladder cancer is endemic in Indo Gangetic plain with patients usually presenting in advanced stages. However a significant number of cases are diagnosed Background—Gall bladder cancer is endemic in Indo Gangetic plain with patients usually presenting in advanced stages. However a significant number of cases are diagnosed incidentally. Fate of these patients is vastly different and there are no standard treatment guidelines for the same. We attempted to study these patients with an aim to understand this entity better.

Methods: Records of all gall bladder cancers registered in the department of radiotherapy between 2015 and 2016 were retrospectively analyzed. Of the 167 cases, 36 were incidentally diagnosed. Results: They were predominantly females (Male: Female =0:2.1) with mean age of 49.5 years(±10.1 SD, Range 25-66 years ) and 35% being ≤45 years. Baseline KPS ranged from 50-90, and mean baseline weight was 53kg (± 9.2SD, Range 35-74kg ). All patients presented with pain and underwent surgery because of associated cholelithiasis in 32 (89%). Post initial diagnosis, 67% of the cases underwent resurgery at our institute and surgeries performed were radical cholecystectomy in 18(50%), open simple cholecystectomy in 8 (21%), laparoscopic simple cholecystectomy in 4 (11%) and staging laparotomy in 6 (16%) patients. Consequently stage assessment was not possible in 33% cases, 36% were stage IV while remaining 31% were stage I-II. There were 9 (25%) N1 and 2 (5%) N2 patients. Metastases were found subsequently in 11 (31%) patients. Moderately differentiated adenocarcinoma was the most common histology in 19 (53%) patients. 15(42%) patients were lost to follow up after surgery, 2(5%) were kept under observation, 15(42%) received adjuvant chemotherapy and 4 (11%) received palliative chemotherapy. Platinum based doublet was the most common regimen in 16 (45%) patients. For a median follow up of 07 months (0-28 months), there were 9 relapses, 5 (55%) were locoregional and 4 (45%) distant. The median overall survival was 24 months. Conclusions—incidentally diagnosed gall bladder cancers tend to behave differently. However locoregional and distant relapses highlight the need for aggressive surgery along with effective systemic treatment in order to alter the fate of these patients.

Abstract Id: YUGP4623
Is Laparoscopic Approach Better Or Equal Than Open Approach In Rectal Cancer?
Presenter - Dr. ASHISH POKHARKAR
Co-author - Dr anvish saklani, Vikram chowdhary, PAVAN SUGOOR

Introduction Application of minimally invasive approach in the management of rectal cancer has been sparse in our country. It is an advanced laparoscopic skill, has a steep learning curve and training opportunities are limited. Evidence supporting laparoscopic rectal resection in cancer has evolved over the last decade and revolves around only three main RCTs - CLASSIC, COLOR II, and COREAN. These studies have shown, equivalent or even better results with laparoscopic approach, including after neoadjuvant chemo radiation (NACRT). Laparoscopy has better results than open approach with respect to most of the perioperative parameters like pain, blood loss, recovery of bowel function and duration of hospital stay. Short term oncological outcome parameters like circumferential and distal resection margin (CRM, DRM), and lymph node harvest have also been noted to be similar. Material and methods Study includes 660 consecutive patients undergoing curative intent surgery for rectal cancer in Tata Memorial Hospital, since establishment of dedicated colorectal cancer services from July 2013 to March 2017. It aims to compare perioperative and short term oncological outcomes in laparoscopy and open group. All patients were evaluated by multi-disciplinary team (MDT), Pre-operative MRI was employed as a

Routine in staging all patients. Type of surgery and plane of dissection were decided in preoperative MDT meeting. Results 660 patients were included in the final comparison of both the approaches. 374 underwent open resections and 286 resections were attempted laparoscopically. Conversion rate was 1.71% (5/291). Groups were similar with respect to age, sex, ASA status and BMI, with median age of 49 years and BMI of 22.9. 43.3% of the total resections were done laparoscopically. 198 patients underwent abdominoperineal resection (APR), sphincter preservation rate was 63%. 61.2% patients had low rectal tumors (within 5 cm from verge). Both group had equal T3/T4 and N+ tumors as per pre treatment staging MRI (84.26% laparoscopic, 86.09% open, p=0.457). 432(65.45%) patients received conventional NACRT, 35 patients received SCRT (28.05%). On comparison of perioperative outcome measures, Laparoscopic group has significantly reduced blood loss (294vs 793 ml), higher rate of high IMA ligation, and less anastomotic leak rate (3.14 vs 4.81% p=0.05), compared with the open group. Median post op stay is equal in both groups (7 Days vs 7 days) On comparison of short term oncological outcomes, laparoscopy and open group had no statistical difference in CRM rate (2.79% vs 4.81%, p=0.114), lymph node harvest (14.43 Vs 15.61, p=0.899) and DRM rate(0.69% vs 0.53 p=0.731). CRM, DRM positivity rate and lymph node harvest (14.43 Vs 15.61, p =0.899) and DRM rate(0.69% vs 0.53 p=0.731) . CRM, DRM positivity rate and lymph node harvest (14.43 Vs 15.61, p =0.899) and DRM rate(0.69% vs 0.53 p=0.731) . CRM, DRM positivity rate and lymph node harvest (14.43 Vs 15.61, p =0.899) and DRM rate(0.69% vs 0.53 p=0.731).

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Abstract Id: YUGP4625
Tracheal Resection For Thyroid Cancer
Presenter: Dr. Syed Murtaza Ahmed Co-author - Dr. Syed Murtaza Ahmed Co-author

This study was a single institution series of 21 patients, managed over 6 years, who underwent tracheal resection for advanced thyroid cancer. All patients were older than 45 years (range, 45-65 years) and were predominantly male (six of seven). All patients presented to us with a swelling in the neck. Fine needle aspiration cytology detected thyroid cancer in all patients. One of the patients required a tracheostomy prior to surgery; however, they all had varying degree of airway compromise in all patients, the airway was successfully secured with fibre-optic assisted intubation prior to surgery. All patients underwent a total thyroidectomy with tracheal resection and anastomosis. Montgomery’s suprathyroid release was utilised to achieve adequate laryngeal drop. None of the patients required a tracheostomy in the post-operative period. All patients received adjuvant therapy with either radioiodine ablation and/or radiotherapy. CONCLUSION: Tracheal resection and primary reconstruction is a feasible surgical procedure for patients with thyroid cancer infiltrating the upper aerodigestive tract, with good clinical outcomes. However, the morbidity of the procedure mandates careful case selection, airway management and meticulous surgical technique.

Abstract Id: YUGP4631
Laparoscopic Learning Curve In Oncological Surgery – A Single Institutional Experience
Presenter: Dr. Bharathi Raja Co-author - Dr. Bharathi Raja

CONTEXT: Laparoscopy is evolving as the procedure of choice in various conditions and has gained considerable popularity. It has not spared oncological surgery too. But this involves a learning curve and time. The improvement tends to be most rapid at first and then tailed off. AIM OF THE STUDY: To analyse the learning curve and the time involved in mastering the art of laparoscopy in the field of onco-surgery. To compare the duration of surgery, conversion to open method, complications involved in three consecutive years.

SETTINGS AND DESIGN: Patients operated laparoscopically for various conditions in three consecutive years (2015-2017) were compared for operative time, morbidity, mortality, conversion to open procedure and oncological safety. RESULTS: Total number of laparoscopy increased between 2015 and 2017. The morbidity after laparoscopic gynaecological surgery has reduced during the third year compared to first year and the difference is statistically significant. Conversion rates have drastically come down during the 3rd year. Operative times have come down but without statistical significance. Oncological safety was not affected from the first year onwards. Newer procedures have been tried during 2nd and 3rd year like thoraco-laparoscopic oesophagectomy. Conclusion: Initially the learning curve was steep followed by a plateau. As the experience with number of cases increases morbidity has come down. The experience gained from one procedure adds to a easy learning curve and decreased morbidity in another new complicated procedure. Knowledge of anatomy and proficiency in open procedure can make a learning curve steep and attains plateau phase early.

Abstract Id: YUGP4632
Comparison Of Two Quality-Of-Life (Qol) Instruments For Cancer Patients: The Mini Qol (TMQ) Tool And European Organization For Research And Treatment Of Cancer Qol Questionnaire (Eortc Qlq)
Presenter: Dr. Revathy Krishnamurthy Co-author - Dr Rajiv Sarin, Dr Santam Chakraborty, Dr Mansi Munshi

Background: The present study is a part of a project which aims to develop, validate and perform clinical testing of a brief Quality of Life (Qol) tool specific to Indian cancer patients for use in routine oncology practice. TMQ tool is semi-qualitative with 15 items – 12 general, 2 site-specific and 1 global to be scored on a Likert scale of 0 to 4 with score descriptions and faces scale. It is developed for – Breast Cancers, Head Neck Cancers, Gynecological Cancers, Thoracic Cancers and Gastrointestinal Cancers. Materials and methods: TMQ tool and EORTC QLQ-C30 along with site-specific QLQ were administered to 250 cancer patients – 50 each from the 5 sub-sites after written consent. To assess acceptability, a debriefing survey was served. Each item of TMQ was correlated with similar items or scales of EORTC QLQ. Results: TMQ tool EORTC QLQ Target population Cancer patients Cancer patients Purpose Qol assessment in routine clinical practice QoL assessment in clinical trials Number of items 15 open ended question 30 Number of scales Items not clubbed as scales 15 Type of response scale 5-point ordinal Likert type with emotions and description for each score 4-point ordinal scales, Likert type with description at start. 7-point ordinal scales for 2 items Time frame 1 week 1 week Scoring Unweighted scores from 0 to 4 for each item Unweighted sum of items in that score, transformed to 0 to 100 range. Summary score Unweighted sum out of 60 15 scale scores, summary score Site specific 5 16 Languages 3 53 for EORTQ LQ Mean time 6 minutes 11 minutes (QLQ C30 alone) Overall response rate 90% 72.4% All correlations between corresponding were statistically significant. TMQ summary scores correlated with EORTC summary score. Conclusion: TMQ is a brief and pragmatic QoL assessment tool developed specifically for use in routine clinical practice in Indian cancer patients with a lower response burden and higher acceptability than EORTC questionnaire in clinical setting.

Abstract Id: YUGP4634
Video-Reconstruction Of Heel Defects: The Reverse Sural Artery Flap

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Abstracts

Presenter- Dr. Caleb Harris
Co-author - Mebanshanbor Garod Pasi, Cliff Wanniang,

Background Lesions on the solar aspect of the heel will need reconstruction using flaps as they constitute a weight bearing region of the foot. Though free flaps may be ideal, the resources may not be available everywhere. The reverse sural artery(RSA) flap is a simple flap which can be used for defects in this region. Methods We present a video of a lesion of melanoma of foot for which wide excision was performed, followed by reconstruction using a RSA flap. Results & Conclusion The RSA flap is a robust flap and can be performed with minimal training.

Abstract Id: YUGP4636

Profiling Of In Vitro Established Radiation Resistant Oral Cancer Cells For Identification Of Radioresistance Related Biomarkers.

Presenter- Dr. Tanuja Teni
Co-author - Mohd Yasser, Sagar Pawar,

Radiotherapy is an integral part of oral cancer treatment, either alone or in combination with surgery. But, during radiotherapy, oral tumours of a subset of patients develop radioresistance creating a major obstruction towards its efficacy. The aim of this study was to establish radioresistant cell lines from different oral subsites using clinically admissible low dose radiation and profile them by proteomic and transcriptomic approaches to identify proteins/genes associated with radioresistance in oral cancer. We have established three radioresistant oral cancer cell lines; 70Gy-AW13516, 70Gy-AW56707 (Tongue-SCC) and 70Gy-SCC029B (Buccal-SCC). Radiation was given in 2Gy dose by 60Co-? linear accelerator(Bhabhatron-2) up to a total dose of 70Gy to each and radioresistant character was assessed by clonogenic assay. Proteomic profiling of parental/resistant cells was done by 2D-gel electrophoresis. Gels were analysed by PD-Quest software and differential spot identities revealed by MALDI-TOF/TOF. To explore changes at transcript levels, cDNA microarrays were performed by Affymetrix Gene Chip array and analysed by Gene Spring GX-12.5. MS identified 106 differential proteins among three parental/radioresistant cell lines with significant MS/MS score. A panel of 8 common proteins across three sets; GRP78, STIP1, PGP, PKM2, GRP94, PDA13, HSP70-1A/B and HSPA8 were selected and validated by Real time-PCR. Further, statistically significant genes (>3 fold) from radioresistant cells of different sub sites (Tongue & Buccal) were mapped by David & Panther functional tools. Pathway analysis revealed genes related to altered cell survival & apoptosis pathways like; Apoptosis signalling, PI3K, P38 and Wnt signalling. Proteomic and transcriptomic profiling of established oral radioresistant cells may provide new insights into the mechanisms underlying clinical radioresistance & help in identifying radioresistance related biomarkers.

Abstract Id: YUGP4642

Topic:A Clinicoepidemiological Study Of Trends Of Tobacco Usage Of A South Indian Regional Cancer Centre(Hyderabad) In 2016.

Presenter- Dr. Tasneem Lilamwala
Co-author - dr.tasneem lilamwala, dr.aarti, DR.benjamin

ICC 2017 ABSTRACT ICC 2017 ABSTRACT TOPIC:A CLINICOEPIDEMIOLOGICAL STUDY OF TRENDS OF TOBACCO USAGE OF A SOUTH INDIAN REGIONAL CANCER CENTRE(HYDERABAD) IN 2016. AUTHORS:Dr.tasneem lilamwala,DNBRT MNJ INSTITUTE OF ONCOLOGY& RCC DR.AARTI.MDRT MNJIO&RCC BACKGROUND:TOBACCO is the highest ranked risk factor contributing to cancer etiology. Head & neck cancers are the sixth most common malignancy in the world. In India & south east Asia ,oral cancer incidence accounts upto 40% of all malignancies[1]Our interest was to know the trends in tobacco usage pattern across TELANGANA during 2016. AIM:To explore the trends of prevelance in tobacco & alcohol consumption at a regional cancer centre,hyderabad,telangana & to define a demographic profile for oral cavity cancers.

METHODS & MATERIAL:This is a retrospective single institutional study in which we reviewed 258 medical records of tongue , buccoalveolar complex & oropharyngeal cancers from M.N.J INSTITUTE OF ONCOLOGY & REGIONAL CANCER CENTRE,Hyderabad, Telangana for background & medical data during JAN 2016 to DECEMBER 2016. The data was retrieved mostly from medical records & partly from telephonic interviews. RESULTS:Among the oral cavity malignancies analysed in our study, the most common site is buccoalveolar complex(134) followed by oral tongue(95) & the least are in oropharynx(29). The male:female ratio is 3.69:1. The age-wise distribution is as follows :20-29 yrs-7 patients,30-39 yrs-61 patients,40-49 years-76,50-59 years-51,60-69years -34,70-79years-25,80-89years-4.Majority of the patients fell in the age group of 40-49 constituting 29%of our study population. Squamous cell carcinoma is the most common histology (252)accounting about 97.6% out of which 50% are well differentiated,11.5% are moderately differentiated , 3.9% are poorly differentiated & in 34.9% grade was not documented. 55.8% of the study population presented in stage IVA followed by 29% in stage III and around 12% were in the early stages I & II(AJCC 7th edition). We analysed that majority of the study population consumed smokeless tobacco in some form(205=GUTKA [82]+PAAN[32]+JHARDA[20]+KHAINI[4]+ form not specified[67]). Around 3% of the population had no addictions i.e neither tobacco users nor alcoholics.36%(93) are smokers in forms of beedi,cigarette & chutta.58 out of 93 (62%)smokers had stage IV cancer. SMOKERS 93 ALCOHOLICS 118 SMOKELESS TOBACCO 205 Gutka 82 Paan 32 Jharda 20 Khaini 04 Not specified 67 NEVER TOBACCO USERS 26 SMOKERS+ALCOHOLICS 65 BETELNUT CHEWERS 9 NO ADDICTIONS 8 126 out of 205 smokeless tobacco consumers had stage IV cancer.44 out of 65 patients who were both alcoholic & smokers had stage IV cancer. CONCLUSIONS: We could identify that all the addictions SMOKELESS FORM OF TOBACCO ranked the highest of which GUTKA WAS THE MOST COMMON FORM OF TOBACCO CONSUMPTION IN HYDERABAD. REFERENCES: 1. Vokes EE, Weichselbaum RR, Lippman SM, Hong WK-Head and neck cancer:N Engl J Med. 1993 Jan 21;328(3):184-94. 2. TOPIC:A CLINICOEPIDEMIOLOGICAL STUDY OF TRENDS OF TOBACCO USAGE OF A SOUTH INDIAN REGIONAL CANCER CENTRE(HYDERABAD) IN 2016. AUTHORS:Dr.tasneem lilamwala

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Abstract Id: YUGP4648
Video; Laparoscopic Omentectomy And Retroperitoneal Lymphadenectomy: The Rising Trend Of Minimally Invasive Surgeries In Gyn Cancers. 
Presenter- Dr. Arpitha Anantharaju
Co-author - Dr Bafna U D, Dr Pallavi V R, Dr Praveen Rathod

Omentectomy and retroperitoneal lymphadenectomy (RPLND) serves as a cornerstone for surgeries in gynaecological oncology. The safety and advantages of laparoscopic lymphadenectomy have been elaborated in various studies; which has expanded its use to surgical staging and cytoreductive procedures. Laparoscopic omentectomy and RPLND can be used as a part of completion staging in a previously operated unstaged ovarian malignancy, interval cytoreductive surgery of ovarian malignancy having a good response to neoadjuvant chemotherapy and in surgical management of serous and clear cell endometrial malignancies. Laparoscopic RPLND alone can be used for staging endometrial malignancies and in treatment of early stage cervical cancer. We aim to elaborate through our video this rising trend of minimally invasive surgeries in Gyn cancers and acceptable alternative procedure. The video briefly describes the anatomy of omentum and retroperitoneal lymph node along with its relation to the surrounding vital structures. Steps involved in resection of omentum from its attachments, creating para vesical and obturator space for retroperitoneal lymphadenectomy. Conclusion: Operative laparoscopy in the management of gynaecologic malignancies is feasible and an effective alternative to laparotomy cervical endometrial and selected cases of ovarian cancers. Their potential advantages include shorter recovery time, less postoperative pain & intraoperative blood loss, lower rates of adhesion formation and better cosmetic results.

Abstract Id: YUGP4650
Is Preoperative Prognostic Nutritional Index Associated With Morbidity Following Conventional,Laparoscopic And Robotic Colorectal Cancer Resections
Presenter- Dr. Harish Verma
Co-author - Ashwin D'souza, Avanish Saklani,

Introduction: Prognostic nutritional index has been shown to be associated with postoperative outcomes following resections for colorectal cancer and other gastrointestinal malignancies. However there is no data to suggest if it is equally associated with postoperative complications in patients undergoing conventional and minimally invasive colorectal cancer resections. Materials and Methods: All curative intent colorectal cancer resections performed between January 2014 to February 2017 were included.75 consecutive open, laparoscopic and robotic resections each were included (Prospectively retrospective study) Onodera’s PNI was calculated as follows: 107*serum albumin (g/dL) + 0.0057*lymphocyte count (per mm). Both Albumin and Lymphocyte count values used were immediate preoperative values. Parameters that were studied were hospital stay, immediate postoperative morbidity and mortality among the three categories of open, laparoscopic and robotic resections. Postoperative complications were studied and categorized as per Clavien Dindo classification. Results: The overall morbidity was 17.78% and mortality 0.8%. Overall serious complications (III,IV,V) were 10.22 %. The median PNI was 46.65. Statistically significant difference between the robotic Vs open and lap cases with regard to serious morbidity; Robotic cases with higher PNI value (>46.7) had lower incidence of serious complications Conclusion: Incidence of serious morbidity following robotic colorectal cancer resections is significantly lower in patients with higher PNI values as compared to that in open and laparoscopic patients.

Abstract Id: YUGP4654
Cervical Sympathetic Chain Schwannoma:A Case Report
Presenter- Dr. Sandeep Gupta
Co-author - Dr SOURABH MITTAL

Cervical sympathetic chain Schwannoma: a case report Dr Sandeep Gupta*, Dr Sourabh Mittal** Assistant Professor in Surgical Oncology, **Senior Resident Acharya Tulsi Regional Cancer Treatment & Research Centre, Bikaner Email: guru.sandeepbkn@gmail.com Introduction Schwannomas, neurilemomas or neurinomas are benign nerve sheath tumours deriving from Schwann cells that occur in the head and neck region in 25-45% of cases 1. Cervical lesions originate from spinal nerves, the last four cranial nerve roots, or occasionally from the sympathetic chain 2. They can be composed of two cellular zones: Antony type A, and Antony B, Cervical schwannomas are uncommon, but those arising from the cervical sympathetic chain are extremely rare, with less than 60 cases reported in the English literature. In this report, we document a case manifesting as a swelling in the upper neck, which confirms the typical presentation of the tumour, displacing the carotid arteries laterally,5. Difficulties in diagnosis and treatment are discussed. Case report A 40-year-old female, presented to us with an asymptomatic swelling in the right upper lateral neck. There was no history of hoarseness, nasal regurgitation, syncopal attacks, associated pain, fever or trauma. Examination revealed a firm, 3 × 2 cm right upper cervical swelling that was not mobile in longitudinal or transverse planes. Oropharynx examination revealed no displacement of the pterygoid structures, and indirect laryngoscopy excluded vocal cord paralysis. Ultrasonography showed a 3 × 2 cm mass displacing the carotid arteries slightly laterally. Contrast-enhanced CT scan of the neck revealed a well-defined contrast-enhanced, oval 24 mm lesion in the retro-styloid compartment of the right parapharyngeal space. The mass, located behind the angle of the mandible, displaced the internal and external carotid arteries laterally, and did not compress the internal jugular vein. MR sagittal T1-weighted images confirmed a low intensity mass in the upper right neck, posterior to the ascendant ramus of the mandible with heterogeneous enhancement after contrast medium administration. Coronal T2-weighted images defined the supra-inferior extent of the lesion. Angiography of the right major vessels revealed a thin pathologic circle with an oval image just above the internal and external carotid arteries slightly laterally. Contrast-enhanced CT scan of the neck revealed a well-defined contrast-enhanced, oval 24 mm lesion in the retro-styloid compartment of the right parapharyngeal space. The mass, located behind the angle of the mandible, displaced the internal and external carotid arteries laterally, and did not compress the internal jugular vein. MR sagittal T1-weighted images confirmed a low intensity mass in the upper right neck, posterior to the ascendant ramus of the mandible with heterogeneous enhancement after contrast medium administration. Coronal T2-weighted images defined the supra-inferior extent of the lesion. Angiography of the right major vessels revealed a thin pathologic circle with an oval image just above the carotid bifurcation; there was no hypervascularization or spaying of the internal and external carotid arteries. Thus, a carotid body tumour could be excluded. The patient underwent surgical treatment with a provisional diagnosis of a neural tumour. The lymphatic nature of the lesion was thought to be less probable because of the retro-styloid location of the mass and the absence of general signs of a lymphatic pathology. Preoperative diagnosis of a neural tumour was not possible as there were no significant signs for vagus (hoarseness and vocal cord palsy) or sympathetic chain involvement (Horner’s syndrome). No radiological connection of the tumour with vagal trunk, spinal roots or sympathetic chain, or a superficial position of the
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vagus over the mass was observed, but this latter sign has been reported only in some large sympathetic cervical tumours 6. The neck was explored by a transverse right submandibular skin incision. Deep to the upper portion of the sternocleidomastoid muscle, an encapsulated, white coloured, 3 × 2 cm tumour was found between the internal and external carotid artery anteromedially, and the internal jugular vein posterolaterally. Vascular structures were not stretched or compressed. The tumour appeared to originate from the sympathetic chain. The eccentric site of the mass and the presence of a capsule indicated that it was probably a benign lesion. The mass was carefully dissected from the nerve while trying to avoid any damage to it. As it was not possible to dissect the tumour without damage to the nerve bundles, the capsule was incised longitudinally so that the tumour could be excised from inside. Nevertheless, a partial right side Horner’s syndrome occurred, with mild ophthalmologic signs but without facial anhidrosis, as reported in some cases. Histopathological examination of the specimen confirmed the tumour to be a benign schwannoma originating from the sympathetic chain. Postoperatively, the complication was well tolerated and required no treatment.

Discussion

Cervical sympathetic chain schwannomas (CSCS) are rare, benign tumours originating from the superior or middle part of the cervical chain and typically located in the retrostyloid compartment of the parapharyngeal space. CSCS occur more frequently in adults 20 to 50 years old, but are even observed in patients aged 5 to 77, without sex preference. Schwannomas of the vagus nerve grows between the internal or common carotid artery and the internal jugular vein causing separation of the two vascular structures; no separation has been seen between the artery and the vein in CSCS. A large tumour can displace the internal carotid artery and vagus nerve antero-laterally or the internal carotid artery also in addition to the internal jugular vein. Most CSCS appear as asymptomatic and solitary masses in the mid or upper lateral neck that tend to grow slowly approximately 3 mm per year thus avoiding compression of other structures until advanced stages. Rarely, they arise near the vertebral foramina presenting with intraspinal and extraspinal components 13. The size reported in the literature for CSCS has been between 2 and 7.5 cm in major diameter 4. These tumours grow at least to 2.5-3 cm before they are detected 10. Horner’s syndrome is rarely apparent on physical examination with only 6 cases reported 5. Pulsation is an atypical finding for CSCS and may be due to reflection of the carotid artery system, or it may be true pulsation caused by schwannoma hyperintensity 6 8 13 14. Neck pain, neurological defects and compression symptoms should suggest malignancy from neurogenic sarcomas, neuroepitheliomas and malignant melanomas 2 16 17. In recent years CT has been used widely to localize paraffaryngeal lesions, distinguishing pre-styloid from poststyloid ones 4. A mass on contrast-CT pushing the internal carotid artery or common carotid artery anteriorly is suggestive of schwannoma originating from the sympathetic chain or vagus nerve 10. On MR-imaging, a schwannoma is generally hypointense on T1-weighted and hyperintense on T2-weighted images, depending on its cellularity. The random distribution of Antoni A and B within the tumour is not easy and there are no signs of malignancy, functional loss can be minimized by opening the capsule longitudinally and removing the tumour from inside 6 11 23. Nevertheless, a CSCS can be uncommonly removed without sacrifice of some nervous fibres or section of the sympathetic trunk 4. Moreover, since cervical sympathetic chain damage is well tolerated, restoration of the nerve has only been rarely performed, while in vagal schwannomas the practice of nerve reconstruction is recommended 6. Thus, the majority of patients who have undergone intervention are reported to manifest some degree of postoperative Horner’s syndrome, which is the most frequent complication after CSCS removal 4 7 8 18. The actual percentage of this complication and its impact on quality of life are not well known, but its frequency is estimated to be quite high, also in its definitive form. In our patient, a partial, well tolerated Horner’s syndrome occurred on the right side of the face and is still present at 7 months of follow-up; therefore, only sympathetic fibres branching to the internal carotid artery were injured during surgery 4 19. Conclusions CSCS do not present with specific symptoms or imaging signs. Imaging examinations cannot reveal the exact origin of the tumour. Radiological investigations can only narrow diagnosis to lesions arising in the retro-styloid compartment of the parapharyngeal space, thus excluding lymphadenopathies and salivary gland tumours that originate in the pre-styloid compartment. According to some evidence, present some risk, and FNAC provides minor diagnostic value in compact neural tumours. The majority of patients have undergone intervention without a preoperative diagnosis, but only with a provisional suspect based on the exclusion of other similar tumours. Only surgical observation of the lesion and the nerve from where it originates, and histologic examination of the specimen, can lead to a correct diagnosis. Nevertheless, an accurate preoperative workup is useful for surgical planning and informing the patient about any possible complications. Total resection is the treatment of choice for these tumours, but can only rarely be performed without sectioning the sympathetic trunk or damage to any nervous fascicle. Intervention often leaves the patient with some degree of Homer’s syndrome, which is relatively well tolerated and should be discussed with the patient during preoperative counselling.

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Abstract Id: YUGP4659
Plasmacytoid Urothelial Carcinoma-A Rare Variant.
Presenter- Dr. KARThICK R G
Co-author - Dr. Veena Ramaswamy

i. Introduction- Infiltrating urothelial carcinoma is the most common malignant neoplasm of the urinary tract and accounts for 90% of bladder cancers in industrialised countries. Urothelial carcinoma can be a rapid method in achieving the diagnosis. This case is being presented to highlight that even FNA samples with good cell yield can be analysed by flow cytometry. Keywords- Relapse of ALL, Testicular relapse, FNAC, Flowcytometry

Abstract Id: YUGP4663
Endoscopic Resection For Barrett’s Esophagus
Presenter- Dr. Rasul Sadykov
Co-author -

Introduction: In the treatment of esophageal dysplasia, particularly Barrett’s esophagus, radical endoscopic resection ?SRER? has shown its effectiveness. The purpose of this study was to evaluate the long?term results of treatment of Barrett’s esophagus dysplasia after a successful SRER. Methods METHODS: Patients who received SRER for BE ?5 cm with high?grade dysplasia ?HGD? or early cancer ?EC? achieved complete elimination of intestinal metaplasia ?CE?IM? and neoplasia ?CE?ne?. Primary outcomes: relapse of neoplasia ?HGD / EC?, recurrence of dysplasia ?including indefinite dysplasia? and recurrence of endoscopically visible BE. RESULTS: 76 patients were included ?65 men, mean age 66 months, median BE C2M3?,. The median follow?up was 76 months. A repetition of neoplasia was observed in 1 patient ?T1bN0M0? after 130 months of observation and was treated with medical surgery ?annual frequency 0.22% per year of the patient’s observation?. Four patients had recurrent dysplasia 70.87% per patient?year of follow?up?. Twelve patients had recurrent dysplasia and treated BE after median follow?up for 22 months 72.6% for each subsequent patient?year of observation?, mostly small islands or languages. Five patients were found to have one Barrett burial gland finding 71.1% per year of the patient’s observation?, and 27 patients 75.9% per year of the patient’s observation? showed MI in biopsies only distal to the neo?squamousmuncar compound, the need for re?treatment, and sustained by CE?IM and CE?ne? at the last follow?up endoscopy. RESULTS: 76 patients were included ?65 men, mean age 66 months, median BE C2M3?. The median follow?up was 76 months. A repetition of neoplasia was observed in 1 patient ?T1bN0M0? after 130 months of observation and was treated with medical surgery ?annual frequency 0.22% per year of the patient’s observation?. Four patients had recurrent dysplasia 70.87% per patient?year of follow?up?. Twelve patients had recurrent dysplasia and treated BE after median follow?up for 22 months 72.6% for each subsequent patient?year of observation?, mostly small islands or languages. Five patients were found to have one Barrett burial gland finding 71.1% per year of the patient’s observation?, and 27 patients 75.9% per year of the patient’s observation? showed MI in biopsies only distal to the neo?squamousmuncar compound, the need for re?treatment, and sustained by CE?IM and CE?ne? at the last follow?up endoscopy. RESULTS: 76 patients were included ?65 men, mean age 66 months, median BE C2M3?. The median follow?up was 76 months. A repetition of neoplasia was observed in 1 patient ?T1bN0M0? after 130 months of observation and was treated with medical surgery ?annual frequency 0.22% per year of the patient’s observation?. Four patients had recurrent dysplasia 70.87% per patient?year of follow?up?. Twelve patients had recurrent dysplasia and treated BE after median follow?up for 22 months 72.6% for each subsequent patient?year of observation?, mostly small islands or languages. Five patients were found to have one Barrett burial gland finding 71.1% per year of the patient’s observation?, and 27 patients 75.9% per year of the patient’s observation? showed MI in biopsies only distal to the neo?squamousmuncar compound, the need for re?treatment, and sustained by CE?IM and CE?ne? at the last follow?up endoscopy. RESULTS: 76 patients were included ?65 men, mean age 66 months, median BE C2M3?. The median follow?up was 76 months. A repetition of neoplasia was observed in 1 patient ?T1bN0M0? after 130 months of observation and was treated with medical surgery ?annual frequency 0.22% per year of the patient’s observation?. Four patients had recurrent dysplasia 70.87% per patient?year of follow?up?. Twelve patients had recurrent dysplasia and treated BE after median follow?up for 22 months 72.6% for each subsequent patient?year of observation?, mostly small islands or languages. Five patients were found to have one Barrett burial gland finding 71.1% per year of the patient’s observation?, and 27 patients 75.9% per year of the patient’s observation? showed MI in biopsies only distal to the neo?squamousmuncar compound, the need for re?treatment, and sustained by CE?IM and CE?ne? at the last follow?up endoscopy. RESULTS: 76 patients were included ?65 men, mean age 66 months, median BE C2M3?. The median follow?up was 76 months. A repetition of neoplasia was observed in 1 patient ?T1bN0M0? after 130 months of observation and was treated with medical surgery ?annual frequency 0.22% per year of the patient’s observation?. Four patients had recurrent dysplasia 70.87% per patient?year of follow?up?. Twelve patients had recurrent dysplasia and treated BE after median follow?up for 22 months 72.6% for each subsequent patient?year of observation?, mostly small islands or languages.
Abstract Id: YUGP4669
Feasibility Of Hypo-Fractionated External Beam Radiotherapy Schedule For Radical Treatment Of Head And Neck Carcinoma In A Busy Radiotherapy Facility.
Presenter- Dr. Yashpal Verma
Co-author - Dr. Ashok K Chauhan, Dr Paramjeet Kaur, Dr Anil Khurana

Background: For the management of head and neck carcinoma, standard fractionated external beam radiotherapy (SF-EBRT) takes 6-7 weeks for the radical regimen to complete (64-70 Gy, 1.8-2.0 Gy per fraction) and most radiotherapy facilities are over-burdened these days with long waiting period for the patients. Aims: To propose feasibility of a hypo-fractionated external beam radiotherapy schedule (60-63 Gy/20-21 once daily fractions, 3Gy each over 4.0-4.1 weeks, re-plan after 12 fractions) so as to combat the rising burden in radiotherapy facility, to make it accessible to maximum, without waiting period and for optimal utilization of the resources. Material & Method: Standard fractionated external beam radiotherapy (SF-EBRT) schedule (64-70 Gy/32-35 daily fractions, 1.8-2.0 Gy per fraction, over 6.2-7.0 weeks, re-plan after 22 fractions) and hypo-fractionated external beam radiotherapy (HF-EBRT) schedule (60-63 Gy/20-21 once daily fractions, 3Gy each over 4.0-4.1 weeks, re-plan after 12 fractions) were compared for dose equivalence in Department of Radiotherapy, Pt. B.D. Sharma University of Health Sciences, Rohtak (INDIA) and feasibility being explored for its clinical application. Results: The proposed HF-EBRT plan (60-63 Gy/20-21 once daily fractions, 3Gy each over 4.0-4.1 weeks, re-plan after 12 fractions) seems feasible. Conclusion: Though the proposed HF-EBRT plan seems feasible and is dosimetrically comparable to SF-EBRT plan, this needs to be validated for practical application to fulfill its aims in busy radiotherapy set up, to serve the masses. Keywords: EBRT, Head and Neck Carcinoma, Hypo-fractionation, Radiotherapy.

Abstract Id: YUGP4671
Discordance In Survey Responses In Multi-Modality Management Of Head Neck Cancers: A Cross-Specialty Comparison
Presenter- Sandeep Jain
Co-author - Moni Kuriakose, Nisha Vishnu, Vijay Pillai

Objective: The objective of this survey was to study common practices and perceptions amongst oncologists, and to compare their approach between the surgeons and radiation oncologists about multi-modality management issues of head and neck cancers. Methods: A custom-designed survey questionnaire, containing 19 single answer questions regarding workup, adjuvant treatment, use of neo-adjuvant chemotherapy and salvage treatment was e-mailed to the members of international academy of oral oncologists (IAOO) and Indian oncologists. The data was analyzed after applying an exclusion criteria and relative completion of questionnaire. Statistical procedure included chi-square analyses and student t tests. Results: Out of 348 evaluable respondents 211 (60.9%) were head-neck surgeons (HNS) and 135 (39.1%) were radiation oncologists (RO). Areas of consensus include the approach to sub-centimeter mediastinal nodes to be followed up, HPV positivity not be used in decisions making presently, and use of adjuvant chemo-radiotherapy only in presence of strong indications; however there were some other discordant opinions. Sixty-four (47.4%) RO opined for addressing contralateral neck in central subsites of oral cavity carcinomas irrespective of tumors crossing midline in comparison to 57 (27%) of HNS. Weekly cisplatin was preferred over 3 weekly regimen by 73 (54.1%) of RO compared to 53 (25.1%) HNS. Ninety-one (43.1%) HNS still wanted to discuss the option of laryngectomy in eligible patients of laryngopharyngeal carcinomas in comparison to 105 (77.8 %) RO favoring radical chemo-radiation. Ninty-nine (73.3%) RO felt confidant for taking up re-irradiation with advanced technology assuming less morbidity in comparison to 57 (27%) HNS. Conclusion: Though there were similar opinions in majority of issues, specialty do influence the choice of treatment offered like organ preservation and re-irradiation which may be improved with more understanding of each others specialty and multi-disciplinary tumor boards. When there are competing modalities with equivalent results the patient should be actively engaged in decision making to eliminate self-modality bias.

Abstract Id: YUGP4675
Quality Of Life After Gastrectomy For Gastric Carcinoma: A Prospective Study
Presenter- Dr Kailash ramrao Surnare
Co-author - Dr Iqbal A M, Dr Chandramohan K,

Introduction: Gastrectomy remains a major operation with potential for significant deterioration in patient’s health-related quality of life (QOL). Aims & Objectives: To assess changes in the Quality of life after gastrectomy for gastric cancer patients by using the validated European Organization for Research and Treatment of Cancer questionnaire (EORTC) QLQ-C30 and its gastric module QLQ-ST022. To assess quality of life using validated Distress Inventory cancer Version 2 (DIC) in Malayalam language .To study correlation of impact of demographic factors, disease and treatment related factors on quality of life. Material & Methods: We prospectively enrolled patients undergoing gastrectomy at our institution between 2014 and 2015. Participants completed the EORTC (QLQ-C30) and gastric (QLQ-ST022) Questionnaires, DIC preoperatively and at 1 and 6 months postoperative intervals. We compared changes from baseline in patients based on extent of resection (distal or total) using generalized linear models. Results: We included 73 patients: 50 DG, 2 PG, and 21 TG. In the immediate postoperative period, all patients suffered significant impairment in their global QOL. This impairment persisted in most patients by six months. Most of Symptoms has improved at 6 months compared to baseline. Patients who underwent TG suffered from significantly more clinical reflux, nausea, vomiting and fatigue than DG patients. These differences persisted up to 6 months postoperatively. There was no impact of age, gender, comorbidities, complications of surgery, stage of disease on QOL indices. Total distress was less at 6 months compared to baseline. Conclusions Surgeons should discuss expectations of QOL impairment with their patients prior to gastrectomy and reassure them that most symptoms resolve by six months following operation. Presenter Full name – DR KAILASH RAMRAO SURNARE, MS,DNB,MCh Surgical Oncologist.

Abstract Id: YUGP4677
The Prevalence, Patterns Of Usage And Attitude Towards Complementary And Alternative Medicine (Cam) Among Cancer Patients: Study From A Tertiary Care Center In Northern India
Presenter- Dr. Rajesh Pasricha
Co-author - Dr Manoj Gupta, Dr Sweety Gupta, Dr Aruj Dhayani

Background The purpose of this study was to assess the prevalence, various reasons, their association with socio-economic factors & implications for choosing complementary and alternative medicine (CAM) use over standard treatments in a representative cancer population at the time of presentation in a tertiary care center METHODs- A survey was conducted in a consecutive sample of 266 cancer patients coming for treatment at AIIMS-Rishikesh, using a structured questionnaire & a semi-structured interview to assess & record the pattern of CAM usage, demographic profile of patients, various reasons why patients chose CAM and different socioeconomic factors & their association with choice of CAM
Abstracts

treatments. We also tried to look into factors which made them come back for a standard cancer treatment RESULTS: A total of 266 newly diagnosed cancer patients were seen during the study period of 4 months. 112 (42%) had used CAM post cancer diagnosis, of these 82% had CAM as their first treatment for cancer and only 18% went for conventional cancer treatment but later started using CAM along with standard treatment or alone. Majority patients using CAM were of breast cancer (21%), followed by head & Neck & Genitourinary cancers (18% each). Around 50% of patients were using CAM for less than 3 months, 39% more than 3 months and in around 11% duration of CAM usage was unknown. Among socioeconomic factors, most of our patient were either of lower income group (unemployed (25%) or economically dependent housewives (46%), 28% cases belonged to middle higher income group. Education wise again 53% were either uneducated or had only primary education & 32% had their education up till high school level. Only 14% patients using CAM were graduate or had higher education. Most common type of CAM used was traditional Indian system of medicine i.e. Ayurveda (30%) followed by Homeopathy (24%). 18% used other forms of CAM like spiritual & faith healing, Yunani medicines and traditional Tibetan medicines etc. and 14% used more than one forms of CAM. Major reasons for opting for CAM instead of standard treatment were- advice by family & friends (26%), perception of CAM being more effective and safe then conventional treatments (23%). Fear of side effects from conventional cancer treatments, Lack of modern treatment facilities nearby (14% each), cost of conventional treatment, lack of social support (3% each) were other prominent reasons for which patients opted for CAM. 7% patients cited more than one reasons for using CAM. Most common reasons cited for stopping CAM was that it was ineffective and not working anymore (60%). Other factors for coming to a tertiary care center for standard cancer treatment were- advice by friends & relatives (21%), for a second opinion while continuing CAM (7%) beside others. Conclusions Ayurveda & Homeopathy are most common form of CAM among north Indian patients. Major reasons for using CAM were low socioeconomic strata, economic dependence and lack of education. Most patients who opted for CAM as their primary cancer treatment stopped it after some time as it was found ineffective.

Abstract Id: YUGP4681
Incidence Of Lymphedema With Auxiliary Sampling Versus Axillary Lymph Node Dissection: Preliminary Results.
Presenter- Dr. Aditi Chaturvedi
Co-author - Nair NS, Hawaldar RW, Parmar V

Title: Incidence of lymphedema with auxiliary sampling versus axillary lymph node dissection: preliminary results. Chaturvedi A, Nair NS, Hawaldar RW, Parmar V, Daptardar A, Siddique S, Pandey A, Badwe RA. Background: Axillary lymph node positivity is still the most important prognostic factor in the management of breast cancer. Axillary lymph node dissection (ALND) was the gold standard and was associated with morbidity, namely lymphedema. Over the years there has been a paradigm shift to wards conservative procedures to stage the axilla with sentinel lymph node biopsy (SLNB) and axillary sampling (AS). The cost and resources required for SLNB make it not universally acceptable across our country. We have thus previously published data on the accuracy of low axillary sampling compared to SLNB, however morbidity data associated with AS is scarce. We analyzed the preliminary results of a large randomized study to evaluate the incidence of lymphedema in women undergoing AS compared to ALND. METHODS: Arm circumference was measured at 4 cm intervals from the axilla to the hand and volume was thus calculated. The measurements were taken at baseline and then at 6 monthly intervals post surgery. A difference of more than 100 ml in volume was deemed as lymphedema. RESULTS: Among 269 patients, 72 (27.1%) patients underwent AS and 196 (72.8%) had undergone ALND. The mean age of the study population was 47.8 years and mean body mass index (BMI) was 25.9 kg/m2. The two groups were balanced for BMI, type of surgery (breast conservation vs mastectomy) and rates of surgery on dominant side. At a median follow up of 15.4 (12-62 months), lymphedema was reported in 14 patients (5.2%): 2 patients (2.7%) in AS arm and 12 patients (6.1%) in ALND arm (p 0.36). On multivariate analysis, only BMI had a significant impact on the lymphedema rates (p 0.03), while extent of axillary surgery (p=0.51), type of breast surgery (p=0.61), dominant arm operated (p=0.14) had no significant correlation with incidence of lymphedema. CONCLUSIONS: The incidence of lymphedema is overall very low in this cohort and these preliminary results show low incidence of lymphedema in AS. However longer follow up in the larger cohort is needed to assess the true incidence of lymphedema in AS versus ALND.

Abstract Id: YUGP4687
Changing Trends In The Usage Of Her2Neu Targeted Therapy At A Tertiary Care Center In India
Presenter- Dr. Karishma Kirti
Co-author - Dr Karishma Kirti, Dr Nita S Nair, Dr Sudeep Gupta

BACKGROUND: Her 2 positive breast cancer accounts for approximately 17% of the patients treated for breast cancer. Standard recommendations for trastuzumab include one year of treatment, but data from the FinHer and ShortHer studies showed benefit with shorter course trastuzumab. The most limiting factor for the administration of trastuzumab has been its prohibative cost. In 2012 we published data from our institution suggesting that only 8% women were able to receive trastuzumab in the neo/adjuvant setting. MATERIALS AND METHODS: The histopathology reports of all breast cancer patients registered in the hospital in 2016 were extracted from the electronic medical record system. In all Her2 amplified (IHC or FISH), the use of HER2-targeted therapies was evaluated by extracting relevant information from the database RESULTS: In 2016, 4717 patients registered with our breast clinic for treatment. Of these IHC for ER, PR and Her2 was done on 3636 patients. Of these 729 (20.04%) were IHC 3+ for Her2neu overexpression and those with HER2 2+ expression was 641 (17.62%). Of those with IHC 2+, FISH was performed in 298 (46.48%), of which, 99 (33.22%) were amplified 183 (61.40%) were not amplified. 16 (2.5%) were uninterpretable or equivocal even on FISH testing. The remaining 343 did not undergo FISH testing because of financial constraints. Assuming the same 33.22% amplification in these 343, the final number of Her2 over expressed tumours is 942 [729 ( Her2neu IHC 3+) + 99 (FISH amplified ) + 114 ( FISH assumed amplified)]. Of these 942, 845 were included in the analysis for usage of HER2-targeted therapy. Overall 458 (54.20%) of these 845 received Trastuzumab which is in stark contrast to the previously reported 8.61% in 2012. Of these 535 were non metastatic breast cancer and 366 (68.41%) received trastuzumab, 2 (0.54%) stopped before completion of treatment, 190 (51.2%) took trastuzumab treatment for only 9-12 weeks and 174 (48.3%) took trastuzumab treatment for 12months. CONCLUSIONS: The overwhelming majority of patients eligible for HER2-targeted therapy in our institution are now able to receive HER2 directed therapy compared to our previous analysis published in 2012. This is mainly because of the short course of treatment offered, available bio-similars which have reduced the cost and philanthropy directed towards the same.

Abstract Id: YUGP4689
Comparison Of Acute Toxicities In Concomitant Chemoradiotherapy With Single Agent Cisplatin And In Combination: Cisplatin And 5- Fluourouracil.
Presenter- Dr. Ashok Singh
Co-author - Dr. V. J. Vyas, Dr. Manish Gupta, Dr. Deepika Malik

Introduction: In general, the use of concomitant chemoradiotherapy schedules carries a high toxicity burden; altered fractionation or
multi agent chemoradiotherapy will likely further increase the toxicity burden. CDDP in moderate doses (30-40 mg/m2) is now a standard, used as weekly schedule concomitantly with RT, mostly on an out-patient basis. The toxicity profile for 5-Fluourouracil (5-FU) and cisplatin combination therapy is similar to that for cisplatin therapy alone with conventional radiotherapy. Trials with weekly gaps or alternate chemotherapy and radiotherapy showed no actual reduction in the toxicity as compared to the single agent chemo radiotherapy. This study was conducted in order to assess if there is reduced toxicity in planned weekly gaps. Materials & Methods: Seventy (70) biopsy proven cases with locally advanced head and neck squamous cell carcinoma with informed consent; age less than or equal to 70 years with good performance status and no history of prior chemotherapy or radiotherapy, were registered and randomized in control group and trial group. Each group had 35 patients with control group, Patients were treated with Concomitant chemoradiation (CTRT) with single agent Cisplatin to 70gy/35# over 7 weeks. In trial group Patients were treated with concomitant chemoradiation with Cisplatin and 5Fu along with External Beam Radiation up to a total dose of 66-70Gy using 2Gy/fraction every other week for a total dose of 70 Gv over 13 Weeks. Acute toxicities were assessed using the WHO Common Terminology Criteria for Adverse Events (CTCAE) version 2.0. Results: Control group Trial group Total P-Value Mean Age 55.45 52.44 0.28 Sex Male 29(82.86%) 26(74.29%) 55(78.57%) 0.38 Female 6(17.14%) 9(25.71%) 15(21.43%) Stage III 1(2.86%) 8(22.86%) 9(12.86%) 0.012 IV 34(97.14%) 27(77.14%) 61(87.14%) At the end of the treatment mean hemoglobin in trial group was 11.2 and in control group 11.29 with a standard deviation of 0.83 and 0.99 respectively. Anemia was managed periodically with blood transfusion. Oropharyngeal mucositis was observed in both the groups. But at the end of the treatment both the groups had no significant difference. (p=0.817). One patient in Control group and two in trial group were complicated with grade 4 radiation dermatitis in the last week of treatment with an increased number of dermalits in trial group (p=0.003) . Grade 2-3 dysphagia was seen in 85% of patients in control group and 71% of patients in trial group respectively. (p=0.002). Two patients in the trial group presented with chemotherapy induced febrile neutropenia which was managed with parenteral antibiotics and GCSF. During that period chemotherapy was withheld until neutropenia was recovered. Mouth and neck pain was significant higher in the control group as compared to the trial group. Nausea and vomiting was significantly higher in control as compared to the trial group (p=0.001). Conclusion: In our study also significant toxicity difference between the arms was evident in. control as well as trial groups. The toxicity profile was significantly less in the trial group but at the cost of poor outcome as the treatment was extended to 13 weeks. So it is evident that single agent cisplatin is still the standard of treatment. Main drawback in using planned treatment gap in rural setup is the patient compliance and break in treatment protocol. Patient were not on Regular Follow up in both the arms.

Abstract Id: YUGP4693
Is Lymph Node Ratio An Alternative To Pn Staging In Breast Cancer – Results For 587 Patients From Single Institution
Presenter- Dr. Krunal Khobragade
Co-author - Dr.Nita Nair, Rohini Hawaldar, J Sathwara

Background: Axillary lymph node positivity is still the most important prognostic factor in the management of breast cancer. Various studies have shown that the percentage of involved nodes, lymph nodal ratio (LNR), may be a superior indicator of axillary burden and prognosis. In the current eighth edition AJCC, the expert panel considered but decided not to incorporate the LNR as they recognized that, when modest number of lymph nodes are removed for pathological evaluation, the LNR performs as well or better than total positive nodes for outcome prediction. However, when only few nodes are removed, the LNR can perform worst than total positive nodes and may be misleading. We conducted a retrospective review of women treated for breast cancer in 2008 at our institution to evaluate if LNR and disease free survival (DFS). Methods: 587 women who were treated for operable breast cancer in 2008 with at least 5 year follow up were included in the analysis. Clinico-pathological and follow up data was extracted from patient files and records and telephonic contact where necessary. LNR categories of low, intermediate and high were calculated based on the classification proposed by Vinh Hung Et al. Predicting risk factors for relapse were performed according to Cox proportional hazard analysis. DFS was estimated using the Kaplan-Meier method and compared by the log-rank test Results: Of the 587 women whose data was analyzed, median age was 45 years, median pt was 2cm. The pN staging was pNo 293 patients, pN1 [1-3 nodes positive] 157 patients, pN2> [4nodes positive] 139 patients. Similarly, when LNR was calculated, 482 were low risk [LNR <=0.2] , 84 were intermediate risk [ LNR 0.21 -0.65] and 21 were high risk (> 0.65 ). Median follow up was 82 months. 5-year DFS rate decreased significantly with increasing LNRs and pN. The DFS curves were better aligned according to LNR compared to pN. However on multivariate analysis, only age at diagnosis (p=0.007), presence of lymphovascular emboli (p=0.001) and pN status (p=0.004) were significant, LNR was not significant (p=0.652). Conclusion: LNR does not define the prognosis in breast cancer more adequately than the pN status, reinforcing the importance of pN as a prognostic variable.

Abstract Id: YUGP4695
Trifecta Assessment In T1B; Renal Score <8 Renal Tumors Following Rapn: Our Experience At Yenepoya Medical College Hospital, Mangalore, Karnataka. Presenter- Prof. Mujeebu Rahiman
Co-author - dr attai khan, Dr nischith D souza, dr raul bhargava

Objectives Trifecta(the warm ischemia time ; post operative complication and histopathology for surgical margin status) assessment in T1brenal tumours with RENAL score<8 with RAPN. Material and Methods We assessed the outcome of 10 cases of RENAL nephrectomy score <8 and T1b ; in robot assisted partial nephrectomy. The preoperative parameters were kept as near as possible for the evaluation purpose. Of the ten patients nine had morphologically and functionally normal opposite kidney with one patient having a solitary functioning kidney. Intra operative warm ischemia time; intraoperative and postoperative complications and histopathological examination of the specimen for type of tumor, grade and surgical margin were analysed. Post operative follow up of these patients were done at 6 and 12 months , both clinically and radiologically. Results The warm ischemia time;post operative complications and histopathology for surgical margin status were evaluated postoperatively. In the evaluation it was observed that the mean warm ischemia time was 23.6 min. No post operative complications were seen(Clavien-Dindo?2). The surgical margins were negativefor malignancy in all thecases . Conclusion RAPN is a feasible modality with excellent outcome for patients with selected cases of T1b and RENAL score<8 and the results are comparable with open and has a better outcome than laposcopic nephron sparing surgery.

Abstract Id: YUGP4697
Risk Stratification In Early Stage Node Negative Oral Cancer – The Impact Of Prognostic Factors And The Proposed 8th Edition Staging System
Presenter- Dr. GAURAV GOSWAMI
Co-author - Sanjoy Chatterjee, Pattathayell Arun, Kapila Manikantan

BACKGROUND: The choice of adjuvant treatment after surgery in early stage node-negative oral cancer (T1-T2N0 or Stage I-II by the 7th edition TNM staging criteria) is subjective. In our institution we devised a risk stratification system in 2015 based on the number of poor prognostic factors present in a cohort of patients. We present the validation of this institutional system with longer follow up in the
same cohort, and also test the proposed T stage reclassification in the TNM 8th edition. METHODS: The records of the first 112 consecutive patients with T1-T2N0 (7th edition TNM) oral cancer and who had complete pathological data and post-operative follow up were reviewed for factors determining prognosis. The institutional risk stratification system using the number of known risk factors identified was validated. The poor risk factors included oral tongue primary, max dimension > 2cm, depth > 5mm, lymphovascular invasion, perineural invasion, and poor differentiation. The prognosis in a lower risk group (with 0-2 risk factors) was compared to that of a higher risk group with (3 or more risk factors). Prognostication based on the proposed new T staging system (8th edition TNM) based on depth of invasion was evaluated. RESULTS: Among the 112 patients the median age was 55 years and 71 (63.4%) were males. The commonest primary site was oral tongue in 60 (53.6%) patients. Adjunct radiotherapy was given in 43 (38.4%) based on multidisciplinary team based recommendations. The median follow up after surgery was 41 months. The 4 year disease free survival (DFS) was 83.9% (with 11 local failures, 4 regional failures and 3 distant mets) and 4 year overall survival of 94.7%. Using the risk stratification criteria, patients with high risk (3-6 factors) had a 4 year DFS of 73.0% vs 90.2% for patients at low risk (0-2 factors), (p=0.005, log rank test) with HR = 3.8 (95% CI 1.2 – 11, p=0.015). Using reclassification of T stage based on TNM 8th edition the DFS for T1, T2 and T3 (all N0) was 93.4%, 77.6%, and 81.9%, without any observed difference between T2 and T3 (depth 5-10mm vs. > 10mm). CONCLUSION: Risk stratification into high and low risk by the number of prognostic factors remains clinically relevant with longer follow up. Classification based on depth of invasion by the THM 8th edition did not show a difference in outcomes between T2 and T3 in this node negative cohort.

Abstract Id: YUGP4701
Identification Of Pqp1 As A Novel Tumor Suppressor Gene In Prostate Cancer Cells
Presenter - Dr. Yuba Raj Pokharel
Co-author - Aveshka Sharma,
Polylglutamine Binding Protein-1(PQP1) is encoded by a gene present on X chromosome. It is an important protein in terms of its role in Neuro-degeneration which leads to X-Linked Mental Retardation. It is a compelling hypothesis that proteins which play role in neuro-degeneration induce apoptosis. Various evidence has been found to support of this as over expression of this protein in transgenic mice and in vitro samples have induced apoptosis and late motor neuron development. We speculate that this protein might also play a significant role in cell proliferation. Phenotypic studies done on DU145 cells of over expression and knock down shows that PQPB1 inhibits cell proliferation. Though in vitro assays of over expression and knockdown of PQPB1 in prostate Cancer cell line DU145, it down regulate protein involved in inducing cell proliferation like Pin1, C-Jun, CMyC, phosphorus-cMyC, NF-KB and P38 Moreover it down regulate antiapoptotic protein Bcl-xL after over expression of PQPB1. Hence it can be concluded that PQPB1 can control cell proliferation and induce apoptosis, which are characteristic of tutor suppressor genes. When we overexpressed PQPB1 colony size of cells have been inhibited. PQPB1 could be a novel drug target for the treatment of cancer, could be developed as cancer biomarker for future therapy.

Abstract Id: YUGP4705
Eosinophilia And Its Related Disorders - Interesting Case
Presenter - Dr. Shefall Karve
Co-author - Dr.Renu Ethirajan, Dr.Sharita N, Dr.Mangesh K
Abstract for Poster presentation at Indian Cancer Congress 2017 Full Name : Dr.Shefall.H.Karve Academic Qualification: M.D.Pathology Institution Name: HCG,Bangalore Address: No.5, Bull temple road, Basavanagudi, Bangalore-560004. Mail id: shefallkarve@gmail.com Abstract title: Eosinophilia and its related disorders - Interesting case
Abstract: Eosinophilia and its related disorders - Interesting case - Utility of peripheral smear and bone marrow as a clue to diagnosis. Co-authors: Dr.Renu Ethirajan, Dr.Sharita N, Dr.Mangesh Abstract Body : Introduction - Eosinophilia is graded based on absolute eosinophil count: mild (500–1500/L), moderate (1500–5000/L), or severe (>5000/L). A patient can be described as having idiopathic hypereosinophilic syndrome if it is persistent moderate or severe eosinophilia for at least 6 months without an identified cause, and the diagnosis of hypereosinophilic syndrome (HES) is applicable when end-organ damage occurs because of persistent moderate or severe eosinophilia. Causes of hypereosinophilia: - Neoplastic (Clonal) - 1) Myeloproliferative neoplasms: ? CML ? MDS/MPN ? CMML ? MDS ? SM 2) Myeloid and lymphoid neoplasms associated with eosinophilia and abnormalities of PDGFRα, PDGFRβ or FGFR1. 3) Acute leukemias (ALL/AML), ? Benign, reactive conditions (non-clonal) – ? Asthma ; 2) Allergies ; 3) Skin diseases; 4) Loeffler’s syndrome ; 5) Vasculitis ; 6) Drug hypersensitivity - Idiopathic hypereosinophilic syndrome It is important to differentiate between reactive and clonal disorders related to eosinophilia. Case : 38 year old male presented with bony pain and rib pain since 4 months and early satiety and feeling of nausea. No h/o fever/bloeding manifestations/blood transfusion/TB/DM/HTN/Asthma/Allergy. He was a known case of Chronic hepatitis. On physical examination - Spleen palpable - 8cm , firm non-tender. In view of splenomegaly he was advised BCR-ABL qualitative detection. CBC revealed raised WBC count - 22,000/cumm , of which eosinophils were 32%. Platelet count was also decreased. Peripheral smear : Showed eosinophilic leucocytosis with dysmorphic eosinophils, which gave a clue that it could be MDS/MPN. Bone marrow aspirate : Hypercellular with sheets of eosinophilic precursors and few myeloid precursors(>60%). Bone marrow biopsy : Hypercellular marrow with tightly packed sheets of eosinophilic precursors. Rest of the hematopoietic elements are decreased. Megakaryocytes seen focally, IHC done on bone marrow biopsy: CD34 and Tdt did not highlight any blasts. CD 117 highlighted around 10-12% immature precursors. Eosinophilic precursors were highlighted by MPO. CD 71 decorated the erythroid precursors and CD 61 highlighted the megakaryocytes which were focally increased and occasional clustering was seen. At this juncture the DD’s were : 1) Chronic eosinophilic leukemia 2) Acute leukemia with eosinophilia 3) MDS/MPN Further flowcytometry was done on the aspirate which revealed <5% blasts. Eosinophilic precursors along with granulocytes were >84%. Karyotyping done revealed normal 46,XY karyotype. BCR-ABL translocation was not detected. Molecular testing : FIP1L1- PDGFRα was detected in the leucocytes of specimen.

Abstract Id: YUGP4707
Prevalence Of Complementary And Alternative Medicine Amongst Cancer Patients
Presenter - Dr. Mansi Barthwal
Co-author - MADAN LAL BRAHMA BHATT,
Background: Interest in complementary and alternative medicine (CAM) has grown dramatically over the past several years. Cancer patients are always looking for new hope, and many have turned to non-traditional means. In cases of severe illness, the hope to “leave no stone unturned” is a powerful motivator. This study was conducted to determine the prevalence of complementary and alternative medicine use in cancer patients and what if any agents are being used (benefits and delay in treatment). The most commonly used CAM therapies throughout the study include vitamins/minerals, spiritual therapies, herbal medicines, homeopathy, medicinal teas, relaxation techniques, mind-body approaches (meditation, relaxation, and other imagery techniques), dietary approaches and food supplements, Chinese medications, botanical preparations. Aims and Objective: 1) To find the prevalence of complementary and Alternative Medicine in Cancer patients. 2) To imply the results of our study in our day to day practice and spread awareness amongst patients regarding drawbacks of
Complementary and Alternative Medicine. Methods: Histologically proven, adult (above 18yrs) Cancer patients attending Radiotherapy outpatient department with history of use of CAM in any form, were included in the study. Face to face interview using a questionnaire was conducted after an informed written consent, including 200 patients. Result Data suggest that CAM is popular among cancer patients with 74% using some form of CAM. The mean age of participants was 47 years (ranging from 27 to 72 years). Majority of patients used spiritual (82%) and herbal (84%) modality. 68% patients used more than one form of CAM. The most common subsite in cancer patients were Breast (34%) followed by Head and Neck (23%) and Cervix (20%). It was reported that among the CAM users; 57% noticed some kind of benefit in symptom, 19% did not noticed any benefit, while 24% noticed worsening of symptoms. Conclusion: It is imperative that health professionals explore the use of CAM with their cancer patients, educate them about potentially beneficial therapies in light of the limited available evidence of effectiveness. In addition, CAM usage was more common in breast cancer patients with poor emotional and financial status.

Abstract Id: YUGP4713
Docosahexaenoic Acid Prevents Osteoblast-Like Potential Of Metastatic Breast Cancer Cells To Attenuate Microcalcification
Presenter- *Dr. Chandi Mandal
Co-author - , ,

Docosahexaenoic Acid Prevents Osteoblast-like Potential of Metastatic Breast Cancer Cells to Attenuate Microcalcification in Breast Cancer
Chandi C. Mandal, Department of Biochemistry, Central University of Rajasthan; Email ID: chandimandal@gmail.com

Early detection not only increases overall survival but also markedly reduces the deaths of cancer patients. Accumulating evidence suggests microcalcification could be an early detector of breast cancer. Moreover, presence of microcalcification positively correlates with malignancy of breast tumors. However, molecular pathobiology of this microcalcification process is very poorly known.

It is the common concept that osteoblast or osteoblast-like cells drive both physiological and pathophysiological calcification process in many tissues like bone and arteries. This study was to investigate the underlying molecular mechanism involved in breast cancer microcalcification and its prevention. Our findings documented that expressions of osteoblast related markers and other genes in metastatic breast cancer cells are relatively higher as compared to non-metastatic breast cancer and non-cancerous cells, suggesting an elevated osteoblast potential in metastatic cells. Similarly, clinical cancer sample analysis found that malignant breast tissues showed an increased osteoblast potential, responsible for microcalcification which can be blocked by the treatment of DHA. Keywords: Breast cancer, Microcalcification, Osteoblast potential, Metastasis, Omega-3 fatty acid, DHA

Abstract Id: YUGP4717
Primary Adenoid Cystic Carcinoma Of Lung- A Case Report
Presenter- *Dr. ANEESHA BABU
Co-author - Dr.Aneesha Babu, Dr.Roshni.S.

Primary adenoid cystic carcinoma of lungs accounts for 0.09% of all primary lung cancers. Most of these neoplasms are located in the central airways and peripherally situated adenoid cystic carcinomas is rare. We present here an unusual case of peripherally located primary adenoid cystic carcinoma of lung in this report. This 37-year-old gentleman was evaluated elsewhere for an incidentally detected consolidation in the right lower zone of lung in 2005 with a CT scan which showed a primary mass lesion in right lower lobe ,with metastatic nodules in bilateral lung fields. Cytology was suggestive of adenoid cystic carcinoma. PET CT showed no evidence of extrathoracic disease. Patient underwent right lower lobectomy , wedge resection of upperlobe lesion and metastatlectomy of left lung nodules and was kept on followup. In 2007 he developed recurrence in lung and scalp. He was started on Erlotinib but was discontinued due to skin reaction. In 2009 he presented to us with a recurrent scalp soft tissue swelling . Palliative RT of 800Gy was given to the scalp swelling . CT evaluation showed multiple parenchymal lung metastasis and was started on Gefitinib. Reassessment CT done in 2015 revealed metastasis in both lungs, liver and right kidney with renal vein thrombosis . Biopsy confirmed adenoid cystic carcinoma. Patient was not keen for any active intervention and continues to remain relatively asymptomatic on Gefitinib. This report reaffirms the indolent nature of metastatic adenoid cystic carcinoma.

Abstract Id: YUGP4719
Orbital Metastasis As The Initial Manifestation Of Small Cell Lung Cancer- A Case Report
Presenter- *DR. ANEESHA BABU
Co-author - DR.ANEESHA BABU, DR.GEETHU BABU, DR.SAJEEV.A

Orbital tumours present a rare clinical problem. Metastatic orbital
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Abstract Id: YUGP4729

Pect In Head & Neck Cancers: The Right Imaging Tool Has Arrived!
Presenter- Dr. Shivakumar Swamy S
Co-author - Kumar Kallur, Prashanth G, Indiresh Desai

Background: Whole body FDG PET scans have been shown to be useful in staging and prognostication of head and neck cancers. In this observational study we evaluated the clinical utility of whole body FDG PET scans in staging and prognosis in head and neck cancer patients undergoing cancer directed treatment. Methodology: This is a longitudinal observational study of 138 head and neck cancer patients who have been prescribed to undergo FDG PET scan for either staging or prognosis. In this retrospective and prospective study 138 consecutive PET Scans of HNCC patients were studied. Results: At baseline FDG PET scan showed upstaging in 27.1% of cases, oligometas in 14.5% and incidentalomas in 10.5% of cases. Incidentalomas found were cancers of lung, liver, prostate, meningioma, NHL, stomach, thyroid and prostate. On followup scans restaging was done in 2.52%, oligometas was picked up in 31.1%. Upstaging was done in 45.4%, recurrence was seen in 26.1% and progressive disease was seen in 45.4%. Conclusion: FDG PET is useful in refinement of neck staging and evaluation of distant metastases or second primaries. It also has a substantial impact on treatment planning.

Abstract Id: YUGP4735

Hypo-Fractionated Radiotherapy (Rt) Schedule Of 35Gy In 10 Fractions In Advanced Incurable Breast Cancer: A Prospective Phase III Study
Presenter - Dr. MANDIRA SAHA
Co-author - SANJOY CHATTERJEE, ANIMESH SAHA, GAURAV GOSWAMI

Background: Compared to conventional fractionation breast cancer has found to be more sensitive to higher fraction size. There is no standard palliative regime used in locally advanced breast cancer for local or regional symptom control but doses of 40-50Gy over 3-5 weeks have often been used as adjuvant treatment. Aims and Objectives: Within a Phase 2 study, we investigated the feasibility and safety of a two week palliative hypofractionated radiotherapy schedule (35Gy in 10 fractions) in advanced incurable breast cancer patients. We also wanted to assess the response (clinical and imaging) as well as Quality of Life (QOL) changes in this group of patients. Methods: A RT dose of 35 Gy in 10 fractions over 2 weeks to the breast and supraclavicular fossa (SCF) was prescribed to palliate symptomatic advanced incurable breast cancers. To prevent overdosage a robust RT Quality Assurance(QA) was done using in-vivo thermoluminescent dosimetry (TLD). A film based dosimetry of the junction field(JF) was carried out to ensure junctional dose safety at the SCF and tangential field junction. Acute toxicity was assessed using common terminology criteria for adverse events (CTCAE) version 4 and LENT SOMA toxicity criteria pre RT, weekly during RT and 1 monthly up to 3 months and then 3 monthly for 1 year. QOL was assessed using FACT-B score and PHQ4 at pre and post RT, as well as after 3 month after RT. We report the QA, safety and QOL data of the first 24 recruited (of the 30) patients. Results: Of the required 30 patients, 24 have been recruited. Median dose received by 95% volume of the breast PTV was 96.3% (range=95.2-98.9%). The median dose max to the breast PTV was 106.4% (range=105.4-106.9%). Breast PTV receiving ?105% of the prescribed dose was 1.75% (median) with no point dose ?107%. Organ at risk (OAR) dose constraints were met for all patients. Median percentage variation for isocenter dose was 3% (Range = 9.7 to 9.4%). Median percentage dose variation for JF was 1.2% (Range = 8.5 to 8.9%). The junction movement range was between 2mm and 3mm. At a median follow up of 7 months, only one patient reported grade-2 acute skin toxicity (others had grade 1). None of the patients complained of dysphagia or acute brachial plexopathy. Overall, all of them reported a better QOL at 3-months post-RT (Table 1). Conclusion: QA measures in the HYPORT study confirm the delivery of the prescribed two week dose schedule with no significant over dosage at the field junction. A 35Gy/10 fraction (2 week) palliative radiotherapy regimen for symptom control in advanced breast cancer is feasible with confirmation that the delivered and received doses are safe and there is a improving the QOL of such patients. Completion and long-term follow-up of this study are required before routine use. Table 1. QOL parameters (PHQ4 – Lower the better; FACT-B – Higher the better; n=24) QOL Parameter Baseline at 3 months PHQ4 at post RT at 3 month after RT

Abstract Id: YUGP4737

Clinicopathological Features Of Triple Positive Breast Cancer: A Perspective Analysis
Presenter - Dr. Anil Kumar J
Co-author - Dr.Chitra Reddy, Dr.Sumita Jain

Clinicopathological Features of Triple Positive Breast Cancer: A Perspective Analysis. Dr. Anil Kumar Khyalia, Dr.Sumita Jain. Abstract: Aim: The aim is to study various clinicopathological features of TPBC in Northern part of INDIA. Background: • Molecular classification of breast cancer is based on gene expression profile. They subgroup [luminal A, luminal B, HER2, and basal-like] have distinct gene expression pattern and phenotypical characteristics. HER2 positive associated with TP53mutations They are associated with less aggressive histology, good clinical outcome, and responsive to endocrine therapy and short survival. Material And Method: • Study Design: Hospital based retrospective, descriptive type of observational study. • Study place: Dept. of general surgery SMS hospital Jaipur. • Study population: 370 cases of diagnosed breast cancer. • Statistical Analysis: Descriptive statistics. Result: • Total breast cancer patients studied = 370 • 32 patients [8.5%] were found to have TPBC • Most [56.6%] were before the age of 48 years. • More common in pre menopausal women[60%] • Most of TPBC [96.6%] had histological features of IDC Conclusions: TPBC represents around 9 % of breast cancer. TPBC is commonly associated with pre menopausal status before the age of 45 years. TBC is commonly infiltrative duct...
Resection Of Periampulary Carcinoma At Government Medical
A Study Of 100 Cases Of Pancreatico-Gastrostomy Post
Abstract Id: YUGP4741
A Study Of 100 Cases Of Pancreatico-Gastrostomy Post Resection Of Periampulary Carcinoma At Government Medical College And Regional Cancer Centre Aurangabad
Presenter - Dr. MANDAR TILAK Co-author - DR MANDAR TILAK, DR NIHIL NALAWADE, DR HARISH VARMA
Aim: To assess the feasibility of pancreaticogastrostomy of remnant pancreatic duct to gastric mucosa anastomosis in periampullary adenocarcinoma with respect to technical difficulty, intra-operative and post operative complications
Introduction: Whipples surgery or its modification pylorus preserving pancreaticoduodenectomy is the standard surgical procedure for resectable periampullary carcinoma. Post resection of the tumor, the reconstruction options for drainage of pancreatic enzymes in the gastrointestinal tract is of utmost importance and also is the source of the major post operative complication that is anastamosis leak and pancreatic fistula which is the most common cause of morbidity and mortality of the surgery. Procedures for drainage of pancreatic secretions into the gastro-intestinal tract include ; pancreaticojejunoanostomy (duct to mucosa or duct-in telescoping procedure) and the now increasingly used other option that is pancreaticogastrostomy with duct to mucosa anastomosis between the pancreatic remnant and the stomach or direct invagination of remnant pancreas into the stomach that is du-n-in pancreaticogastrostomy. Pancreaticogastrostomy as first described, consisted of implanting the open (1,2,3) or closed (4,5) end of the pancreas into the stomach through an incision in the posterior wall. The pancreas was sutured in position with serosa to serosa stitches. Anastomosis between the gastric mucosa and pancreatic duct was first described by Wells et al. (1) in 1952, and was revived by Telford and Mason (6). The current study was done to assess the outcome of duct to mucosa pancreaticogastrostomy post resection of periampullary carcinoma.

Study type: Prospective observational study ; case series Materials and methods: Cases of periampillary carcinoma were selected. After resection of periampillary carcinoma (pancreaticodudenectomy or pylorus preserving pancreaticoduodenectomy ) duct to mucosa pancreaticogastrostomy was performed in 2 layers using 4.0 P.D.S. Preoperative patient characteristics; age, sex, body mass index,tumor site, tumor size, serum bilirubin, serum proteins and hemoglobin were noted. Intra-operatively; time required for pancreaticogastrostomy, overall surgical time, complications during pancreaticogastrostomy were noted. Post operative, all patients were given injection octreotide 50microgram s/c TDS Post operatively anastomotic leak defined as per the ISGPF classification. Persistence of leak, occurrence of post operative hemorrhage, infection, intra-abdominal abscess and need for reexploration and duration of use of octreotide. Incidence and duration of post operative paralytic ileus were noted . These were compared with standard available data for pancreaticojejunostomy procedure post resection of periampillary carcinoma. Result: In our case series of 100 patients Grade C leaks as per ISGPF were observed in 4 patients that is 4 % cases with re exploration needed in 2 patients Grade B leaks were seen in 6 percent cases and were managed conservatively with hospital stay of 26 days average. Grade A leaks were observed in 14 percent cases Post operative hemorrhage was sen in 6 percent patients and was managed conservatively in all . Persistent intra-abdominal collection and abscess were observed in 3 patients out of which 2 required pig tail catheter drainage. Overall pancreatic fistula associated mortality was 2 percent Average time for pancreaticogastrostomy 32 min and average total operative time was 280 min Conclusion: Pancreaticogastrostomy is a feasible and safe procedure post resection of periampullary carcinomas with low incidence of overall and Grade B and C pancreatic fistulas. References: 1) Wells C, Shepherd JA, Gibbon N. Pancreaticogastrostomy. Lancet 1952;262:588-9. 2) Ingebritsen R, Langfeldt E. Pancreaticogastrostomy. Lancet 1952;263:270. 3) Silverstone M. Pancreaticoduodenectomy and pancreaticogastrostomy. Br J Surg 1956;44:299-302. 4) Mackie JA, Rhoads JE, Park CD. Pancreaticogastrostomy: A further evaluation. Ann Surg 1975;181:541-5. 5) Kapur BML. Pancreaticogastrostomy in pancreaticoduodenal resection for ampullary carcinoma: Experience in thirtyone cases. Surgery 1986;100:489-93. 6) Telford DL, Mason GR. Pancreatico-gastrostomy: Clinical experience with a direct pancreatic duct to gastric mucosa anastomosis. Am J Surg 1984;147:832-7.

Abstract Id: YUGP4745
Exploring Breast Cancer Data To Evaluate Risk Factors For Recurrence – An Institutional Analysis
Presenter - Dr. N V S PRAVEEN Co-author - MBBS, M. D. RT, Dr.N.V.S.PRAVEEN, G.S.L.MEDICAL COLLEGE
Introduction – Breast cancer is the second most common cancer in the world and fifth cause of death from cancer overall. Aims and Objectives – To study the risk factors involved in the Recurrence of treated cases of Carcinoma Breast patients. Patients and Methods – Patients with Breast cancer who were treated from January 2012 to December 2014 were evaluated. A total of 263 patients were taken for the study. The patients were categorized into 2 groups- Metastatic and Non-Metastatic. Various risk factor variables such as Age, BMI, Stage at presentation, Margin status, Lymph node status, LVSI, Tumor grade, ER/PR status were compared and statistical analysis was performed. Results – In a series of 263 patients, numbers of Non metastatic cases were 228 (86.7%) and Metastatic cases were 35 (13.3%). The Median age at presentation – 51 years (range 21 – 76 years). On univariate analysis, BMI (>25, 25-30, >30) (p=0.348), Tumour site (p=0.884), Margin status (p=0.233), Histological grade (p=0.223), ER/PR status (p=0.774) were not statistically significant predictors of recurrence and locally advanced Stage at presentation (p=0.013), > 4 Lymph
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nodal involvement (p=0.000314), LVI (p=0.007) were statistically significant predictors of recurrence. Conclusion - Among the several factors that have been considered in the study Tumour stage at presentation, More than 4 lymph node involvement and LymphoVascular Stromal Invasion were identified as significant risk factors for recurrence of disease

Abstract Id: YUGP4747
Fanconi Anemia Without Anemia Presenting With Oropharyngeal Malignancy
Presenter - Dr. N V S PRAVEEN
Co-author - Dr.P.B.ANANDA RAO, Dr.SIVASANKAR KOTNE, Dr.PRUDHVI RAJ M

INTRODUCTION: Fanconi anemia (FA) is primarily an autosomal recessive disorder, about 2% of cases are inherited as X-linked recessive condition. HNSCC is the most common solid tumor in patients with FA with incidence of 500 to 700 fold higher than in the general population CASEREPOT: A 30yr old male, presented with ulcer over left tonsil, associated with pain and burning sensation for 2 months.Patient had history of severe anemia at the age of 10 years for which blood transfusions were given, and history of fever with thrombocytopenia in 2010 for which he received platelet transfusions.OE- patient is short statured(142cm), oral cavity - ulceroproliferative lesion over left tonsil, puffy lips, B/L cervical lymphadenopathy present. Systemic examination was normal except for small genitalia and testicles. INVESTIGATIONS: CBP showed Hb 14.4 g%, platelets 50,000/mm3. CT Neck suggestive of invasive carcinoma of Oropharynx.Biopsy reported as moderately differentiated Squamous cell carcinoma of tonsil. X-ray Right and left upperlimb showed absence of thumb, radial hypoplasia, shortened and curved ulna, absence of pisiform and trapezium carpal bones, palmar flexed right hand. Bone Marrow revealed normal study. Semen analysis - Aspermia. Chromosomal breakage analysis- sensitive to MITOMYCIN-C TREATMENT:FA is a condition usually identified in childhood due to classical presentation of recurrent anemia and blood malignancies. This case is unique in being undetected until 3rd decade. Supportive treatment for hematological abnormalities. Surgical resection remains the mainstay of treatment for patients of HNSCC with FA. Radiation and Chemotherapy are poorly tolerated and may be used with caution in advanced tumors.

Abstract Id: YUGP4749
Comparative Study Of Three Chemotherapy Schedules In Recurrent, Residual Or Metastatic Head And Neck Carcinoma
Presenter - Prof. Vivek Kaushal
Co-author - Vipul Bansal, Anil Kumar Dhull

Comparative Study of Three Chemotherapy Schedules in Recurrent, Residual or Metastatic Head and Neck Carcinoma Vivek Kaushal, Vipul Bansal, Anil K Dhull Department of Radiation Oncology, Post Graduate Institute of Medical Sciences, Rohtak Aims: Recurrent, residual and metastatic squamous cell carcinoma of the head and neck carries a poor prognosis with median survival of 1-year. The purpose of this study is to determine the efficacy and toxicity profile of the triple agent versus double agent versus single agent chemotherapy regimens in residual, recurrent or metastatic head and neck carcinoma. Material and methods: Thirty previously treated, histopathologically proven patients of recurrent, residual or metastatic squamous cell carcinoma of head and neck (AJCC stage III and IV), that were unsuitable for loco-regional treatment and were eligible for palliative chemotherapy were randomized between 3 study arms. Patients in arm A received 3-weekly TPF regimen for a maximum of 6-cycles. Arm B patients received oral metronomic chemotherapy i.e. tab celecoxib 200 mg twice daily and tab methotrexate 15 mg/m2 weekly for 4 weeks and in arm C, patients received 3-weekly cisplatin 100 mg/m2 for a maximum of 6 cycles. Results: Patients were randomized and equally allocated to each arm. The median age of presentation in arm A, arm B and arm C was 55-years (42–70), 58-years (46–69) and 52-years (32-67) respectively. Male to female ratio was 14:1. In arm A, 44% of patients presented intended treatment, while in arm B and arm C, percentage of patients who completed intended treatment was 56% and 44%. The response rates in arm A, B and C were 34%, 23% and 12% respectively. The median overall survival in arm A, B and C was 330 days (113-510), 296 days (168-421) and 210 days (108-390) respectively. The percentage of Grade 3-4 hematological toxicity in arm A, B and C was 45%, 12% and 34% respectively. Conclusions: Multi agent-containing regimen has an improved overall survival and oral metronomic chemotherapy has an excellent safety profile in group of patients with residual, recurrent or metastatic squamous cell carcinoma of the head and neck.

Abstract Id: YUGP4767
Cancer Awareness Amongst Nurses In A Tertiary Care Hospital In North Delhi, India.
Presenter - Dr. R Ranga Rao Ranga Raju
Co-author - Dr Waseem Abbas, Dr Rudra P Acharya, Dr Peush Bajpai

Abstract Nursing staff is the first of constant line of contact with the patients and serve a prodigious responsibility. They play a pivotal role in disseminating knowledge to the patients in their daily practice. The present study was conducted to assess the level of cancer awareness amongst hospital nurses, identify the knowledge gaps and to incorporate them in training. A cross sectional survey was conducted amongst nurses in a tertiary care hospital in North Delhi. Of 458 employed nurses, 53.3% nurses working in the hospital participated in the study on a voluntary basis. A structured pre tested questionnaire was administered to the study subjects. The questionnaires were coded and information on personal details was not included. To warrant an effective measure of study outcomes, a Cancer Awareness Score (CAS) was developed. CAS of individual participants was achieved by dividing the total average score of each subject by ten that will help in quantifying the cancer awareness. A total of 244 nurses (53.3%) out of 458 employed were surveyed. One hundred and forty six forms were filled manually and 78 forms were completed electronically. The return rate was 65.5%. The completion rate was 100% and the rejection rate was zero. Of these 223 were females and 21 were males. The study subjects were in the age range of 19 – 56 years. Out of the 244 nurses, 75.81% were aware about general aspects of cancer .77.5 % of the nurses acknowledged that cancer is a serious health problem in India, and 79.9 % were aware of the increasing incidence of cancer. 86.4 % subjects knew that cancer is a lifestyle disease. 75.4 % were aware that cancer is preventable, and 78.7 % agreed that early detection is possible. 23 % believed that all lumps are cancerous. Warning symptoms of cancer: Almost 75% of the study subjects were aware about warning symptoms of cancer, with a majority of them were aware of the all the warning symptoms of cancer and rest were aware of some of the symptoms. Causative factors: Ninety percent of them were aware about all the causative factors , 8.8 % were not aware and 1.2 % did not know about the causes. Myths of cancer: In this study, 21 % of nurses were observed to have one or more myths about cancer during the survey, while 77.8 % did not carry myths about cancer (Figure VI). Surprisingly, 23.4 % believed that cancer is contagious, 25% of the study subjects believed that cancer is familial, 13.9 % believed that cancer is due to God’s curse! Another alarming observation is that they believe that procedures such as biopsy (17%) or surgery (21.7%) can spread cancer! It is vital to work on removing these myths. Cancer Statistics: More than 65% of the participants were unaware about Cancer statistics in India. More than half subjects were unaware of the most common cancerin men and women, the cancer incidence and deaths. However, 33% of the study subjects had knowledge on cancer statistics in India. It is important to empower nurses with the information on increasing burden of cancer in India and common
nurses 77.88 20.59 1.49 Awareness amongst nurses on cancer amongst nurses 74.9 22.77 2.31 Awareness of causative INAPPROPRIATE DO NOT KNOW General cancer awareness SCORE OF THE PARTICIPANTS TOPICS APPROPRIATE care givers and other hospital staff (table -1) TABLE I- AVERAGE knowledge on cancer, they can further impart information to patients, look up to them for information and advice. If well equipped with knowledge and rest needed improvement of varying degrees. They are regularly assisting patients with cancer and hence patients look up to them for information and advice. If well equipped with knowledge on cancer, they can further impart information to patients, care givers and other hospital staff. (Table-1) Conclusion Authors perceive that on cancer prevention and less than 3% of study subjects had no knowledge about cancer prevention Decision making of treatment: More than 80% of the subjects believed that diagnosis of cancer, prognosis, treatment details must be discussed with patients and caregivers. Regarding the decision makers, they believed that patients (48.4 %) or caregivers (28.3 %) must take the treatment decision while 17.2 % believed that doctor should decide the treatment. While more than 80% of the study subjects believed that patient and caregivers should participate in decision making where as less than 15% of the subjects did not. The total average score of nurses was 84.72 for appropriate responses and 14.1 for inappropriate responses To get an objective view of the quantum of cancer awareness amongst the nurses, CAS was applied.CAS was calculated as a group and on individual basis to measure the level of cancer awareness. The group CAS of the study subjects was 7.2/10 and as per the scale the findings demonstrated a need for improvement on cancer awareness. Only 4 % of nurses had desirable level with a score of above 8, while 54.5 % had score of 6 to 7, 18.8% had average and 22.5 % below average. In all 95% required training and improvement in their level of knowledge. Satisfactory aspects were in general awareness (75%), warning symptoms (75%) causations (80%), and prevention (78%), treatment (68%) decision making (83%). Unsatisfactory were knowledge of cancer statistics in India (26%). An observation of concern was existence of myths in 30 % nurses. While group average CAS was 72% needing improvement, only 4% nurses had adequate knowledge and rest needed improvement of varying degrees. They are regularly assisting patients with cancer and hence patients look up to them for information and advice. If well equipped with knowledge on cancer, they can further impart information to patients, care givers and other hospital staff. (Table-1) Conclusion Authors perceive that the study subjects lack adequate knowledge about cancer. The total average score of the study subjects is less than 75%. General awareness about cancer treatment needs to be reinforced. There is a pressing need to bust the myths by using appropriate information education communication strategies such as displaying appropriate posters depicting facts and highlights about cancer at nursing stations. Information dissemination in an integral part of the nursing role and inappropriate message communicated could be detrimental to the patients. Repeated training of nurses on cancer awareness is warranted. Nursing staff is the backbone of healthcare and play a vital role in promoting cancer screening and healthcare seeking practices. They are regularly assisting patients with cancer and hence patients look up to them for information and advice. If well equipped with knowledge on cancer, they can further impart information to patients, care givers and other hospital staff (table -1) TABLE I- AVERAGE SCORE OF THE PARTICIPANTS TOPICS APPROPRIATE INAPPROPRIATE DO NOT KNOW General cancer awareness amongst nurses 75.81 23.03 1.38 Awareness of warning symptoms of cancer amongst nurses 74.9 22.77 3.21 Awareness of causative factors of cancer amongst nurses 90.8 8.12 Myths of cancer amongst nurses 77.88 20.59 1.49 Awareness amongst nurses on cancer statistics 33.4 66.6 1.95 Awareness amongst nurses on general aspects of cancer treatment 66.7 6 31.25 2.65 Awareness amongst nurses on cancer prevention 74.68 24.6 1.06 Awareness amongst nurses on decision making of treatment 84.72 14.1 1.1 Awareness amongst nurses on decision making of treatment- WHO SHOULD TAKE THE DECISION IN A PATIENT OF 75 YEARS OLD MALE CAREGIVER DOCTOR FRIEND PATIENT DO NOT KNOW 28.3 17.2 4.5 48.4 4.1 6 Average CAS Of Participated Nurses and Its Interpretation: Needs Improvement Score Number of Nurses Interpretation Way Forward < 4 55 (22.5%) Below Average Needs training 4-6 46 (18.8%) Average Needs training 6-8 133 (54.5%) Good Needs improvement 8-10 10 (4.09%) Very good Desirable

Abstract Id: YUGP4773

Preoperative Chemoradiation In Resectable Carcinoma Of Oesophagus : Clinical Audit In A Single Rural Cancer Centre In India

Presenter- ' Dr. Prasad Tanawade
Co-author - Dr Suraj Pawar, Dr Suraj Pawar,

Background - Preoperative neoadjuvant chemoradiotherapy (NACTRT) has proven survival advantage in resectable carcinoma of esophagus. The feasibility of this approach in a rural setting needed to be studied considering compliance, socio-economic status issues. Methods - Retrospective analysis of patients with carcinoma of esophagus who received NACTRT at a single institute from March 2011 to March 2017 was done. The clinical outcome data was retrieved. Results - Total of 135 patients with median age 55 years: diagnosed of resectable carcinoma of esophagus received NACTRT. Lower third and GE junction was the commonest site. Squamous cell carcinoma was the commonest histology. The mean dose of RT given was 45Gy in 25 fractions over 5 weeks. Concomitant chemotherapy was given in all but 15 patients. Of the 113 patients in whom response was assessed; 75% showed partial response, 8% had stable disease while 16% had progressive disease. Half of the patients underwent surgery. The reasons for not undergoing surgery in the 67 patients were PD [21], lost to follow up [28], unwilling for surgery [14], complete response after NARTCT [1], expired during NARTCT [1], development of second primary [2]. Conclusions - NARTCT followed by surgery for resectable carcinoma of oesophagus is a feasible approach in rural set up with nearly half of the patients undergoing the definitive treatment. The careful selection of the patients based on the socio-economic factors warrants attention in the decision. This approach might prevent the patient from losing chance to cure by not undergoing the definitive treatment i.e. surgery.

Abstract Id: YUGP4775

To Assess The Feasibility And Oncological Safety Of Axillary Reverse Mapping In Early Breast Cancer, Using Premixed Autologous Serum And Indocyanine Green Dye Fluorescence Technique And An In-House Near-Infrared Fluorescence Imaging System And Methylene Blue

Presenter- ' Dr. Jyothsna Mentam
Co-author - Jyothsna M, Syrapaline Wankhar, Pooja Ramakant

Background: Lymphedema remains as the most troublesome sequel following axillary dissection in breast cancer patients. Incidence of lymphedema ranges from 11-30% of patients undergoing axillary lymph node dissection (ALND). Axillary reverse mapping (ARM) is a technique described to map and preserve arm lymphatics, to reduce the incidence of lymphedema after ALND. The arm nodes with metastatic tumour is a major concern. Aim : To determine the metastatic rate and compare the detection rates of arm lymphatics and arm nodes, between premixed autologous serum and indocyanine green (ICG) dye, using an in-house near infrared (NIR) fluorescent imaging system and methylene blue dye, in patients with early breast cancer. Methods: This IRB approved study included 52 patients with early breast cancer, undergoing ALND, equally allocated into two groups. In one group standardized solution of patient’s serum
and ICG was injected intradermally posterior to the proximal part of the arm inter-muscular groove and in-house NIR imaging system was used and 2ml of methylene blue was injected at the same site in the other group. The identified ARM node is sent for histo-pathological examination to detect metastasis. Results and conclusion: After identifying the accurate site of injection, the identification rate of arm lymphatics and arm lymph node using patient's serum and ICG and methylene blue were comparable. Metastatic rate in the arm node was low (5.8%). Thus ARM technique is feasible and safe in patients with early breast cancer.

Abstract Id: YUGP4787
Comparison Of ERC Stenting And Percutaneous Cholecystostomy As Preoperative Biliary Drainage Procedure In Periampullary Malignancies: A Retrospective Analysis
Presenter - Dr. Venkatarami Reddy Vutukuru
Co-author - Sivaramakrishna G, Dinakar Reddy A,

Background: Preoperative biliary drainage (PBD) for periampullary tumors is necessary in few patients. ERC with stenting (ERCS) is the preferred method. However, percutaneous cholecystostomy (PC) is an option, especially in centres where ERCP is not available or ERCP has failed. Our aim is to compare the outcomes following PBD for periampullary tumors using two methods (PC and ERC stenting) Methods: All patients who underwent PBD prior to pancreaticoduodenectomy during the period July 2012 to May 2017 were included. Data was retrospectively collected. Patients were divided into 2 groups. Group A included patients who underwent ERCS and Group B who underwent PC. Outcomes were compared in two groups and results were analyzed. P value of <.05 was considered significant. Results: Of 144 patients who underwent PD, 28(19.4%) required PBD for various reasons. 18 were subjected to ERCS and 10 underwent PC. Reasons for subjecting to PC are financial constrain in 7 (ERC not available at centre and needed referral to private hospital) and ERC failure in 3. Expenses incurred for ERCS and PC were approximately 20,000 and 3500 rupees respectively. Demographic, biochemical, coagulation profile and tumor characteristics were similar in two groups. Mean time for resolution of complications for which PBD done was similar. 2 in group A required redo ERC stenting for stent blockage. Duration of surgery, Intraoperative blood loss were similar in two groups. Intraoperatively collected bile cultures were positive in 11/18(61%) in group A and 4/10(40%) in Group B. Wound infection rates were higher in group A (10/18, 72.2%) then Group B (3/10, 30%), which resulted in prolonged mean hospital stay in Group A (14 days vs.10 days in group B). Conclusion: PC as a procedure for PBD prior to pancreaticoduodenectomy is cheaper and equally effective as compared to ERC with stenting with less wound infection rates and decreased hospital stay.

Abstract Id: YUGP4789
Serum Amylase In Defining Clinically Relevant Postoperative Pancreatic Fistula (CrF): Day 3 Or Day 5; Which Is Better?
Presenter - Dr. Venkatarami Reddy Vutukuru
Co-author - Dr. Dinakar Reddy A,

Background ISGPF defined POPF in 2005 based on drain amylase on or after day 3. Still exact incidence is not known due to discrepancy in considering Grade A fistulas as true fistulas. In 2016, Grade A fistula is considered as Biochemical leak and no longer a true fistula. Our aim is to see if we can avoid the term Biochemical leak in defining POPF by considering Amylase on Day 5 instead of Day 3 Methods: retrospective study included all patients who underwent pancreaticoduodenectomy during Jan 2014 - Nov 2016. Serum and Drain amylase were analyzed on Day 3. Those who met criteria of POPF, underwent repeat amylase on Day 5. These patients were divided into 2 groups. Group A includes patients whose Day 5 amylase normalized and Group B where elevated Amylase persisted. Outcomes compared in 2 Groups in terms of clinically relevant POPF (CRF), DGE, Hemorrhage (PPH), hospital stay and 30 Day mortality. Results were analysed and p value <.05 was considered significant Results: Of 110 patients, 44(40%) met ISGPF criteria. Of 44, 36(82%) had normalised Amylase on Day 5 (Group A). Only 8(18%) had persistent elevated amylase (Group B). None in Group A had CRF, whereas in Group B, 6(75%) had CRF and 2(25%) had only biochemical leak (p=0.0001). DGE was significantly higher in Group B (87.5% vs 33.3%; p=0.013). PPH was seen in only 1 patient (Group A). Duration of hospital stay and 30 day mortality were similar Conclusion: Amylase levels on Day 5 in defining POPF may avoid the term Biochemical leak and it is also a better predictor of Clinically relevant POPF.

Abstract Id: YUGP4793
Are Cancer Euphemisms Associated With Psychological Outcomes And Health Behaviours?
Presenter - Ms. Ravalif T S M
Co-author - Ravalii Tanikella, Dr Tracy Epton, Dr Mahati Chitter

Background The term “cancer” has negative connotations; in India, there are also taboos. Euphemisms (e.g., lump) are often used instead of “cancer”. Patients who use euphemisms could differ in psychological outcomes and health behaviours compared to those who use medical terms. This study investigates the relationship between cancer euphemism use and illness perceptions, stigma, coping strategies, anxiety, depression, self-affirmation and health behaviours in Indian patients. Method Patients (N=350) were recruited from cancer hospitals in Hyderabad. They were asked “what words do you use to describe your illness?”. Scores on the Brief illness perception questionnaire (BIPQ), Cancer stigma scale (CASS), Hospital anxiety/ depression scale (HADS), Brief COPE, Spontaneous self-affirmation scale (SSAS), and a health behaviour scale were recorded. Mann-Whitney Us were used to explore differences between groups euphemism users (i.e., used euphemism as their 1st word) and medical term users. Results 51% were euphemism users. Compared to medical term users, euphemism reported lower responsibility on the CASS; less self-distancing, emotional support, positive reframing, planning, acceptance, religion and blame on the COPE; and greater illness identity, less understanding of illness, and lower perceptions of personal control on the BIPQ. There were no differences between groups in anxiety and depression. Euphemism users ate a healthy diet on fewer days than medical term users and were less likely to spontaneously self-affirm. Conclusion Using euphemisms is associated with illness perceptions, coping strategy and spontaneous self-affirmation use. Physicians should consider overcoming cultural issues and taboos and use medical terms with patients.

Abstract Id: YUGP4795
Risk Factors Of Multiple Primary Malignant Neoplasms (Mpmns) In Cancer Survivors
Presenter - Prof. Chichang Chang
Co-author - Chi-Jie Lu

Over the past decades, the number of cases of cancer has been increasing worldwide. The high effectiveness of cancer screening and therapies resulted in the increased diagnosis of multiple primary malignancies (MPMNs) in Taiwan. The present study was to investigate the clinical data of patients, and using machine learning approaches for extracting hidden information from the cancer registry database. Traditionally, clinical diagnosis of MPMN was based on physician’s clinical experience with various risk factors. Since the risk factors are broad categories, years of clinical study and experience have tried to identify key risk factors for MPMN. In this study, five machine learning approaches including LADT(Logical Analysis of Data Tree), NBT(Naive Bayes Tree), RF(Random Forests), RT(Random Tree) and FT(Functional Trees) to develop SPM prediction model based on the past medical examination.
Abstracts

data for patients. Each patient in the data set contains 28 predictor variables, namely Age, Primary Site, Histology, Behavior Code, Grade, Tumor Size, Clinical T, Clinical N, Clinical M, Clinical Stage, Pathologic T, Pathologic N, Pathologic M, Pathologic Stage, Surgical Margins, Surgery, Radiation Therapy, Pre-operative Radiation Therapy, Sequence of Locoregional Therapy and Systemic Therapy, Dose to CTV H, Number of Fractions to CTV H, Dose to CTV L, Number of Fractions to CTV L, Body Mass Index (BMI), Smoking Behavior, Betel Nut Chewing Behavior, Drinking Behavior and Type of Recurrence. Experimental results illustrate that RF model is the most useful approach to the discovery of recurrence proneness factors. Our findings suggest that four most important SPM-proneness factors were grade, smoking behavior, betel nut chewing behavior and drinking behavior.

Abstract Id: YUGP4799

Internaure Tissue Clearance In Axillary Dissection For Breast Cancer: What Is The Importance?Presenter- Dr. Parth PatelCo-author - Dr Shashikant Saini,

Background: Breast cancer is the most common cancer in women and second most common type of cancer overall. The prime objectives of axillary surgery in the management of breast cancer patients are: 1) accurate staging, 2) treatment to cure and 3) quantitative information of metastatic lymph nodes for prognostic purposes and allocation to adjuvant protocols. During axillary dissection, all 3 level lymphnodes are removed, while the important axillary structures (axillary vein, long thoracic and thoracodorsal nerves) are preserved. The latter two structures are particularly vulnerable to injury when dissecting the tissue between them (the interneural tissue). Methods: This prospective non-randomized study, conducted on 125 female patients, who underwent axillary lymphadenectomy for breast cancer has evaluated the importance of dissection of the Interneural tissue during axillary dissection in breast cancer surgery by reviewing the lymph node yield and metastasis rate. The interneural tissue was excised separately after a routine axillary dissection. Results: Lymph nodes were found in the interneural tissue of 70 out of 125 patients (56%). The average number of interneural lymph nodes recovered per specimen was 1.3. The interneural tissue lymph nodes were positive for metastasis in 10 (8%) patients. There was no incidence of isolated metastasis in the internerve tissue nodes. Conclusions: There is a significant incidence of lymph nodes (56%) and axillary node metastases (8%) in the tissue lying between the long thoracic and thoracodorsal nerves. Therefore, meticulous dissection and excision of this interneural tissue is strongly recommended to optimize decision making regarding adjuvant treatment and outcome.

Abstract Id: YUGP4801

Locally Aggressive Recurrent Inflammatory Myofibroblastic Tumor In A Rare Extrapulmonary Location.Presenter- Dr. Parth PatelCo-author - Dr Kamal Kishor Lakhera, Dr Sanjeev Patni,

Abstract: Inflammatory myofibroblastic tumor (IMT) is a rare disease. The lung is the most common site and commonly seen in young males, accounting for 0.7% of all thoracic tumors. It can also develop in rare extrapulmonary sites like the orbit, skull base, paranasal sinuses, thyroid, liver, spine, spleen, kidney, bile ducts, epididymis, testis, spinal cord, lymphnodes and other tissues and their clinical and radiological features, prognosis, and therapeutic management are still debated. A variety of terms have been used to identify this disease, also known as plasma cell granuloma, inflammatory pseudotumor, fibrous histiocytoma, fibroxanthoma, and xanthogranuloma Inflammatory myofibroblastic tumor (IMT) is a rare lesion with an uncertain prognosis and a disorder difficult to classify. It exhibits a variable biological behaviour that ranges from frequently benign lesions to more aggressive variants. IMT in elderly people are very rare, especially the extra pulmonary one. We report the clinical, radiological, and histopathological findings of a case of IMT arising in the axilla. No case of IMT in axilla has been found to be reported during extensive pubmed search. Keywords: Inflammatory myofibroblastic tumor, inflammatory pseudotumor, extrapulmonary, recurrent, axilla.

Abstract Id: YUGP4803

Blood Group Change In Acute LeukemiaPresenter- Dr. Deepti HallurCo-author -

Change in the ABO Blood group of acute leukemia patients has been generally observed post bone marrow transplant with an allogenic transplant of a different ABO group. Here is a 65 year old female patient presenting a change in the ABO blood group on commencement of chemotherapy. Epigenetic modifications in the promoter of the ABO gene causing its suppression has been implicated in such a change.

Abstract Id: YUGP4809

Successful Abo Incompatible Haploidentical Allogenic Stem Cell Transplant In Heavily Pretreated Refractory Hodgkins Lymphoma Following Nivolumab TreatmentPresenter- Dr. MADHUSUDAN GANVIRCo-author - Dr Shyam Aggarwal, Dr Madhusudan Ganvir, Dr Shrinivas shinde

Background: Nivolumab is a potent new therapeutic option has been approved in treatment of heavily pretreated refractory Hodgkin’s lymphoma. However, to achieve cure in those patients’ myeloablative or non myeloablative allogeneic stem cell transplant is necessary especially in whom bone marrow is infiltrated by lymphoma. Aims: We report a rare case of Hodgkin’s lymphoma after failure of three lines of chemotherapy, successfully treated with immunotherapy (nivolumab) followed by ABO incompatible haploidentical stem cell transplantation. Methods: A 28 year old male without comorbidity was diagnosed as Hodgkin’s lymphoma stage 3B in 2013 and achieved complete remission after six cycles of ABVD. He remained in remission for over 2 years. His disease relapsed in Dec 2015, when he was treated with four cycles ICE regimen, but he progressed and then he was given two cycles of bendamustine, gemicitabine & Navelbine (BGV) protocol but he again progressed at end of the second cycle. He then developed extensive bone marrow and liver involvement leading to severe pancytopenia and jaundice (bilirubin of 13 mg/dl & SGOT/SGPT > 1000 U/ml) and presented with hepatic encephalopathy in moribund condition. His bone marrow biopsy was positive for lymphoma involvement. He was then started on nivolumab. Results: He showed dramatic improvement with 2 weekly nivolumab (3 mg/kg). His pancytopenia and hepatic parameters returned to normal after four doses of nivolumab. However, after eight doses, he progressed. He had ABO incompatible haploidentical sister (50% match). The patient was conditioned with FLU- CY- TBI 200cGy. For GVHD prophylaxis, 50mg/kg cyclophosphamide was given on day+3, +4, followed by tacrolimus and MMF. He engrafted on day+23. He was given appropriate treatment for neutropenic sepsis and pancytopenia. He did not develop any GVHD. After three months of transplantation he is in complete remission. Chimerism studies demonstrate 80% donor chimerism. Summary/Conclusion: To our knowledge, this is the first reported case in our hospital, We here highlights 2 points 1) that nivolumab immunotherapy seems to be an effectivecould act as a bridge for heavily pretreated refractory Hodgkin’s lymphoma in a sick condition. 2) ABO incompatible haploidentical allogenic stem cell transplant is feasible following nivolumab. Email Address: drshyam_aggarwal@yahoo.com
Abstract Id: YUGP4811

Video: Thoracolaparoscopic Esophagectomy
Presenter- Dr. Munish Mahajan
Co-author - .

Abstract Id: YUGP4813

Video: Laparoscopic Right Radical Nephrectomy
Presenter- Dr. Munish Mahajan
Co-author - .

Abstract Id: YUGP4817

Selective Pelvic Lymph Node Dissection In Mid And Lower Rectal Malignancy
Presenter- Dr. MANIKANDAN VENKATASUBRAMANIYAN
Co-author - Dr Asif, Dr. Shivendra Singh,

ABSTRACT _ ICC_2017 Selective Pelvic Lymph Node dissection in mid and lower rectal malignancy Principle Author (Presenter) Dr. Manikandan – MBBS MS DNB surgical Oncology Trainee Rajiv Gandhi Cancer Institute and Research Centre – New Delhi Mob no – 8551075677 E-mail – drbella1988@gmail.com Co Author 1. Dr. Asif MS DNB Surg Onco Consultant - GI onco surgery RGCI & RC - New Delhi 2. Dr. Shivendra MS DNB Mch (Surg Gastro) Senior consultant – GI onco Surgery RGCI&RC – New Delhi

Background: The incidence of lateral pelvic lymph node metastasis in middle and low rectal cancer is around 15%. The significance of lateral pelvic lymph node dissection (LPND) in middle and low rectal cancer remains unclear. Most centers follow the policy of selective LPND. We present our initial experience of selective PLND in rectal cancer. Methods: From August 2013 to July 2017, 23 patients with locally advanced rectal malignancy underwent pelvic lymph node dissection. 18F FDG PET scan or pelvic MRI done before neoadjuvant treatment was used to identify patients with significant pelvic lymph node lymph nodes. LPND dissection was performed in all these patients irrespective of the response to neoadjuvant treatment. Results: Out of 187 patients with rectal cancer malignancy who underwent surgery, LPND was performed in 23 patients. All patients had adenocarcinoma and除外 two who had melanoma. MRI detected PLN in 11 patients and PET scan in 12 patients. Mean pre-chemotherapy CEA level was 10.42 ng/mL. 2 patients received neo-adjuvant chemotherapy and 18 patients received neoadjuvant chemo radiotherapy. 3 patients underwent upfront surgery. Mean duration of surgery was 222.3 minutes (120-310 minutes) and mean blood loss was 228.84 mL (25-1200). Two patients required blood transfusion. Bilateral PLND was performed in 13 patients, left in 8 patients and right sided in 2 patients. 5 patients developed urinary retention which was managed conservatively. Main complication was increased drain output which eventually settled conservatively. Average duration of drain placement was 10.3 days and mean hospital stay was 8.1 days (6-11 days). There was no mortality. 6 out of 23 patients had histopathological evidence of disease in LPNs. Conclusion: In mid/low rectal cancer with clinically metastatic LPNs, LPND dissection can be safely performed without significant morbidity or increase in operating time.

Abstract Id: YUGP4823

Prediction Of Oral Cancer Recurrence Using Data Mining
Presenter - Dr. RUTUL PATEL
Co-author - DR SOMESH CHANDRA, DR MITESH PATEL, SHANTANU CHANDRA

Unlike breast and colorectal cancer no genetic and molecular models exist for oral cancer to predict outcome. The existing TNM system lacks accuracy and does not incorporate many factors known to influence outcome. A multifactorial predictive model is therefore needed. Data Mining helps to build such a model to calculate recurrence by incorporating various patient and tumour characteristics over and above TNM staging criteria. Objective: To predict the recurrence of disease in patients of oral cancer treated with curative intent using Naive Byes based Data Mining Technique. Methods: 1) Dataset of oral cancer with 200 tuples and 8 different attributes were obtained 2) Data was pre-processed to apply Naive Byes Classification Algorithm: numeric to nominal type of data conversion (1-yes,2-no) was done. 3) This preprocessed dataset was uploaded in WEKA for further analysis. 4) Chances of recurrence in new patients was calculated by cross referencing this new values of their data and running Naive Byes assumption algorithm to reach to conclusion of “YES” or “NO”. The results were compared to results obtained by analyzing same dataset with Random Forest disecion tree algorithm. RESULTS: 1) Naive Byes classification predicted recurrence with 85.443% accuracy compared to 83.443 with Random Forest tree. CONCLUSIONS: 1) Naive Byes based Data Mining predicts recurrence with acceptably high degree of accuracy. 2) Besides T,N,grade,thickness,PNI, two clinical markers were identified as powerful predictors of recurrence; limited mouth opening and poor oral hygiene.

Abstract Id: YUGP4829

Study Of Copper, Zinc And Selenium Associated With Superoxide Dismutase, Catalase And Glutathione Peroxidase Level In Serum Of Breast Cancer Patients Of North India
Presenter - Dr. ANoop Singh
Co-author - Prof. Vinod Jain, Dr Gitika Nanda Singh,

Material & Methods: This Prospective observational cohort study is conducted in department of general surgery, King George’s Medical University, Lucknow, India. Blood sample of 152 breast cancer patients were analysed and age matched with 152 controls. Unpaired t-test is used to compare the antioxidant enzymes and antioxidant enzymes have been found involved in development and prevention of malignancies including breast cancer. This study aims to find out association between trace elements: copper, zinc and selenium along with antioxidant enzymes: SOD, Catalase, Glutathione peroxidase levels in breast cancer patients of various clinical stages.

Results: Plasma copper levels (µgm/dl) (case: 113.58±11.70 with p<0.0001) are lower in cases with mean of 132.43±6.10 vs controls 113.58±11.70 with p<0.0001. Plasma zinc levels (µgm/dl) are higher in cases with mean of 132.43±6.10 vs controls 113.58±11.70 with p<0.0001. Plasma levels of Superoxide dismutase (IU/ml) (case: 9.49±6.25, control: 27.04±4.39, p<0.0001), Catalase (IU/ml) (case:0.09±0.08, control: 0.29±0.24, p<0.0001) and Glutathione peroxidise (nanomolNADPH oxidase/min/mg protein) (case: 16.96±10.20, control: 46.70±14.18, p<0.0001) are observed to be lower in breast cancer patients. Mean levels of Superoxide dismutase (IU/ml) (case: 9.49±6.25) is decreased to 27.04±4.39 in breast cancer patients. Mean levels of Catalase (IU/ml) (case:0.09±0.08) and Glutathione peroxidise (nanomolNADPH oxidase/min/mg protein) (case: 16.96±10.20) is decreased to 46.70±14.18 in breast cancer patients.

Conclusion: Trace elements and antioxidant enzymes have been found involved in development and prevention of malignancies including breast cancer. This study aims to find out association between trace elements: copper, zinc and selenium along with antioxidant enzymes: SOD, Catalase, Glutathione peroxidase levels in breast cancer patients of various clinical stages. Usage of a commercial product or device. Introduction: Breast cancer in women is most common cancer world wide and second most common cancer overall. Trace elements and antioxidant enzymes have been found involved in development and prevention of malignancies including breast cancer. This study aims to find out association between trace elements: copper, zinc and selenium along with antioxidant enzymes: SOD, Catalase, Glutathione peroxidase levels in breast cancer patients of various clinical stages. Materials & Methods: This Prospective observational cohort study is conducted in department of general surgery, King Georuge’s Medical University, Lucknow, U.P., India. Blood sample of 152 breast cancer patients were analysed and age matched with 152 controls. Unpaired t-test is used to compare the antioxidant enzymes and trace elements between cases and controls. The plasma level of copper, zinc, selenium and antioxidant enzymes (SOD, Catalase, Glutathione peroxidase) were analysed in both groups to find out any statistically significant correlation. Results: Plasma copper levels (µgm/dl) are higher in controls with mean of 132.43±6.10 vs controls 113.58±11.70 with p<0.0001. Plasma zinc levels (µgm/dl) (case: 88.25±6.30, control: 109.92±8.33, p<0.0001) and selenium (µmol/dl) (case:3.27±0.18, control: 3.33±0.22 (p<0.0001)) are lower in breast cancer patients. Mean levels of Superoxide dismutase (IU/ml) (case: 9.49±6.25) is decreased to 27.04±4.39 in breast cancer patients. Mean levels of Catalase (IU/ml) (case:0.09±0.08) and Glutathione peroxidise (nanomolNADPH oxidase/min/mg protein) (case: 16.96±10.20) is decreased to 46.70±14.18 in breast cancer patients. Blood level of selenium, Superoxide dismutase, Catalase and Glutathione peroxidase are found to have a direct correlation while Plasma levels of Copper has inverse correlation with advanced stages of breast cancer Conclusion:
Abstract Id: YUGP4831

**Adenoid Cystic Carcinoma Of The External Auditory Canal And Chromate 6 Exposure**

**Presenter:** Dr. David Douglas

**Co-author:**

This presentation is a case study of a man who developed the rare condition of adenoid cystic carcinoma (ACC) of the external auditory canal 12 years after several months of direct skin exposure to chromates through the use of ear plugs contaminated with dust from strontium chromate pigment. After incomplete excision of the ACC there is now slow progressive perineural and local spread. This paper will summarise the experimental and epidemiological data on chromate carcinogenicity and the current knowledge of adenoid cystic carcinoma.

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Abstract Id: YUGP4842

**Demographic And Clinico-Pathological Profile Of Patients Of Gastrointestinal Stromal Tumor From A Tertiary Care Center Of North India - An Observational Study.**

**Presenter:** Dr. Mayank Aggarwal

**Co-author:** Archana Aggarwal, Savita Arora, Arun Kumar Rathi

Background: Gastrointestinal stromal tumor (GIST) is the most common mesenchymal tumor of gastrointestinal system. This study was aimed to analyze the demographic and clinico-pathological data of the patient with primary diagnosis of GIST, who were treated at our center. Patient and methodology: Patients of GIST registered at our center from September 1st 2008 till 31st August 2016, were enrolled for this study. Patient’s demographic and clinico-pathological data was collected from clinical records. The data was represented as absolute number, percentage and median (range: minimum to maximum), whichever applicable. Results and observations: Analysis of twenty-seven patients revealed that pain was the most common clinical feature (66.7%) among the patients of GIST. Stomach was the most common primary site (51.9%). Most of the patients underwent upfront radical surgery followed by adjuvant imatinib. Histopathological data revealed that most patients had tumors of >10 cm in size (55.6%), 51.8% patients had low mitotic index and all these patients were either IHC positive for CD117 or KIT. Median duration of tyrosine kinase inhibitors therapy (Imatinib) in our study subject was 2.5 years with a range of 4.8 months to 3 years. Response assessment revealed 74.1% complete remission, 11.1% stable disease and 3.7 percent progressive disease. Median overall survival in study subjects was 2.63 years (Range: 0.1-8.6 years). Conclusion: Patients who underwent upfront surgery followed by adjuvant imatinib has shown good response to the treatment. However, due to limitation of the small sample size and short follow up in this study, data may not be a true representation of the entire population.

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Abstract Id: YUGP4844

**Expression Of Radioresistant Gene Icam2 And Its Prognostic Significance In Oral Squamous Cell Carcinoma.**

**Presenter:** Dr. Vandana Singh Kushwaha

**Co-author:** Vandana Singh Kushwaha, Shankar Saran Singh, M. L. B. Bhatt

Worldwide, incidence of Oral Squamous Cell Carcinoma (OSCC) patients frequently increasing per year. Intercellular adhesion molecule (ICAM2), also known as CD 102 (cluster of differentiation 102) is a member of the intercellular adhesion molecule (ICAM) family. ICAM2 plays an important role in cancer cell migration, invasion and promotes cell adhesion. Our objective was to correlate the mRNA expression of ICAM2 with clinicopathological features, radiotherapy responses and survival in OSCC patients. Analysis of mRNA expression by real-time quantitative reverse transcriptase-polymerase chain reaction (qRT-PCR) in tissue specimens (n=160) of OSCC patients (Who were recommended for the radiotherapy treatment). Age and sex matched individuals (n=80) attending dental procedures for dental implant or benign cyst were included as control group (for tissue samples). Significant over expression of ICAM2 mRNA was found in tobacco chewers (p<0.0003), advanced tumor size (p=0.0072), advanced stage (p=0.0001), lymph node metastasis (p=0.0105) and radiotherapy non responder (p<0.0001) in OSCC patients. Multivariate Cox regression analysis revealed that higher mRNA expression was significantly associated with poor prognosis (p=0.016). These results suggest that ICAM2 gene may involved in resistance to radiation therapy. ICAM2 gene could be used as predictive as well as prognostic biomarkes in OSCC patients.
Abstract Id: YUGP4868

Title: Ultrasound Correlation Of Groin Nodes With Clinical And Pathological Findings In Squamous Cell Carcinoma Of Vulva.

Introduction:

Ultrasound examination of the groin nodes on the other hand is safe, noninvasive, cheap and highly acceptable to patients. This study was undertaken to evaluate the significance of routine ultrasonography of inguinal lymphnodes in operable squamous cell carcinoma of vulva with as the primary objective of Determining whether the value of ultrasound reporting of groin nodes positivity is complete for confirmed cases of vulval cancer and to correlate Ultrasound and clinical findings with the final histological finding. MATERIALS AND METHODS. This was a prospective study which was conducted in The Department of Gynaecologic oncology of Dr B Borooah Cancer Institute (Regional cancer Centre), Guwahati. Patients were recruited into the study from the month of June 2013 to June 2014. Patients were followed up for a period of 2 years. All operable patients with proven histology of squamous cell carcinoma vulva were included. Patients with advanced inoperable disease, early stage disease not fit for surgery, non squamous histology and recurrent disease were excluded from the study. The scans were performed by radiologist without knowledge of the size, location or depth of the primary tumour or the clinical nodal status. The histological status of the lymph nodes was correlated to the ultrasound and clinical findings. The sensitivity, specificity and predictive values of ultrasound and clinical examinations were calculated using the standard 2 x 2 method. Comparisons between the groups were done by using Man Whitney – U test. Results were statistically analysed IBM SPSS Statistics 19. RESULTS & OBSERVATIONS Total of 15 patients were enrolled in the study over a period of 1 year. Majority of tumour was located in the labia majora (53.3%). Clltoral involvement was secondary to involvement of labia majora and minora. Leukoplakia was associated with vulval growth in 3 patients(20%). Maximum tumour diameter was 7cm and minimum was 1cm. Mean tumour diameter was 3.7cm and median was 3cm. Clinically 10(66.67%) patients were suspected to have enlarged metastatic lymphnodes whereas 8 (53.33%) patients were suspected to have enlarged metastatic lymphnodes. Final histopathological examination revealed metastatic lymphnodes in 6 patients(40%). Maximum patients had histopathology of well differentiated squamous cell carcinoma of vulva(80%) whereas none of the patients had poorly differentiated carcinoma in our study group. Radical vulvectomy with bilateral inguinal lymphadenectomy was the surgical procedure done in 7 patients(46.67%) hemivulvectomy with bilateral inguinal lymphadenectomy in 4 patients, hemivulvectomy with unilateral inguinal lymphadenectomy in 3 patients and radical vulvectomy with bilateral inguinal lymphadenectomy with resection of terminal 1/3rd of urethra in 1 patient. 26.67%(4) patients belonged to stage IA and 33.33% in stage IB. 40%(6) were in stage II(IIIa)(i): (4)26.67%; IIIB(i)6.66%; IIIC (1) 6.66%). None of the patients were in stage II. On statistical analysis it was found that sensitivity of USG examination of groin nodes was 85.71% (95% CI: 42.23% to 97.63 %) whereas specificity was 71.43% (95% CI: 29.27 % to 95.48 %). On the other hand sensitivity for clinical examination was 71.43% (95% CI: 29.27 % to 95.48 %) whereas specificity was 44.44% (95% CI: 13.97 % to 78.60 %). DISCUSSION On the final histopathological examination only 6 (40%) patients had metastatic deposits in the lymph nodes. Based on the histopathological results 6(40%) patients were given postoperative radiotherapy. One patient received radiotherapy after recurrence in the groin. None of the patients receiving postoperative radiotherapy had recurrence during the two year followup. On statistical analysis it was found that sensitivity of USG examination of groin nodes was 85.71% (95% CI: 42.23 % to 97.63 %) whereas specificity was 71.43% (95% CI: 29.27 % to 95.48 %). On the other hand sensitivity for clinical examination was 71.43% (95% CI: 29.27 % to 95.48 %) whereas specificity was 44.44% (95% CI: 13.97 % to 78.60 %). From our study we found that USG examination of the groin nodes was more sensitive as well as specific than clinical examination for detection of lymph node involvement in vulvar cancer. The sensitivity of our study was found to be similar a study by Gregorio et al 2013. It was a retrospective study of 60 patients who had vulvar malignancies of whom 92% were squamous cell carcinomas. Sensitivity was 76.3%, specificity was 91.3% for ultrasonic examination of groin nodes [8]. Another study by Land R et al compared CT scanning of the vulva and the groin and groin ultrasound scanning alone or with fine needle aspiration cytology (FNAC) (USS/FNAC). The calculated sensitivity, specificity CT were 58%, 75%, for USS alone was 87% and 69% and for USS-guided FNAC-80% and 100% respectively. They concluded that their data did not support the routine use of CT scanning in patients with primary squamous cell carcinoma of the vulva, either in assessment of the primary vulvar carcinoma or in detecting groin nodal metastases. They also found USG with FNAC of groin nodes to be superior to USG of groin nodes alone and CT scan. Even though our study was a comparison between USG of the groin nodes alone with clinical examination the sensitivity and specificity was comparable to the sensitivity and specificity of USG alone of this study. Similar comparison can also be drawn from other studies[9,82]. Our study demonstrates that ultrasound is a sensitive investigative tool in assessing the preoperative inguinal node status. However a negative inguinal nodal status cannot be used to omit inguinal node dissection as it lacks the high sensitivity and specificity that are necessary to avoid surgery. It should be remembered that recurrence in the groin node can be a fatal complication. Based on our results and observations from the available literature regarding the low sensitivity and specificity of other modalities like CT and MRI routine preoperative ultrasound evaluation of the groin nodes will be continued in our institute.
most important prognostic factor that correlates with depth of tumor invasion, preoperative information about regional nodal metastasis and depth of tumor invasion is essential in tailoring the treatment. Clinical examination by palpation of the inguinofemoral lymph nodes is a simple approach for determining the inguinofemoral lymph node status but is impaired by several conditions like obesity of the patients, small sized metastatic nodes, metastases located deep in the subcutaneous fatty tissue, and scar tissue due to former surgery and / or radiation. There is limited data on the role of imaging in the diagnosis and staging of vulvar carcinoma.The resolution of computed tomography is too poor to detect disease in lymph node groups larger than 1 cm in diameter and magnetic resonance imaging has not so far been able to characterise nodal tissue accurately. Ultrasound examination of the groin nodes on the other hand is safe, noninvasive, cheap and highly acceptable to patients. This study was undertaken to evaluate the significance of routine ultrasonography of inguinal lymph nodes in operable squamous cell carcinoma of vulva with the primary objective of determining whether the value of ultrasound reporting of groin node positivity is complete for confirmed cases of vulvar cancer and to correlate Ultrasound and clinical findings with the final histological finding. MATERIALS AND METHODS This was a prospective study which was conducted in The Department of Gynaecologic oncology of Dr B Borooah Cancer Institute (Regional cancer Centre), Guwahati. Patients were recruited from the period of June 2013 to June 2014. Patients were included in the study over a period of 1 year. Majority of tumour was located in the labia majora (53.3%). Clltoral involvement was secondary to involvement of labia majora and minora.Leukoplakia was associated with vulval growth in 3 patients(20%).Maximum tumour diameter was 7cm and minimum was 1cm. Mean tumour diameter was 3.7cm and median was 3cm. Clinically 10(66.67%) patients were suspected to have enlarged metastatic lymphnodes whereas 8 (53.33%) patients were suspected to have enlarged metastatic lymphnodes. Final histopahological examination revealed metastatic lymphnodes in 6 patients(40% ). Maximum patients had hisopathology of well differentiated squamous cell carcinoma of vulva(80%) whereas none of the patients had poorly differentiated carcinoma in our study group. Radical vulvectomy with bilateral inguinal lymphadenectomy was the surgical procedure done in 7 patients(46.67%) hemivulvectomy with bilateral inguinal lymphadenectomy in 4 patients, hemivulvectomy with unilateral inguinal lymphadenectomy in 3 patients,and radical vulvectomy with bilateral inguinal lymphadenectomy with resection of terminal 1/3rd of urethra in 1 patient. 26.67%(4) patients belonged to stage IA and 33.33% in stage IB. 40%(6) were in stage IIIA(ii): (4);26.67%; IIIIB(i)(1);6.66%; Ilc (1) 6.66%] None of the patients were in stage II. On statistical analysis it was found that sensitivity of USG examination of groin nodes was 85.71% (95% CI: 42.23 % to 97.63 %) whereas specificity was 71.43% (95% CI: 29.27 % to 95.48 %). On the other hand sensitivity for clinical examination was 71.43% (95% CI: 29.27 % to 95.48 %) whereas specificity was 44.44% (95% CI: 13.97 % to 78.60 %). DISCUSSION On the final histopathological examination only 6 [40%] patients had metastatic deposits in the lymph nodes. Based on the histopathological results 6[40%] patients were given postoperative radiotherapy. One patient received radiotherapy after recurrence in the groin. None of the patients receiving postoperative radiotherapy had recurrence during the two year followup. On statistical analysis it was found that sensitivity, specificity and predictive values of ultrasound and clinical examinations were calculated using the standard 2 x2 method. Comparisons between the groups were done by using Man Whitney – U test. Results were statistically analysed IBM SPSS Statistics 19.

RESULTS & OBSERVATIONS Total of 15 patients were enrolled in the study. The scans were performed by radiologist without knowledge of the size, location or depth of the primary tumour or the clinical nodal status. The histological status of the lymph nodes was correlated to the ultrasound and clinical findings. The sensitivity, specificity and predictive values of ultrasound and clinical examinations were calculated using the standard 2 x2 method. Comparisons between the groups were done by using Man Whitney – U test. Results were statistically analysed IBM SPSS Statistics 19.
Abstract: The differences are clinically meaningful in any combination of utility score of TOX with a utility score of REL > 0.

Abstract Id: YUGP4874
QTwist Analysis To Compare The Benefit Of Maintenance Erlotinib Versus Pemetrexed Patients With Egrf Non-Mutated Nsclc
Presenter- 'Dr. SIDDHARTH TURKAR
Co-author - Amit Joshi, Vanita Noronha, Vijay Patil

QTWiST analysis to compare the benefit of maintenance Erlotinib versus pemetrexed patients with EGFR non mutated NSCLC Type: Intent to submit late-breaking abstract Topic: NSCLC, metastatic Authors: S. Turkar, A. Joshi, V. Noronha, V. Patil, M. Sharma, C. Vora, S. More, S. Goud, K. Prabhesh; Medical Oncology, Tata Memorial Hospital Centre, Mumbai, IN Background In an open label, Phase 3 randomised study, Pemetrexed maintenance after induction with 4-6 cycles of pemetrexed -Platinum therapy failed to prove its superiority over Erlotinib in patients with EGFR non mutated NSCLC. In this analysis we have assessed the benefit of erlotinib over Pemetrexed using quality adjusted time without symptom or toxicity analysis method. Methods The overall survival in each arm was partitioned into 3 health states. TOX state (Time spent in grade 3 or above toxicity after randomization and before progression), TWiST state (Time spent after randomization before progression without grade 3 or above toxicity) and REL state (Time spent after progression). The mean QTWiST was calculated for each arm using utility coefficients of 0.65 for TOX, 0.71 for TWiST and 0.67 for REL states respectively. The difference in QTWiST and the 95% CI of difference were calculated using a nonparametric bootstrap. A p value of 0.05 was considered as significant.

Abstract Id: YUGP4880
Expression Of Radioresistant Gene Icam2 And Its Prognostic Significance In Oral Squamous Cell Carcinoma
Presenter- 'Dr. Vandana Singh Kushwaha
Co-author - Shankar Sharan Singh, Vandana Singh Kushwaha, M.L.B. Bhatt

Expression of radiosensitive gene ICAM2 and its prognostic significance in Oral Squamous Cell Carcinoma Shankar Sharan Singh1, Vandana Singh Kushwaha1, M.L.B. Bhatt1, Rajiv Gupta1, Rajendra Kumar1, Devendra Parmar2, Affiliations: 1) Department of Radiotherapy, King George’s Medical University, Lucknow, India 2) Developmental Toxicology Division, CSIR-Indian Institute of Toxicology Research, M.G. Marg, Lucknow-226 001, U.P., India. ABSTRACT Worldwide, incidence of Oral Squamous Cell Carcinoma (OSCC) patients frequently increasing per year. Intercellular adhesion molecule (ICAM2), also known as CD 102 (cluster of differentiation 102) is a member of the intercellular adhesion molecule (ICAM) family. ICAM2 plays an important role in cancer cell migration, invasion and promotes cell adhesion. Our objective was to correlate the mRNA expression of ICAM2 with clinicopathological features, radiotherapy responses and survival in OSCC patients. Analysis of mRNA expression by real-time quantitative reverse transcription-polymerase chain reaction (qRT-PCR) in tissue specimens (n=160) of OSCC patients (who were recommended for the radiotherapy treatment),age and sex matched individuals (n=80) attending dental procedures for dental implant or benign cyst were included as control group.(for tissue samples). Significant over expression of ICAM2 mRNA was found in tobacco chewers (p<0.0003), advanced tumor size (p=0.0072), advanced stage (p=0.0001), lymph node metastasis (p=0.0105) and radiotherapy non responder (p<0.0001) in OSCC patients. Multivariate Cox regression analysis revealed that higher mRNA expression was significantly associated with poor survival (HRR=2.251, 95% CI, 1.160-4.371, P=0.016). These results suggest that ICAM2 gene may be involved in resistance to radiation therapy. ICAM2 gene could be used as predictive as well as prognostic biomarker in OSCC patients undergoing chemoradiation.

Abstract Id: YUGP4882
Bone Marrow Involvement By Solid Tumor - A Single Regional Cancer Center Experience From South India
Presenter- 'Dr. Rajesh Patidar
Co-author - DR. A H RUDRESHA, R. KUNTEGOWDANAHALLI C LAKSHMAIAH, DR. GOIVD BABU K

Bone marrow metastasis by solid tumor implicates advanced disease and dismal prognosis. Bone marrow aspiration and biopsy is routinely performed as staging work up for certain small round cell tumors and also for unexplained cytopenia in other solid tumors. It is important to rule out bone marrow involvement before planning for curative treatment. The aim of our study was to evaluate the pattern of bone marrow involvement by different solid tumors and their correlation with the hematological abnormalities. We retrospectively evaluated bone marrow aspirations and biopsy performed in last three years. At our institution 440 bone marrow examinations were performed in last three years for solid malignancies. Out of 440, 206 were pediatric cases and 234 were adult cases. Bone marrow was involved in 56 patients (12.7%). Among the pediatric cases, bone marrow involvement was present in 30 cases (12.8%) and in adult cases bone marrow was involved in was in 26 cases (11.1%). Neuroblastoma (40%) was the most common malignancy, which involved the bone marrow among pediatric cases, followed by retinoblastoma (26.6%), ewing sarcoma (20%), rhabdomyosarcoma (6%) and Wilms tumor (6%). Among adult patients, neuroendocrine carcinoma (23%) was at the top of the list of tumors involving bone marrow, which is followed by ewing sarcoma (19.2%), nasopharyngeal carcinoma (11.5%), medulloblastoma (7.6%), rhabdomyosarcoma (7.6%), breast carcinoma (7.6%), prostate cancer (7.6%), colon cancer (7.6%), stomach cancer (3%) and urinary bladder cancer (3%). Haematological abnormalities as a result of bone marrow involvement leads to anaemia in 38 patients (67.85%), while the neutropenia and thrombocytopenia were detected in 13 patients (23.2%) and 33 patients (58.9%) respectively. Pancytopenia was found in 10 patients (17.8%). Around one-fifth of the patients had normal blood picture, indicating haematological abnormality may not be present when bone marrow is involved.

Abstract Id: YUGP4886
Decision Making And Autonomic Function In Frontal Lobe Lesions
Presenter- 'Ms. Ann Xavier Choolackal
Co-author - keshav Kumar J, T.N.Sathyaprabha, Dhananjaya I.Bhat

Every important aspect of life is preceded by decision making. Ranging from simple ones like when to wake up, what to eat to complex ones like which stock to invest in, whether to have a surgery, and whether to quit smoking, to name a few examples. Decision making involves, at its most basic level, the selection of one option from several alternatives. Properly executed decision making gives rise to some of the most elevated human abilities, such as ethics, politics, and financial reasoning (Naqvi, Shiv & Bechara, 2006). The role of prefrontal cortex in human decision-making has become a recent focus of study (Godefroy and Rousseaux, 1997; Rogers et al., 1999b; Satish et al., 1999; Bechara et al., 2000a; Sanfey et al., 2003).
Anatomically, there is evidence that different frontal regions contribute uniquely to different decision sub processes. The orbitofrontal cortex (OFC) appears to be relevant in situations involving incentive gain best-guess estimations, and the emotional experience associated with gains and losses. The dorsolateral prefrontal cortex (DLPFC) tends to be most involved in manipulating decision relevant information online, and in conscious deliberation during decisions. Other important frontal areas include the anterior cingulate (AC), involved in conflict processing and outcome relevant processing and the frontopolar cortex, which has been implicated in rule-based deciding, and self-generated information. Yet another neuroanatomically distinct area involved in decision making is ventromedial prefrontal cortex (VMF). Studies on VMF damage patients has shown that they are prone to impulsive decision making in real life and these same patients are impaired on laboratory decision-making tasks that require balancing rewards, punishments and risk (Bechara et al., 1994, 1997, 2000b; Rogers et al., 1999b; Sanfey et al., 2003). Moreover, damaged VMF disrupts social behavior profoundly. When there is a lesion due to a tumor/cyst in any of the areas mentioned the decision making will be impaired. The Somatic Marker Hypothesis proposes that somatic marker biasing signals from the body are represented and regulated in the emotion circuitry of the brain, particularly the ventromedial prefrontal cortex (VMPFC), to help regulate decision-making in situations of complexity and uncertainty(Damasio, 1996; Bechara et al 2000). When making decisions, a crude biasing signals (a somatic marker) arising from the periphery or the central representation of the periphery indicates our emotional reaction to a response option. For every response option contemplated, a somatic state is generated, including sensations from the viscera, internal milieu, and the skeletal and smooth muscles (Damasio, 2004). These somatic markers serve as an indicator of the value of what is represented and also as a booster signal for continued working memory and attention (Damasio et al 1991; Damasio, 1996). In normal samples, Bechara et al. (1994, 1996) found a positive correlation between performance on the Iowa Gambling Task (IGT) and differential somatic markers for advantageous or disadvantageous decisions. Methodology: The present study looks into the psycho physiological changes associated with emotionally driven decision making which is the performance of IGT in healthy control and frontal lobe lesion patients - using heart rate variability. The clinical sample consisted of 10 frontal lobe lesion patients diagnosed on the basis of CT & MRI by neurosurgeon. The patients diagnosed from inpatient and outpatient department of Neurosurgery, National Institute of Mental Health and Neurosciences, Bangalore. A matched sample with the clinical group in gender and age was selected. Tools used- General Health Questionnaire (GHQ) (Goldberg and Hillier, 1972), Neurobehavioral Rating Scale (Levin, 1987): Iowa Gambling Test (IGT) (adapted from Bechara et al., 1994) and Autonomic Functions Test conducted in the Neurophysiology lab. Results: Both groups were comparable in terms of age gender education and marital status. The lesion location was on the frontal lobe. Both groups differ significantly on the General Health Questionnaire. The statistical analysis using chi square gives a p value of .001. On the Neurobehavioral Rating Scale there is significant difference between the patient group and control group. The chi square evaluation yields a p value of .000. On IGT, there was significant difference between the groups (p=.035) and no difference was found in the subsequent sections (p>.05). The basal heart rate variability (HRV) on supine posture, there was no significant difference between the groups (p>.05). The sitting heart rate variability (HRV) shown in the above table comparing the groups show there is no significant difference between both the groups (p>.05). The HRV assessed while doing IGT was found to be not significantly different between the two groups (p>.05). Implications: The current study gives an implication towards utility of IGT as a clinical instrument. The Neurophysiological changes are subtle and SMH is questionable in the face of other areas taking up the role. The possible compensatory mechanism contributed by OFC and VMPFC in DLPFC lesions and the use of this compensatory mechanism in retraining.

Abstract Id: YUGC4892
Comparison Of Transrectal And Transperineal Based Fiducial Placement For Online Tracking In Early Prostate Cancer.
Presenter - Dr. Nihanthy Sreenath
Co-author - Dr P Mahadev ,

Introduction: The use of gold fiducial markers for prostate image guided radiotherapy is a standard practice. Despite their adoption into routine practice, there is a lack of prospective evidence on the safety profile of the implantation of the fiducial markers. Our aim of the study was to compare and assess the safety and efficacy of transperineal versus transrectal gold seed placement for Prostate SBRT. Methods: 60 patients diagnosed with early prostate cancers (T1N0M0 to T2aN0M0) were included in the study. They were randomly assigned for the placement of gold fiducial markers through transperineal and transrectal routes. The patients assigned to transperineal arm had the fiducial placements in the minor OT under aspetic precautions and the patients assigned to transrectal arm had the fiducial placements in the procedure room under aspetic precautions. Post implantation CT scan was done for the confirmation of the fiducial marker positions. The target and the organs at risk were contoured. Through the fiducial tracking system, a dose of 36.25 Gy was delivered in 5 fractions. Results: All the 60 patients completed the treatment but there was a delay in the start of the treatment for the patients for whom fiducials were placed transrectally(8 out of 30). These patients had developed chills, fever, infections, bleeding per rectum, pain and transient hematuria which was significant (’p’ value being less than 0.05). In contrary, the patients for whom the fiducials were placed in the latter group had incurred an additional financial expense due to OT charges but the number of infections reported was none. Conclusion: The overall rate of symptomatic infection with fiducial implantation was higher through the transrectal approach compared to transperineal approach. Transperineal insertion of fiducials avoids the rectum, is effective, convenient, well tolerated and has few side effects.

Abstract Id: YUGC4894
Expression Of Tetraspanin Kai1/Cd82 In Breast Cancer In North Indian Females And Its Prognostic Implications
Presenter - Dr. Richa Singh
Co-author - Madan Lal Brahma Bhatt, Sanjeev Misra, Saurabh Pratap Singh

Breast Cancer has emerged as a worldwide apprehension, with belligerent rise in incidence, morbidity and mortality. Hence it has witnessed increasing attention of the scientific community towards identifying novel molecular targets in its management. Metastasis confers obstacle to conventional treatments. The metastatic suppressor gene CD82/KAI1, is a member of the transmembrane 4 superfamily which was first identified in carcinoma of prostate. Little work has been done on this gene in breast cancer. Herein, we aimed to determine the gene and protein level expression of CD82/ KAI1 in breast cancer and its prognostic significance. Eighty three histologically proven cases of breast cancer and a similar number of controls (18-70 years) were included. Quantitative Real Time Polymerase Chain Reaction (q-RT PCR) and immunohistochemistry (IHC) were used to investigate KAI1 expression at gene and protein levels, respectively. Statistical analysis correlated expression of KAI1 and clinicopathological parameter including metastatic behavior. Our results revealed that: (i) KAI1 expression levels were strongly correlated with TNM staging, histological grade and advanced stage (p<0.01), and no association was found with any other studied parameter;(ii) KAI1 was remarkably diminished in metastatic vs non metastatic breast cancer both at the gene and the protein levels (P < .05); (iii) Lastly, a significant correlation was observed between expression of KAI1 and overall median survival of BC patients (P = 0.04). Conclusively, loss of KAI1 may be considered a significant prognostic marker and predictor of metastatic manifestation. It may
be used to risk stratify the patients and may be beneficial to tailor aggressive therapeutic strategies for such patients.

Abstract Id: YUGP4900
Progressive Gastrointestinal Stromal Tumor (Gist) Associated With A Resistant C-Kit Mutation After Imatinib Treatment
Presenter- Dr. Chandra Bhavani
Co-author - Dr.Sheela M L, Dr.Sateesh C T, Dr.Shekar Patil

Basis of the Study: Majority of human gastrointestinal mesenchymal tumors are gastrointestinal stromal tumors (GIST), which are associated with activating kinase mutation in KIT or platelet-derived growth factor receptor alpha (PDGFRα) gene. Therapy with selective tyrosine kinase inhibitor achieves a partial response or stable disease in approximately 80% of patients with advanced GIST. In metastasized GISTs, resistance to Imatinib after initial tumor response has been associated with observation of secondary mutations in the activation loop of KIT. The aim of the current study was to evaluate the tumor response and observance of secondary KIT mutations in a case of GIST who underwent neo-adjuvant Imatinib therapy.

Case Discussion: A 37 year old female with progressive increase in abdominal pain underwent biopsy of the peritoneal lesions, was reviewed. The patient underwent biopsy of the peritoneal lesions on which Immunohistochemical (IHC) analysis, for CD117, CD34, DOG1, desmin, S100 and CD 140, was performed. Melittin was recommended for genetic study. The surgical sample was sent for Next Generation Sequencing (NGS) to check for the presence of somatic genetic alterations. The DNA isolated from tumor sample was profiled using Illumina’s TSCAP panel by MiSeq technology in a CLIA compliant laboratory. Data was processed using Strand Avadis NGS™. Informed written consent was taken from the patient to carry out the study. Results: The histopathological and IHC analysis of the biopsy sample confirmed the diagnosis of metastatic gastro intestinal stromal tumor (GIST) positive for CD 117 (KIT). Based on this, the patient was started on first line tyrosine kinase inhibitor Imatinib. With the progression of the disease, second and third line therapy with Sunitinib and Sorafenib was started which did not show any improvement. Somatic mutation analysis revealed mutation in the KIT gene with 4 alterations p.Val559_Asn566del (may indicate response to Regorafenib), p.Val654Ala (may indicate resistance to Imatinib), p.Asp777Asn, p.Asp820His (may indicate lack of response to Sunitinib). Clinical evidences have shown that antiangiogenic molecule Regorafenib improves progression free survival across different subpopulations of Imatinib and Sunitinib resistant GISTs by inhibiting KIT activation. As this patient was resistant to both Imatinib and Sunitinib, she would have likely responded well to Regorafenib if it was administered as soon as the resistance was observed. Conclusion: This case study clearly demonstrates that molecular testing of the KIT gene should be considered for patients with a diagnosis of GIST prior to initiating KIT kinase inhibitor therapies. Testing may also be considered for patients already on Imatinib with acquired resistance to therapy. The study shows the utility of a robust platform like NGS in detecting all the hotspot mutations which render acquired resistance in patients that warrant the use of third generation FDA approved drugs. This strategy will help in saving unnecessary treatment and save time and cost by offering the right treatment the first time.

Abstract Id: YUGP4906
A Prospective Study Of Assessment Of Breast Anthropometry In Indian Breast Cancer Patients
Presenter- Dr. Praveen Royal Mokkapati
Co-author - Dr S.V.S. Deo, Dr N.K.Shukla, Dr Naresh Bhatnagar

TITLE: A PROSPECTIVE STUDY OF ASSESSMENT OF BREAST ANTHROPOMETRY IN INDIAN BREAST CANCER PATIENTS INTRODUCTION: India has one of the youngest populations but there is a troubling trend of increasing breast cancer incidence. With increasing affluence, awareness and social demands, the demand for breast conservation surgery and standard of care has increased. Surgical options are guided by tumor, breast volume and patient factors. There is a difference between our population and the much studied west. In the current study, we tried to explore this hypothesis and tried to establish a baseline measurement of various anthropometric parameters of breast in Indian breast cancer patients. Further, we tried to categorise these parameters and attempted a correlation with breast conservation surgery, tumor and breast volume. MATERIALS AND METHODS: The study was done prospectively in 102 patients between January to October 2016. Anthropometric measurements of breast, nipple areola complex, plois and mammographic breast density of the normal breast were recorded. Breast volume was measured with a geometric method devised by Qiao et al. The measurements were done with the help of measuring tape, calipers and rulers and were categorized using quartiles. Tumor size and the surgery performed in these patients was also recorded. 70 patients were suitable for correlation of breast volume and tumor size. RESULTS: Mean breast volume in the study was 303 ml (93.25 – 1345 ml). Breast volume was divided into category I (<170ml), category II (170 – 360 ml) and Category III (>360 ml). Mean areola diameter, nipple diameter, nipple projection were 4.53 cm (2.3 – 8 cm), 0.99 cm (0.6 – 1.5cm) and 0.77 cm (0.3 – 1.5cm) respectively. 51 patients had grade 3 ptosis. Most common mammographic breast density is ACR II. BCS rate in category I was 17.64 percent while categories II and III had a BCS rates of 37.14 and 38.88 percent respectively. CONCLUSION: Breast measurements of Indian women are different from their western counterparts. Ptosis is seen more often. Geometric methods can be used to calculate breast volume and can help predict breast conservation rates and in patient referral. There is a paucity of literature on breast anthropology in Indian breast cancer patients and this is one of the first studies to address it and its implications on surgery.

Abstract Id: YUGP4908
Primary Low Grade Fibrosarcoma Of Broad Ligament: Diagnosis And Management Challenges
Presenter- Dr. Paramjeet Kaur
Co-author - Dr Anil Khurana, Dr Yashpal varma, Dr Ashok chauhan

Tumors of broad ligament are rare and most of these tumors are of benign etiology. The most common solid tumor of the broad ligament is a leiomyoma. Malignant tumors are rare presentation. Some reported malignant tumors of broad ligament are Serous, papillary cystadenocarcinoma, endometrioid carcinoma, clear cell ca, uterohelium transitional cell ca, Mesenchymal sarcoma, histiocytoma and pheochromocytoma. Material and methods: A 24 years old female presented with symptoms of pain abdomen of 7 months duration, loss of appetite. Five months back she observed a mass in left lower abdomen. There was no other significant gynecological and medical history. Results: CT abdomen and pelvis showed a heterogeneous mass at pelvis measuring 13 x11 cm well defined seen arising from pelvis. The lesion displaced uterus, urinary bladder and having mass effect on right ureter. She was provisionally diagnosed as a case of ovarian tumor and planned for exploratory laparotomy. At laparotomy tumor was found located at the right broad ligament and a diagnosis of fibroid of broad ligament was made and fibroid was removed followed by right salpino opherectomy. Histopathological examination revealed multiple grey brown tumors measuring 20x12x3 cm. On cut section grey white with hemorrhagic areas were seen. Microsection showed a collegenising spindle cell tumor. There are foci of myxoid change as well as cellular areas with fish bone pattern of nuclei. On IHC Vimentin strongly positive, SMA, Desmin, S -100, CD 117, CD 34 negative. The patient finally diagnosed as having low grade fibrosarcoma of broad ligament. The patient was put on follow up. After 2 months patient again complaints of mass abdomen, pain abdomen. On clinical examination per abdomen a mass was present in the suprapubic and right iliac region which was bony hard and fixed. USG lower abdomen and pelvis showed a large
heteroechoic lesion with necrotic changes in it, on right side of pelvis extending into 4th ventricle causing obstruction at aqueduct with mild neurological deficit, and his symptoms disappeared. However post operative CECT scan of brain showed well defined solid cystic mass measuring 40 x26x25 mm in pineal region. The lesion was extending into 4th ventricle causing obstruction at aqueduct with mild dilatation of bilateral lateral ventricles. So, the patient planned for adjuvant radiortherapy in dose of 54 Gy to localized area. Now patient is receiving radiation therapy. Conclusion: Pineal region astrocytoma is considered as rare tumor Because of the rarity of the disease and late presentation, there is no established standard treatment. The main treatment modality is surgery. Although these tumor are considered benign and slow growing even though radiation therapy has been often used in the adjuvant setting.

Abstract Id: YUGP4912
Primary Epithelial Ovarian Cancer : A Single Centre Retrospective Study From North Delhi, India.
Presenter- Dr. R Ranga Rao Ranga Raju
Co-author - Dr Amita Mishra, Dr Archit Pandit, Dr Peush Bajpai

Ovarian malignancy is second most common gynecological cancer among Indian women. Epithelial ovarian cancer (EOC) comprises about 80% of ovarian neoplasms. Ovarian cancer has a response rate of 70% to 80% and is chemosensitive. Adequate tumor shrinkage and increased likelihood of optimal tumor debulking can be achieved by Neoadjuvant chemotherapy (NAC). Most patients present with advanced disease stage as the symptoms of EOC are abstruse and often misdiagnosed. High cost of chemotherapy is a major reason for patients not able to afford therapy. Therefore, outcomes of treatment are varied in different centers of our hospital. The aim of this study was to observe the first median recurrence free survival (RFS) and study the prognostic factors. A retrospective study was conducted in the division of Gynaec-Oncology of a tertiary care hospital in North Delhi on patients treated from January 2015 to January 2017. A total number of 77 patients of primary epithelial malignancy were included in the study. Median age of the study subjects was 55 years. Most common stage was IIIC and IV. Subjects were categorized into two groups; operable and inoperable. Data was collected from available hospital records, updated through telephonic conversation and reviews. Cytoreductive surgery was performed for operable subjects followed by adjuvant chemotherapy. Subjects who were inoperable underwent neoadjuvant chemotherapy and internal debulking surgery followed by adjuvant chemotherapy. Subjects in both the groups were followed up every three months. Whole abdomen ultrasound, X ray chest and CA125 investigations were performed. For subjects who had a recurrence of the disease, salvage therapy was done. The response to NACT was evaluated by clinical examination, serum CA 125 level, and CECT scan. At the completion of adjuvant chemotherapy patients were again reassessed clinically, radiologically and by serum CA 125 estimation. Patients were kept on regular follow-up with history and clinical examination (including bimanual pelvic examination), CA 125, chest X-ray & ultrasound whole abdomen every 3 months and CECT scan annually. In the event of suspicion of recurrence a PET CT scan was done as well. Out of the 77 patients 68 patients had completed treatment. Three patients were on treatment and 6 patients had not completed their treatment. Forty seven, patients (61%) had recurrence of the disease. Out of the total patients 18 (23.3%) succumbed to the disease and 8 (10.3%) were lost to follow up. Thirty six patients received neoadjuvant chemotherapy (NACT). Complete tumor resection was achieved in 56 out of 61 patients who underwent debulking surgery. Median RFS in the study was 24.56 months. In this study, RFS was better in cohort which received weekly chemotherapy (24.3 months) than 3 weekly chemotherapy(18.06 months ). Also, the group who had undergone optimal debulking(25.83 months) reported better RFS than the cohort who had undergone suboptimal debulking(21.2months) as depicted in Table I b TABLE NO.1 a No. OF PATIENTS & MEDIAN RFS AS PER VARIOUS FACTORS (N=77) TABLE III C, IV 62 I A, I C, II A, II C 15 HISTOLOGY SEROUS & CLEAR CELL 48 OTHERS 29 NACT NO 25 YES 28 CRS Suboptimal debulking 17 Optimal debulking 56 TREATMENT GAP 21- 28 days 27 OTHERS 50 CHEMOTHERAPY FREQUENCY IIC & IV Weekly 26 3Weekly 27 TOTAL TREATMENT DURATION <180days 29 >180days 24 TABLE NO. 1B Comparison of Prognostic Factors and RFS FACTOR GRP I RFS( in months ) GRP II RFS( in months ) JP value AGE 25.43 0.396 STAGE III C, IV 21.2 I A, I C, II A, II C 42.43 0.01 Histology Serous 25.83 OTHERS 20.13 0.252 NACT NACT 20.13 NO NACT 25.43 0.461 CRS Suboptimal debulking 21.2 Optimal debulking 25.83 0.304 Treatment Gap 21- 28 days 27 OTHERS 21.2 0.413 Chemotherapy FrequencyWeekly 24.03 3Weekly 18.06 0.88 Treatment Duration <180days 17.9 >180days 27.7 0.082

Abstract Id: YUGP4914
A Prospective Comparative Study Of Concurrent Chemoradiation With Weekly Cisplatin Versus Three Weekly Cisplatin Inlocally Advanced Carcinoma Of Head And Neck
Presenter- Dr. Anirban Haldar
Co-author - Prof.(Dr.) Sanatan Banerjee, Dr.Diptimay Das, Dr.Biswamit Bhattacharya

Background: The primary aim of the study was to compare the efficacy and toxicity in both arms. Subjects and Methods: Between January 2016 and June 2017, 64 patients were enrolled in the study following obtaining institutional ethical committee clearance and proper informed consent from the patients. Patients recruited were randomly allocated into a control arm (who received External Beam Radiotherapy with conventional 2 Gy/fraction, 5 days a week for 7 weeks up to total dose of 70 Gy along with concomitant injection cisplatin at the dose of 30 mg/m2 of body surface area on every week during radiation) and study arm (who received radiotherapy with 2 Gy/fraction, 5 days a week for 7 weeks up to total dose of 70 Gy, along with concomitant injection...
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cisplatin at the dose of 75 mg/m2 of body surface area on every three weekly during radiation. However, only 61 patients (31 in the control arm and 30 in the study arm) were available for analysis. The two groups were comparable in terms of age distribution, sex distribution, performance status, stage, primary site and histological grade. Results: 29.03% patients achieved complete response (CR) in the control arm while 36.67% patients achieved CR in the study arm (CR), but the difference was not significant statistically (P = 0.5255). Total number of patients achieving overall response (CR+PR) in control arm was 19 (61.29%) while it was 23 in the study arm (76.67%). However, the difference of overall response between the study arm and the control arm was statistically significant (P = 0.1947). Disease free survival (DFS) rate at 1 year was 22.58% for the control arm and 33.33% for the study arm but it was not statistically significant (P = 0.515). Three weekly cisplatin based concurrent chemo-radiation to standard weekly cisplatin-based concurrent chemo-radiation was well-tolerated with no significant increase in acute skin or mucosal toxicity. There was no significant increase in late toxicities like subcutaneous tissue fibrosis and xerostomia in the study arm. Conclusion: We can conclude that three weekly cisplatin based concurrent chemoradiation to standard weekly cisplatin based concurrent chemo-radiation is well-tolerated, and in our study we found better overall response and DFS (at 1 year) with three weekly cisplatin based concurrent chemoradiation to standard weekly cisplatin based concurrent chemo-radiation. However, these encouraging results did not reach the level of statistical significance. Larger studies involving much greater number of patients across multiple institutions are required to validate those encouraging results and clearly define that three weekly cisplatin based concurrent chemo-radiation can minimize the overall treatment burden in locally advanced squamous cell carcinoma of head and neck.

Abstract Id: YUGP4926
Ipsilateral Breast Tumor Recurrence Following Breast Conservation Surgery: Are The Outcomes Same For Primary Surgery And Surgery Following Neoadjuvant Chemotherapy?
Presenter- *Dr. Chaitra Sonthineni
Co-author - Punita Lal, Vinitha Aggrawal, Narendra Krishnani

Introduction: Breast conservation surgery (BCS) is the standard procedure for majority of breast cancer patients. However, BCS rates are lower in our country compared to the western world due to socio-economic reasons and advanced disease at presentation. Many such patients are treated with neoadjuvant chemotherapy (NACT), following which the safety of BCS is not very well established. This retrospective study compared the pathological and outcome parameters of primary and post-NACT BCS. Methods: All non-metastatic breast cancer patients undergoing BCS from 2011-2015 with a minimum 1 year follow-up were included. Outcome parameters in terms of margin infiltration, ipsilateral breast tumor recurrence (IBTR) and local recurrence free survival were compared between patients undergoing primary and post-NACT BCS. Results: Inclusion criteria were met by 129 patients of whom 95 underwent primary and 34 post-NACT BCS. Patients in both groups underwent similar multi-modality treatment as per institutional protocols. Sixty nine percent patients had cT2/cT3 disease with significantly higher disease stage seen in post-NACT group. Post-NACT patients more frequently required oncoplastic volume displacement or replacement surgery (p<0.001). Recurrence rates didn’t vary significantly with menopausal status, hormone receptor & HER2neu status or re-excision of margins in either group; or with downstaging in post-NACT patients. The stage-wise local recurrence-free survival didn’t differ significantly between the groups. Conclusion: Outcomes are similar in suitable patients undergoing primary or post-NACT BCS. Post-NACT BCS is safe even in large and T4 tumors, though many require oncoplastic procedures for satisfactory cosmesis. In select patients with advance stage disease, the benefits of BCS can be offered with the help of NACT, without compromising the chances of cure.

Abstract Id: YUGP4930
Dietary Risk Factors For Pharyngeal Cancer In South India: A Case-Control Study
Presenter- *Dr. Jayaram D J
Co-author - Matti Hakama, P H Rayappa, K R Reddy

BACKGROUND: The diet is different in India compared to high-resource countries. The dietary practices among the poor also deviate from those among the well-to-do. Hence, in order to study the role of dietary practices on the risk of pharyngeal cancer the study was planned and conducted as a prospective hospital-based case-control study at Kidwai Memorial Institute of Oncology, Bangalore, India. METHODS: The study was planned and conducted as a prospective hospital based case-control study using microscopically confirmed 439 pharyngeal cancer cases registered during 2005 and 2006. Each case was matched for age and sex with an equal number of attendants of patients as controls. RESULTS: In males, a significant inverse association was found for higher frequency vs. lower/never users of wheat (OR 0.5; 95% CI 0.3, 0.7), jowar (0.6; 0.4, 0.9), but consumption of ragi had no association (OR 1.0; 95% CI 0.6, 1.5). In females, a non-significant inverse association was found for jowar (OR 0.4; CI 0.1, 1.0), wheat (OR 0.5; CI 0.2, 1.2) and jowar (OR 0.5; CI 0.2, 1.1). Consumption of very spicy food increased the not statistically significant risk. Non-vegetarians didn’t show any increased risk (OR 1.0; 95% CI 0.6, 1.5) in males compared to the vegetarians after adjusting for smoking, chewing and alcohol consumption. In females, there was a non-significant increased risk of 1.8 (95% CI 0.7, 4.5) when adjusted for chewing. In males, consumption of any hot coffee and any tea associated with an increased risk. However, higher frequency consumption of fruit and vegetable consumption showed a significant inverse association. The estimates of negative association for most of the specific fruit and vegetables had a range of ORs from (0.1 to 0.4; 0.1 to 0.4) and (0.3 to 0.5; 0.03 to 0.4) in males and females, respectively. CONCLUSION: In summary, this study shows that the trend in the protective effect was significant with an increase in the cumulative frequency of consumption of various fruits (p for trend <0.001 and 0.009) and for various vegetables (p for trend <0.001 and 0.009) in males and females, respectively. Diet is an important factor in pharyngeal cancer etiology and prevention in India.

Abstract Id: YUGP4932
Exposure To Wood Stove As An Additional Risk Factor In Pharyngeal Cancer In South Indian
Presenter- *Dr. Jayaram D J
Co-author - Matti Hakama, P H Rayappa, K R Reddy

BACKGROUND: Pharyngeal cancer is one of the 5 most common cancer sites in Indian men, and in female, it is not so common as in males. The major risk factors known are use of tobacco and alcohol consumption. Because of the variation in use and the many forms of tobacco use, India may provide further evidence on the effect of tobacco. The magnitude of the association between different types of beverages and cancer risk was inconsistent across studies and populations. And much of the food is prepared on an open fire called chula. Although as much as 74% of the Indian population relies on solid fuels for cooking, very little information is available on cancer risk associated with these fuels in India. The study was planned and conducted at Kidwai Memorial Institute of Oncology, Bangalore, Karnataka, South India. METHODS: The study was planned and conducted as a prospective hospital based case-control study using microscopically confirmed 439 pharyngeal cancer cases (during 2005 and 2006). Each case was matched for age and sex with an equal number of attendants of patients was included as controls.
RESULTS: The results reported, based on multivariate (conditional logistic regression model) odds ratios after adjusting for smoking, chewing and alcohol drinking (excluding the one under study) indicated that: tobacco smoking (OR 4.4; 95% CI 2.6, 7.5), tobacco chewing (OR 2.2; 95% CI 1.3, 3.9) and alcohol drinking (OR 4.3; 95% CI 2.8, 6.4) were found to be significantly associated with pharyngeal cancer. Overall Bidi smoking was stronger risk factor than the overall cigarette smoking (ORbidi 5.0; 95% CI 2.9, 8.7., and ORcig 1.1; 95% CI 0.5, 2.2). Consumption of only domestic beverages was a stronger risk factor than the consumption of only foreign beverages for cancer of the pharynx (ORdomestic beverage 6.4; 95% CI 3.6, 11.4., and ORforeign beverage 2.6; 95% CI 1.5, 4.5), respectively. In males, exposure to firewood (OR 2.4; 95% CI 1.1, 5.0), and especially more than one hour per day (OR 3.6; 95% CI 1.5, 8.4), showed a significantly increased risk. The increased duration of daily cooking time substantially raised the risk in females; more than two hours of daily exposure had the significant OR=6.2 (95% CI 2.3, 16.5), compared with less than or equal to 2 hours in a day. CONCLUSION: In summary, above findings suggest that reducing indoor air pollution from solid fuels may contribute to the prevention of pharyngeal cancer in India, in addition to tobacco and alcohol control programmes.

Abstract Id: YUGP4934

Role Of Benzydamine Vs Povidone Iodine In Lahnc
Presenter - *Dr. Rajeev Atri*
Co-author - Karun Kamboj, Anil Kumar Dhull, Vivek Kaushal

Role of Benzydamine Vs Povidone Iodine in LAHNC Rajeev Atri, Karun Kamboj, Anil Kumar Dhull, Vivek Kaushal Department of Radiation Oncology, Post Graduate Institute of Medical Sciences Rohtak, Haryana, India Aim: A comparative study evaluating the role of benzydamine versus povidone iodine in oral mucositis during concomitant chemoradiation in locally advanced head and neck carcinoma. Material and Methods: The study was conducted on 40-previously untreated, histopathologically proven patients of squamous cell carcinoma of head and neck in locally advanced stage, attending the Department of Radiotherapy, PGIMS, Rohtak for concurrent chemoradiation. Conventional radical radiation therapy was given as five fractions per week, total dose 64 Gy/32 fractions/6.2 weeks with injection Cisplatin 100 mg/m2 repeated every three week for three cycles. Group I patient did gargling with 0.15% benzydamine, while group II patients did gargling with 1% povidone iodine, four times a day starting from first day of radiotherapy. Tumor control was assessed at the completion of treatment. Mucositis was assessed using RTOG criteria. Results: Most common age group in both the groups is 50-60 years. All the patients were males and chronic smokers. In group I - 12 patients were in stage I (60%) and in stage II (40%) and in stage IV-A (40%). In group II, 14 patients were in stage III (70%) and 6 in stage IV-A (30%). CR and PR after 1 month of completion of treatment was seen in 50% in each group. In group II CR is seen in 8 patients (40%) and PR is seen in 12 patients (60%). In group I mucositis first appear in 3rd week in 2 patients (10%) and in group II in 10 patients (50%). At the end of treatment in group I, grade II mucositis is seen in 10 patients (50%) in each group. In group II at the end of treatment grade I mucositis is seen in 2 patients (10%), grade II in 10 patients (50%) & grade III in 8 patients (40%). Conclusions: It is seen that in group I patients, mucositis appear late during treatment as compare to group II. Severe mucosal reactions were less in group I patients. The response rate to treatment was almost similar in both the groups. It is concluded that benzydamine gargles is superior in preventing radiation induced mucositis as compared to povidone iodine gargles. Larger study is recommended to confirm the findings.

Abstract Id: YUGP4936

Clinico Pathological Profile Of Nasopharyngeal Carcinoma With Respect To Treatment And Survival Outcome: A Prospective Cohort Study From A North East State Of India.

Presenter - *Dr. Dulasiramn Ponnas S*
Co-author - Prof. Y. Indibor Singh, Dr. Th. Nirpendra, Dr. P. Linthoi

Background: In the Indian subcontinent, Nasopharyngeal carcinoma seems to occur most frequently in the North East states. Many environmental and epidemiological factors are found to be associated including gene polymorphisms and EB virus infection. EB virus as etiological agent have been implicated with the tumorgenesis. Many Omic studies ( genomic, proteomic, metabolic) have been carried out and are going on but without any significant result or direction from the treatment point of view or preventive aspect. Fortunately the disease is responsive to both chemotherapy and local radiotherapy, either alone or most of the time in combination and though cure is not possible, long term survival is possible even at a very advanced stage. Treatment of recurrent disease is hardly rewarding and in dire need of specific predictive and prognostic markers. Serological viral antibody markers are available but not validated or routinely used in clinical practice for lack of specificity. Currently, Stage remains the most important prognostic indicator but majority will present in the same late stage and so is of little help to stratify patients by stage. In this scenario, a prospective cohort study is undertaken in the state of Manipur where the disease is rampant to find out the clinico-pathological factors and treatment type which co relate with long term disease free survival. Aims and objectives: To find out the clinico pathological factors and treatment associated with long term disease free survival. Materials and methods: A target study population of sample size of n= 160 from 2010 to 2016. All newly diagnosed nasopharyngeal carcinoma were registered and enrolled after detail History, physical examination, investigations and pre set questionnaire of lifestyle, food habits , tobacco and alcohol uses etc. All eligible patients with respect to inclusion and exclusion criteria and performance status ( above 70% KPS) and stage II, III and up to stage IVB were given standard treatment protocol of Neo adjuvant combination chemotherapy 3 to 4 cycles Taxane plus platinum followed by concurrent chemoradiation with low dose weekly platinum and radical dose External beam radiotherapy(EBRT) with Theratron 780-C using appropriate field size and shrinking techniques compensators and immobilisers. A boost with ILRT using HDR- Ir-192. Micro selectron were added whenever indicated. A median follow up of 5 years was envisaged before data analysis. Frequency tables, charts and non parametric Karl Pearson’s simple correlation tests along with Kaplan Meier’s survival curve will be analysed by using IBM corps SPSS version 21 for inference of results. Results and observation: From the frequency tables and charts: Age ranges from 19 to 80 years with a median of 54 years. Gender wise male is double to female at ratio 2: 1. More than 80 % came from lower socio economic group and 70 % were tribal dwelling in hills and rest from valley who were non tribal. Commonest presenting symptoms were painless neck swelling at 60% , followed by nasal blockade, hearing loss and epistaxis in 30 % and rest cranial nerve palsy and others. Mean duration of symptom was 5 months. Of life style 62% used tobacco either smoking or smokeless and 90 % consumed dry or smoked meat and fermented fish and used fire woods. Alcohols and non alcohols were almost equally distributed at 54 and 46 % and majority of females were non alcohols. Histological grading showed 92 % poorly differentiated or undifferentiated non keratinizing squamous cell type. Stage wise 49 % were stage III and 35% stage IV together forming more than 80% of newly diagnosed cases. Response by RECIST criteria is CR 83% & PR 12% for overall response rate of 95%. At median FU of 48 months the disease free survival is 82% with 12 % having relapsed at loco regional site and 6% at distant sites. Multivariate Pearson’s correlation test failed to show any correlation amongst DFS and stage, DFS and histological grade, DFS and treatment given ( with correlation value at .177 ,.048 and .085 not significant by 2-tailed tests at .01 level). Median survival has not yet matured at 48 months median follow up at the time of analysis by Kaplan Meier’s life table method. The inference from these results is that since majority of patients present in advanced stage and almost with same histological grading and administered almost the
Abstract Id: YUGP4946

**To Compare The Histopathological Response Of Cisplatin-Adriamycin- Methotrexate Versus Cisplatin- Adriamycin As A Neoadjuvant Chemotherapy In Cases Of Primary Non Metastatic Osteosarcoma In Indian Population.**

**Presenter - Dr. Sameeksha Dubey**
**Co-author - Dr. Asha Kapadia, Dr. Muzammil Shaikh,**

Introduction- Neoadjuvant chemotherapy in osteosarcoma helps in limb sparing surgery, taking care of micro-metastasis prior to surgery and in assessing in vivo chemotherapy response. The majority of current chemotherapy protocols based on combinations of 4 active drugs in osteosarcoma ; Adriamycin (doxorubicin) , Cisplatin, Methotrexate & Ifosfamide. But the best combination for multidrug regimen is still debated, two drug versus three drug combination regimens. The purpose of this was study to evaluate the efficacy of methotrexate based chemotherapy in our patients. Aims and objectives - To evaluate the efficacy of addition of methotrexate to cisplatin/adriamycin as neoadjuvant chemotherapy, as assessed by post surgical histopathological response. Materials and methods -This study included 48 patients with non metastatic primary osteosarcoma who received intravenous chemotherapy. In this study retrospective data was collected from the hospital records including, demographics, clinical presentation, imaging (MRI of involved site, PET scan), chemotherapy details (drugs, doses, number of cycles, toxicity) and microscopic pathological response. The study was approved by institutional review board. Adult and pediatric patients of both sexes were included in the study. Results - The patients (48) were divided in two groups, Group A (28 patients, median age 19.04 years) receiving cisplatin/adriamycin and Group B (20 patients , median age 17.45 years) receiving cisplatin/adriamycin/methotrexate .Out of all 48 subjects, 20 (41.66%) had good necrosis (≥ 90%) and 28 (58.34%) had poor necrosis (< 90%). When compared according to Picio’s grading system, Group A and Group B, grade 1 necrosis (100%) was seen in 3 (10.7%) patients in Group A and 7 (35%) in Group B (P value <0.05). Patients in group A had a median survival of 37 months (26.5 – 47.5 months) and group B, 41 months (14.2 – 67.9 months). The Kaplan Meier survival analysis suggested the 2 year overall survival for group A of 70% (0.0001) respectively. The percentage of grade 3-4 hematological toxicity were 198-days (60-287), 262-days (58-615) days and 180-days (65-531) respectively. The percentage of grade 3-4 hematological toxicity in arm A, B and C was 54-years (24–70), 62-years (38–73) and 60-years (40-70) respectively. Male to female ratio was 14:1. In arm A (40%), B (46%) & C (50%) patients completed intended treatment. At the end of treatment, in arm A, 15% had stable disease (SD), 10% had partial response (PR), while in arm B, patients with SD and PR were 30% and 15% and in arm C SD & PR were 30% & 10% respectively. The clinical benefit rate (SD+PR) in arm A was 25%, while in arm B and C was 45% and 40% respectively. The median survival in arm A, B and C were 198-days (60-287), 262-days (58-615) days and 180-days (65-531) respectively. The percentage of grade 3-4 hematological toxicity in arm A, B and C was 40%, 5% and 35% respectively. Conclusions: Multi agent, oral -metronomic and single agent chemotherapy have comparable potential benefit rate in residual, recurrent or metastatic HNC while oral metronomic chemotherapy has an excellent toxicity safety profile in these groups of patients.

Abstract Id: YUGP4950

**Comparative Study Of Three Chemotherapy Schedules In Recurrent, Residual Or Metastatic Head And Neck Carcinoma**

**Presenter - Prof. Vivek Kaushal**
**Co-author - Vipul Bansal, Anil Kumar Dhull,**

Comparative Study of Three Chemotherapy Schedules in Recurrent, Residual or Metastatic Head and Neck Carcinoma Vivek Kaushal. Vipul Bansal, Anil K Dhull Department of Radiation Oncology, Post Graduate Institute of Medical Sciences, Rohtak Aims: Recurrent, residual and metastatic squamous cell carcinoma of the head and neck carries a poor prognosis with overall survival of 6-12 months. The purpose of this study is to determine the efficacy and toxicity profile of the triple agent versus double agent versus single agent chemotherapy regimens in recurrent, residual or metastatic head and neck carcinoma. Material and methods: Sixty previously treated, histopathologically proven patients of recurrent, residual or metastatic squamous cell carcinoma of head and neck (AJCC stage III and IV), that were unsuitable for loco-regional treatment and were eligible for palliative chemotherapy were randomized in 3-arms. Patients in arm A received 3-weekly TPF regimen for 6-cycles. Arm B patients received 4-cycles of oral metronomic chemotherapy with cap. celecoxib 200 mg twice daily and tab methotrexate 15 mg/m2 weekly for 4 weeks, and in arm C, patients received 3-weekly cisplatin 100 mg/m2 for 6-cycles. Results: Patients were randomized and equally allocated to each arm. The median age of presentation in arm A, B & C was 54-years (24–70), 62-years (38–73) and 60-years (40-70) respectively. Male to female ratio was 14:1. In arm A (40%), B (46%) & C (50%) patients completed intended treatment. At the end of treatment, in arm A, 15% had stable disease (SD), 10% had partial response (PR), while in arm B, patients with SD and PR were 30% and 15% and in arm C SD & PR were 30% & 10% respectively. The clinical benefit rate (SD+PR) in arm A was 25%, while in arm B and C was 45% and 40% respectively. The median survival in arm A, B and C were 198-days (60-287), 262-days (58-615) days and 180-days (65-531) respectively. The percentage of grade 3-4 hematological toxicity in arm A, B and C was 40%, 5% and 35% respectively. Conclusions: Multi agent, oral -metronomic and single agent chemotherapy have comparable potential benefit rate in residual, recurrent or metastatic HNC while oral metronomic chemotherapy has an excellent toxicity safety profile in these groups of patients.

Abstract Id: YUGP4964

**Dardsatyall Pall Train Project: Impact Of An Educational & Safe Practice Of Opioids In International Oncology Centre**

**Presenter - Dr. Shiv Pratap Singh Rana**
**Co-author - Avinash Bundival,**

Background and Objectives: There remains a need to raise public & physician awareness about supportive care and opioid use. Improper use and disposal of prescribed opioids can lead to diversion or accidental poisoning. Dardsatya, Pall Train Project, an initiative by a bunch of palliative medicine trained experts is aiming to provide local solutions to local problems and sensitize healthcare workers and general people about different aspects of palliative care. Our objective was to determine the improvement in knowledge and incidence of diversion of opioids with or without education among opioid users. Methods: Our Dardsatya team provided an educational material about opioid use to each and every cancer patient. We assessed 150 patients who received opioids with or without educational material. Demographic information was collected and opioid sharing or losing was considered as unsafe opioid use. Results: Patients who received educational material were more aware of proper opioid use and disposal methods (87% vs. 23%, p<0.0001), less likely to practice unsafe use of opioids (14% vs. 22%, p=0.03), less likely to share their opioids with someone else (7% vs. 12%, p=0.03), and more likely to be aware the danger of their opioids when taken by others (p<0.007). Patients who received education were more likely to keep opioids in safer place and less likely to keep opioids if not used by them. Conclusion: An educational material on opioids safety and use improves patient’s knowledge about opioids and less likely diversion to opioids including use, storage and disposal. Visit www. dardsatya.com to know more about “Pall Train” project. Disclosure of Interest: None Declared

Abstract Id: YUGP4966

**Comparative Efficacy Of Ultrasound Guided Celiac Plexus Neurolysis Versus C Arm Guided Technique For Upper Gastrointestinal Malignancy Pain**
Presenter- *Dr. Shiv Pratap Singh Rana*
Co-author - Avinash Burdwal, Sangeeta Singh,

**Introduction:** Patients with advanced gastrointestinal malignancies commonly present with pain in upper abdomen of varying severity. In a majority of these patients, pain can be effectively managed using an integrated pharmacological approach with oral morphine. But due to morphine related and tumor or treatment related side effects; many patients have poor quality of life and even severe dissatisfaction. Neurolytic celiac plexus block not only alleviate severe pain of cancer but also improves quality of life and increases survival. Objective: Many techniques have been described for celiac plexus neurolysis, here we have compared efficacy of Ultrasound guided celiac plexus neurolysis versus C arm guided technique for upper gastrointestinal malignancy pain. Methods: 20 patients in each group were enrolled into the study. Uncontrolled pain relief with more than 120 mg morphine per day or side effects due to disease or treatment was considered as indication for celiac plexus neurolysis. Patients were randomly selected for either ultrasound guided technique or C arm guided block. The pain relief, analgesic consumption, breakthrough pain, changes of any medication, performance status of patients and side effects were recorded in each visit. Post procedure, one senior resident consulted these patients, collected the data from each group and analyzed statistically. Results: Pain score (NRS) decreased in both the groups but statistically significantly in ultrasound group from 1st day onward (1.4 vs 1.9 at 1 week, 2.2 vs 2.8 at 1 month, and 1.8 vs 2.8 at 3 month). The Karnofsky score improved from the baseline of 60 to 90 subsequently in both groups. The linear quality of life scale showed an improvement from a scale of 2 to 4 in the follow up period. Only 11.4% patients required low dose oral morphine months after neurolysis in C arm group with none patient required morphine in ultrasound group. Conclusion: Both ultrasound guided and c arm guided techniques are good for severe upper abdominal pain due to upper G I cancer pain. Ultrasound guided techniques offers advantage of better pain relief, less postop discomfort, bed side technique, no radiation hazard, less complications and greater satisfaction for patients.

**Abstract Id:** YUGP4968

**Managing Burnout And Promoting Well-Being In Cancer Clinicians**

**Presenter- *Ms. Rhea Daruvala***
**Co-author - , , , ,**

Burnout has been found to be a common concern among professionals dealing with chronic medical conditions such as cancer. With the improvement in the quality of health care and increased expectations from society, professionals in the field often find it difficult to cope and meet the ever increasing demands posed to them. Professional burnout has been found to be associated with several lifestyle related factors such as obesity and physical inactivity as well reduced performance at the work place. It also affects social and family life of the individual. Method: The current study used a mixed methods design and conducted in an Oncology Center in India. 114 participants were included in the quantitative analysis along with 28 participants for the qualitative data analysis. Qualitative analysis was carried out using the methods of thematic analysis. Results: Qualitative and quantitative analysis found various factors. In multivariate analysis it was found that age (OR 2.33, 95% CI 0.9-6.06, p=0.08), gender (OR0.002, 95% CI 1.2-9.5, p=3.4), frequency of participation in sporting activities (OR 0.75, 95% CI 0.43-1.3, p=0.03), job satisfaction (OR 3.56, 95% CI 1.37-9.25, p= 0.009), perceived work pressure (OR 5.39, 95% CI 2.01-14.37, p= 0.001), and qualifying on the PHQ-4 (OR 2.89, 95% CI 1.11-7.46, p = 0.03), as a case were associated with higher levels of emotional exhaustion in cancer clinicians. There were also some gender differences in perception of burnout and wellbeing that arose from the analysis. Conclusion: Although there were some defined risk factors for emotional exhaustion according to prior research, our findings have lent clarity to underlying sources of such exhaustion in our population. Interventions based on occupational mental health policies and programs are indicated and may be beneficial for clinicians in the setting.

**Abstract Id:** YUGP4972

**In Vivo Anti- Cancer Activity Of Ayurvedic Compound W.S.R To Leukaemia**

**Presenter- *Prof. Sharad Porte***
**Co-author - Dr. Monika Sharma,**

The leukemia is a group of disorders characterized by malignant transformation of blood-forming cells. The proliferation of leukemic cells takes place primarily in the bone marrow and in certain forms, it may involve the lymphoid tissues. The Cancer and blood cancer is not new for Ayurveda and described under the heading of Arbuda and Rakta Arbuda. As the morbidity and mortality rate is high in leukaemia, the current modern treatments in the form of chemotherapy and radiotherapy have severe adverse effect with minimum results and lack of documentation, scientific evidences of Ayurvedic drugs supposed to be used for leukaemia, the study was proposed. The Ayurvedic compound was selected for these study contain pure Arsenic tri oxide, Vinca rosea and Urgenia indica. Injection Arsenic tri oxide (Trisonex) was selected as a standard to compare anti-leukemic effect of study drug. WBC (leukaemia) was found increased in all the experimental mice in all the groups including study group 1, study group 2, standard group 1 and standard group 2, but after treatment of test drug as well as standard drug in experiment mice WBC was found decreased substantially but both group drugs study as well as standard found unable to normalize the WBC count in within the range. Though as compare to standard group 1 and 2 the anti-leukemic effect of study group 1 and 2 was found less but the test drugs shows some positive effect on leukaemia overall. The mean level of neutrophil and lymphocyte after treatment it was found decreased in study as well standard groups including both myelocytic and lymphocytic leukaemia. The effect of standard drugs on lymphocytic leukaemia was also found better than the test drugs although the test drugs also showed positive effect on leukaemia. The bone marrow biopsy in myelocytic leukaemia of both test as well as standard group showed markedly hyper cellular marrow with cellularity. While the bone marrow biopsy in lymphocytic leukaemia of both test as well as standard group showed nodular, interstitial, diffuse or mixed pattern. Thus it can be concluded that in bone marrow biopsy none of difference in pattern in study group as well as standard group in both leukaemia (myelocytic and lymphocytic) was found. The overall experimental study the study drugs was found safe on physiological and hematological parameter in all the doses form. The anti-leukemic effect of study drugs was found somewhat significant though it is not better than standard drugs. Thus its need to do the further study by using various form and combination of ingredient of study drugs may give better result than standard drugs, which gives hope of evaluation of new cost effective and safe Ayurvedic drugs for the cure of leukaemia in future.

**Abstract Id:** YUGP4974

**Cost Effectiveness Of Targeted Therapy In Ovarian Cancer**

**Presenter- *Prof. Jyoti Kaushal***
**Co-author - Anil Kumar Dhill,**

Cost Effectiveness of Targeted Therapy in Ovarian Cancer Jyoti Kaushal 1, Anil Kumar Dhill 2 Department of Pharmacology 1 & Radiation Oncology 2, Post Graduate Institute of Medical Sciences, Rohtak Aim: Epithelial ovarian cancer remains the most lethal gynecologic malignancy and current statistical analysis reveals as the 5th leading cause of cancer-related mortality in women worldwide. The review is aimed at describing modern approaches for precision and personalized treatment and their cost effectiveness in ovarian cancer.
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cancer. Material & Methods: Years of researching various cancers with reductionist approach for targeted pathways have made many great improvements in the field of oncology. Modern methods and future directions of nanotechnology-based targeted and personalized therapy are discussed and literature explored to draw the inference for their cost effectiveness. Results: The US-FDA approved bevacizumab for the treatment of recurrent ovarian cancer in Nov 2014 on the basis of results of the phase III AURELIA study. Bevacizumab, an angiogenesis inhibitors, established its results through GOG218 and ICON7. In a meta-analysis shown in ASCO-2017, bevacizumab Vs CT alone have shown median PFS as 28.2 Vs 17.5 months and median OS as 100.5 Vs 62.2 months respectively for stage II-IV disease. Bevacizumab, costs approx. Rs 2 lac/course and usually requires 6-8 courses. Pazopanib (Votrient), an oral TKI, can simultaneously inhibit both VEGF and ancillary angiogenic pathways and has got category-IIIB approval in NCCN-2017. In a clinical trial, the median time to disease progression in the pazopanib group was 17.9 months, compared with 12.3 months in patients receiving placebo. Its average cost is Rs 28000/month. Some other targeted therapies used for BRCA mutated epithelial cancer for maintenance of recurrence are Olaparib (Lynparza; monthly cost Rs 5 lac), Rucaparib (Rubraca; monthly cost Rs 10 lac) and Niraparib (Zejula; monthly cost Rs 10 lac). In a phase II trial published in Lancet Oncology, Olaparib have shown PFS improvement by 7-months. In ARIEL-3 trial, Rucaparib have shown a PFS improvement of 11-months and in a phase-III trial published in NEJM. Niraparib have shown 16-months longer PFS as compared to placebo. Conclusion: Cost of the targeted therapies and their availability in India are responsible for the limited usage. In view of the above results, it needs more responsibility on Indian Oncological shoulder to use these drugs with discretion after explaining the meager potential therapeutic gain achievable with targeted therapy.

Abstract Id: YUGP4982
Differentially Expressed Genes In Human Uveal Melanoma
Presenter- *Prof. Jasbir Kaur
Co-author - Sunil Kumar, Sandeep Goswami, Sooraj K.

Differentially Expressed Genes in Human Uveal Melanoma
MELANOMA Jasbir Kaur, Ph.D.*, Sunil Kumar, M.Sc.1, Sandeep Goswami, Ph.D.1, Sooraj K.., M.Sc.1, Neelam Pushker, M.D.2 Mandeep Singh Bajaj, M.D.2 1Department of Ocular Biochemistry, Dr. Rajendra Prasad Centre for Ophthalmic Sciences, All India Institute of Medical Sciences, New Delhi, India. 2Ocular Oncology and Pediatric Ophthalmology Services, Dr. Rajendra Prasad Centre for Ophthalmic Sciences, All India Institute of Medical Sciences, New Delhi, India *Corresponding author: kaurgasib@rediffmail.com Basis of the study: Uveal melanoma is a highly malignant tumor of the eye which frequently leads to metastatic death. Depending on size and other parameters, treatment of this primary tumor has been enucleation besides radiation and thermotherapy. Despite the advances in treatment, mortality varies considerably, to more than 50% in high-risk patients, primarily due to metastasis of this melanoma to the liver. Uveal melanoma has been attributed to diverse causes but the real mechanism underlying this cancer development remains obscure. Elucidation of such mechanism requires thorough knowledge of the genes involved and their regulation strategies. Gene expression is a constitutively active tumor antigen riding an array of less-explored pathways. This heterogeneous and complex nature of glioblastomas is contributed by the aberrantly functioning driver oncogenes such as the epidermal growth factor receptor (EGFR), which encodes the tyrosine kinase cell surface receptor. Notably, the extracellular domain deletion variant of EGFR, termed EGFR variant III (EGFRvIII) is a constitutively active tumor antigen riding an array of less-explored signaling events involved in proliferation and radio/chemoresistance in glioma. The aim of the current study was to investigate the frequency of this mutation in the Indian patient cohort and analyze its potential relationship with glioma progression. Methods Gliomas were analyzed by reverse transcriptase-polymerase chain reaction (RT-PCR) for EGFR and EGFRvIII detection and the gene expression levels were assayed using real-time PCR. The protein expressions of EGFR and EGFRvIII were evaluated using immunohistochemistry in formalin fixed paraffin embedded (FFPE) sections of glioblastoma. Results EGFRvIII was detected in 21 out of 40 (53%) of gliomas analyzed. Both EGFR and EGFRvIII (p < 0.05) showed a significant upregulation in gene expressions among glioma patients. Interestingly, EGFRvIII showed a positive correlation with the clinical grades of glioma. And the protein expressions of EGFR/ EGFRvIII were observed as areas of intense brown staining of glioblastoma FFPE sections by immunohistochemical evaluation. Conclusions In this study, we have observed that a significant portion of the patient tumors analyzed were positive for EGFRvIII mutation. Moreover, the expression profile of the oncogenes showed an increment with the glioma grade and such a trend has not been reported before in the clinical setting. This further provides evidence for their role in facilitating tumor progression. Therefore, expansion of the study to larger cohorts can affirm the role of EGFRvIII as potential biomarkers in the molecular pathology of glioma and thereby aid in the development of multi-targeted tailored therapy for patients.

Abstract Id: YUGP4986
Molecular Analysis Of Epidermal Growth Factor Receptor Variant III (Egfrviii) Expressions In Glioma Patients: Potential Oncogenic Driver Mutation For Therapy
Presenter- *Ms. Serene Xavier
Co-author - . .

Background Glioblastomas are highly aggressive and neurologically destructive tumors, marked with increased therapeutic resistance. This heterogeneous and complex nature of glioblastomas is contributed by the aberrantly functioning driver oncogenes such as the epidermal growth factor receptor (EGFR), which encodes the tyrosine kinase cell surface receptor. Notably, the extracellular domain deletion variant of EGFR, termed EGFR variant III (EGFRvIII) is a constitutively active tumor antigen riding an array of less-explored signaling events involved in proliferation and radio/chemoresistance in glioma. The aim of the current study was to investigate the frequency of this mutation in the Indian patient cohort and analyze its potential relationship with glioma progression. Methods Gliomas were analyzed by reverse transcriptase-polymerase chain reaction (RT-PCR) for EGFR and EGFRvIII detection and the gene expression levels were assayed using real-time PCR. The protein expressions of EGFR and EGFRvIII were evaluated using immunohistochemistry in formalin fixed paraffin embedded (FFPE) sections of glioblastoma. Results EGFRvIII was detected in 21 out of 40 (53%) of gliomas analyzed. Both EGFR and EGFRvIII (p < 0.05) showed a significant upregulation in gene expressions among glioma patients. Interestingly, EGFRvIII showed a positive correlation with the clinical grades of glioma. And the protein expressions of EGFR/ EGFRvIII were observed as areas of intense brown staining of glioblastoma FFPE sections by immunohistochemical evaluation. Conclusions In this study, we have observed that a significant portion of the patient tumors analyzed were positive for EGFRvIII mutation. Moreover, the expression profile of the oncogenes showed an increment with the glioma grade and such a trend has not been reported before in the clinical setting. This further provides evidence for their role in facilitating tumor progression. Therefore, expansion of the study to larger cohorts can affirm the role of EGFRvIII as potential biomarkers in the molecular pathology of glioma and thereby aid in the development of multi-targeted tailored therapy for patients.

Abstract Id: YUGP4990
Assessment Of Response Of Combination Of Hormonal Therapy Plus Chemotherapy In Treatment Naive Patients With Metastatic Prostate Cancer
Presenter- *Dr. Abhishek Kumar Singh
Co-author - Dr Naresh Somani, Dr Abhishek Kumar Singh,

Introduction: As per the Gobocan 2012, Prostate cancer is among the top-ten leading sites of cancer in India. Metastatic prostate cancer is an incurable disease. Docetaxel was the first cytotoxic drug to demonstrate a survival benefit in mCRPC1. Docetaxel remains approved as first-line chemotherapy by NICE guidelines for treatment of mCRPC2. Recent CHARTED trial demonstrated a significant improvement in overall survival with docetaxel 3 in hormone-sensitive newly metastatic prostate cancer. Data from the MRC STAMPEDE
4 Trial, recently presented at ASCO, again demonstrates an impressive survival advantage when adding docetaxel to ADT in hormone-sensitive metastatic prostate cancer. Thus, we conducted a prospective investigator initiative trial in department of medical oncology at Bhagwan Mahaveer Cancer Hospital and Research Centre (BMCHRC), Jaipur. Aims: To determine the progression free survival. Material & Methods: Inclusion criteria’s were: (1) Histologically or cytologically confirmed prostate cancer; (2) high PSA (20 ng/ml) and metastatic disease; exclusion criteria’s were: (a) visceral metastases, (b) bone metastasis - at least 4 or more bone lesions; (3) low volume disease - Any metastatic disease that is not extensive. Exclusion Criteria’s were: patient with prior malignancy, peripheral neuropathy or active cardiac disease (angina, CCF, MI) with in past 6 months, prior adjuvant therapy or neo-adjuvant therapy was allowed provided the therapy was discontinued 12 months ago and there was no evidence of disease, as defined by 1 of the following- PSA <0.1ng/dl after prostatectomy plus hormonal therapy or PSA 0.5 ng/dl and has not doubled above nadir after radiotherapy plus hormonal therapy. Prior palliative radiotherapy was allowed provided it was commenced within 30 days before starting androgen deprivation. Anti-androgen therapy was allowed as a single agent therapy 7 days before castration to prevent flare. No prior chemotherapy in adjuvant or neo-adjuvant setting and no concurrent 5 ? reducectase inhibitor were used in the past. Patient Characteristics: Male between age group 18-65 years, with ECOG performance status 0-2 with absolute neutrophil count ? 1,500/mm3, Platelet count? 100,000/mm3, ALT/2.5 times ULN, Creatinine clearance?30ml/min, PT and INR?1.5 times ULN and PTT ? 1.5 times ULN (unless anticoagulant administration); of who gave drug administration consent (chemotherapy consent) were included in the study. Total 30 patients were studied from 30th November 2014 to 30th June 2016. Patients received androgen-deprivation therapy (including LHRH agonist therapy, LHRH antagonist therapy, or surgical castration). Patients also receive docetaxel IV over 1 hour on day of treatment along with premedication and postmedication. Docetaxel was repeated every 21 days for up to 4 courses in the absence of disease progression or unacceptable toxicity. The response was assessed after 2 cycles and 4 cycles according to RECIST 1.1 version criteria. Treatment related toxicities were graded using the NCI common toxicity criteria (CTC) scale6. Proper statistical evaluation was done with the help of various charts, graphs and using statistical methods required (including ANOVA test, Kaplan Meir Test); P- value < 0.05 was taken as significant. Medcalc 16.4 version software was used for calculation of statistical results. Results- Clinical Benefit Rate- CR+PR+SD (20.69+44.83+24.14= 89.66%). Patients were radiologically (RECIST Criteria) and clinically evaluated after 4 cycles of chemotherapy. Complete response was found in 6 (20.69%), partial response 13 (44.83%), stable disease 7 (24.14%) and rest of three patients had progression of disease. Cases which were having a complete response, partial response, stable disease were continued up to 6 cycles and followed up to 12 months. The median PFS was 8 months as described by Kaplan-Meir survival curve. Toxicity profile was assessed in the form of hematological and non-hematological toxicities. In hematological toxicity, grade 3 anemia (13.79%) and thrombocytopenia (10.34%) were more than the neutropenia (6.90%) and in grade-4 neutropenia was observed in three cases (10.35%). Non hematological toxicity, vomiting of grade 3 (20.69%) and 4 (3.45%), diarrhea of grade 3 (17.24%), hypersensitivity of grade 3 (10.34%) and peripheral neuropathy of grade 3 (13.79%) were observed. Adverse effects were predictable and manageable. Conclusion- (1) Combination of docetaxel + ADT is active and beneficial and should be offered in metastatic hormonal naïve prostate cancer. (2) Higher statistical power is needed to evaluate the response and survival benefit between the efficacy of docetaxel + ADT and volume of disease. (3) Toxicity in form of hematological and non hematological was seen, but overall the combination is well tolerated and manageable.

Abstracts


Abstract Id: YUGP4992

Optimal Interval Between Neoadjuvant Therapy And Surgery In Rectal Cancer:A Tertiary Cancer Center Experience

Presenter- *Dr. SRIKANTH SOMA

Co-author - - -

BASIS OF STUDY: Current standard of care of locally advanced rectal cancer is neo-adjuvant chemo-radiation followed by radical surgery. The optimal timing of surgery after radiation/chemo-radiation is still debatable. Recent retrospective studies showed that delaying surgery beyond 8 weeks , even 12 weeks have improved tumor downsizing and pathological complete response rates. We have reviewed the data on the effect of different intervals.

METHODS: Retrospective analysis of 474 patients with adenocarcinoma rectum treated with curative intent between 2002 to 2012 at Cancer Institute(W.I.A) was done. Of these , 304 patients who had neoadjuvant long course chemoradiation or Radiotherapy alone followed by surgery were included in the study. Patients who underwent surgery <4 weeks and >16 weeks after neoadjuvant therapy were excluded. Postoperative complications, disease free survival and overall survival were compared among various intervals to determine the optimal timing for performing surgery following neoadjuvant therapy. Univariate and multivariate analysis was performed to identify factors influencing DFS in this group of patients. RESULTS: The treatment group included 190 males and 114 females, with a mean age of 48.7 years (range, 20-84 years). 228 patients received neoadjuvant radiotherapy while 276 had concurrent chemo-radiation. The median follow-up period was 44 months (range: 0-167 months). The median interval between surgery and radiation was 58.5 days (Range, 32-119 days). The only interval between neoadjuvant treatment to surgery that had a significant impact on the DFS and OS was 8 weeks. 5 year DFS was 58% and 44% for interval ?8 weeks and >8 weeks respectively (p value - 0.004) and 5 year OS was 69% and 62% for interval ?8 weeks and >8 weeks respectively (p value - 0.015). Delaying surgery more than 8 weeks showed an insignificant trend towards higher post operative complications (p value - 0.053). On univariate analysis histology of tumor,nature of neoadjuvant therapy,type of surgery(whinicer saving vs APR),multi organ resection,<8 weeks duration to surgery and involvement of circumferential margins were factors found to be significantly influencing DFS ,however on multivariate analysis the factors independently associated with DFS were nature of neoadjuvant therapy(chemoradiation vs radiation), ? 8 weeks interval to surgery , multi organ resection and circumferential margin . CONCLUSION: An interval of > 8 weeks between neoadjuvant therapy and surgery for locally advanced rectal cancer was independently associated with an inferior survival in this study.
Abstract Id: YUGP4997
Association Between Breast Cancer & Glioblastoma Multiforme: Rare Case Report
Presenter- Dr. Manraj Kang
Co-author -

Association Between Breast Cancer and Glioblastoma Multiforme: Rare Case Report
Kang MS1, Jaswal Gaurav2, Garg Pardeep3, Banipal P S Raja4 Senior Resident, 2Senior Resident, 3Assoc. Professor, 4Professor 1Presenting author â€“ Manraj Singh Kang, MBBS MD Radiotherapy, Dept. of Radiotherapy, GGS Medical College, Faridkot, manraj.kang42@gmail.com Introduction - Breast Cancer is the most common female cancer worldwide with an estimated 1.67 million new cancer cases diagnosed in 2012. While the age adjusted incidence rates of breast cancer in India is lower than western countries, because of the large population the burden of breast cancer is high. With an annual incidence of approximately 1,44,000 new cases of breast cancers in India, it has now become the most common female cancer in urban India. Glioblastoma is the most common primary brain tumor in adults. The current standard of care for glioblastoma is maximal surgical resection possible followed by adjuvant radiotherapy plus temozolomide, given concomitantly with and also after radiotherapy. According to literature, the association between breast cancer and glioblastoma is not as common as the association between breast cancer and other primary malignant tumors or intracranial tumors as well as meningiomas. Material and Methodsâ€“ We present a case of 70 years old female who presented with lump in left breast August 2014. FNAC was suggestive of IDC. Patient was given 3 cycles of NACT with TEC regimen followed left total mastectomy with axillary clearance. HPER revealed IDC grade II, 6/22 lymph nodes positive, ER +ve PR +ve, Her 2 neu 2+. Post operatively, 3 cycles of adjuvant chemotherapy with TEC regimen was given followed by hormonal therapy with Tamoxifen 20 mg OD. Patient was on regular follow up and had no significant complaints for 2 years. Then after 2 years patient suddenly presented with facial weakness and aphasia. MRI revealed large intraparenchymal bleed in right frontotemporal with haemorrhagic SOLâ€™s. The patient had a multimodality approach, based on cytoexcusive surgery (subtotal resection) followed by radiotherapy and concomitant temozolomide (75mg/m2). HPER revealed features consistent with Glioblastoma multiforme, NOS (astrocytoma, WHO grade-IV). Conclusion â€“ The association between breast cancer and glioblastoma multiforme has not been amply analyzed in the literature. We believe that this association is not due to chance but rather to genetic changes in hormone status and in particular to sex hormones. Another important point of view is represented by the chemotherapy treatment of breast cancer, which could have a carcinogenic effect and explain the growth of glioblastoma. This consideration, in our opinion, is important, because more effort should be made to understand the pathogenesis of glioblastoma multiforme and to improve the therapeutic approaches.

Abstract Id: YUGP4999
Skin Adnexal Neoplasm With Axillary Lymphadenopathy
Presenter- Dr. Neha Gupta
Co-author -

INTRODUCTION - Skin adnexal tumors are diverse group of benign and malignant neoplasms, which exhibit morphological differentiation towards one of the different types of adnexal epithelium present in normal skin: pilosebaceous unit, eccrine and apocrine. CASE REPORT - A thirty year old female patient presented to us with lesion felt over left upper back since 1 year, which was approximately 10 x 5 cm in size, gradually progressive in nature, painless with erythematous surface, associated with b/l axillary lymphadenopathy. Excisional biopsy from lesion and axillary lymph node was done which came out to be malignant adnexal tumor; sebaceous gland carcinoma. IHC was done which was positive for PANC, CK 7, P63, CK5/6, EMA and GATA3 and is suggestive of malignant adnexal neoplasm. PET CT was done that was showing metabolically active subcm to enlarged b/l axillary lymph node. After the work up, pt was planned for wide local excision with regional lymph node dissection. CONCLUSION - Sweat gland carcinomas are a rare group of tumors with potential for local destruction as well as distant metastasis. Wide surgical excision along with regional lymph node dissection in the presence of clinically positive nodes is the recommended treatment. However, a regular follow up is required to detect early recurrence as well as distant metastasis.

Abstract Id: YUGP5001
Correlation Of Hba1C In Solid Organ Tumors In Non Diabetic Individuals
Presenter- Dr. Chodavarapu Dheeraj
Co-author - Dr Girish M, Dr Krishna Prasad ,

INTRODUCTION People with diabetes have increased risk of developing many cancers compared with non diabetics but it is not still clear whether its hyperglycemia which is the main reason for developing cancer independent of diabetes. Most of the cancers in diabetes are associated with high blood glucose levels. Increase in glucose uptake can activate oncocentic pathways in cells, so this provides information that another pathway by which hyperglycemia increases cancer incidence risk. Chronic hyperglycemia may be evaluated by measuring glycated hemoglobin levels (HbA1c), a biomarker of average blood glucose concentration for a long period. HbA1c is also a good indicator of metabolic processes influencing insulin or insulin like growth factor levels which is important for cancer pathogenesis. MATERIALS AND METHODS Study Designâ€“ Cross sectional study Study Setting- tertiary care hospitals attached to KASTURBA MEDICAL COLLEGE (Manipal university), Mangalore Study Duration- September 2016 to September 2017 Study Population- Non diabetic patients with solid organ tumors admitted in hospital. Otherwise Age and Sex matched healthy individuals from the community will serve as the control group for the study IMPLICATIONS OF THE STUDY If the result shows a positive correlation between the glycated hemoglobin levels and the occurrence of solid organ tumors in non-diabetic population which is found to be statistically significant; then the present â€œsafeâ€™ range of glycated hemoglobin has to be reassessed so as to minimize the risk of tumorogenesis RESULTS This study showed that non diabetic patients who were diagnosed with cancers had elevated levels of HbA1c CONCLUSION Its a known fact that Patients with diabetes are at increased risk of cancer but even in non diabetics if the blood glucose levels are high reflected through HbA1c levels they are also at increased risk of cancer and in simple words consumption of sugar will start oncogenic process.

Abstract Id: YUGP5005
Pelvic Extra-Renal Extra-Cranial Rhabdoid Tumor In A Young Adult- Management Of A Challenging Case
Presenter- Dr. Bharti Devnani
Co-author - SEEMA KAUSHAL, SEEMA KAUSHAL ,

Rhabdoid tumor of the kidney is a rare variant of Wilmsâ€™s tumor and has a dismal prognosis. Outside the kidney, it commonly involves the central nervous system as atypical teratoid/rhabdoid tumor. Extrarenal extracranial rhabdoid tumor (EERT) is very rare. EERT usually presents in childhood, and presentation in adulthood is uncommon. A 20 years old male patient presented to our clinic with backache, urinary hesitancy, left sided groin swelling and weakness in left lower limb. Baseline MRI of pelvis showed a large lytic expansile mass in the sacrum, left iliac bone with associated soft tissue swelling. The patient had been diagnosed at a local centre with bone Tuberculosis and tuberculous abscess and was started on anti-tubercular therapy, which led to symptom progression. Core biopsy from the sacral mass, performed at our institute, revealed a
malignant tumor composed of pleomorphic cells and rhabdoid cells, which were immunopositive for cytokeratin, epithelial membrane antigen, vimentin, synaptophysin and MIC-2. There was loss of expression of INI-1 in the nuclei of tumor cells, suggestive of EERT. Further metastatic work-up showed a suspicious nodule in right lung suggestive of metastasis. In view of unrespectable tumor and lung metastasis, he received 6 cycles of combination chemotherapy with ICE regimen (Irinotecan-200mg/m² IV D1-D3 with Mesna uroprotection, Carmustine-200mg/m² IV D3 and Irinotecan-100mg/m² IV D1-D3), repeated every 3 weeks. End-of-chemotherapy CECT scan of chest, abdomen and pelvis showed a 50% decrease in the size of the primary lesion with the appearance of a new lesion in segment 4a of liver suggestive of liver metastasis. In view of progressive disease, he was planned for palliative radiotherapy to the left hemipelvis to a dose of 20 Gray in 5 fractions over 1 week. There was 50% subjective improvement 1 month after completion of radiotherapy. Thereafter the patient was started on metronomic chemotherapy with a 4 drug combination of Tab Celecoxib (200mg BD), Tab Thalidomide (100mg HS) and alternating courses of Tab Cyclophosphamide (50mg OD) and Tab Etoposide (50mg OD) for 3 weeks each. On the last follow up visit, 2 years after initial diagnosis, patient had completed 10 months course of metronomic chemotherapy and was alive with clinical and radiological evidence of stable disease. This tumor is often difficult to diagnose and can be confused with bone tuberculosis on clinical and radiological grounds. Despite aggressive therapy, achievement of long term cure is difficult in patients with metastatic EERT. Symptomatic improvement and prolonged disease stabilization can be achieved by a judicious combination of systemic chemotherapy and radiotherapy to primary and metastatic sites. Metronomic chemotherapy may be considered in patients with progressive or refractory disease.

Abstract Id: YUGP5009

Presenter - Dr. Pushpa Naga C H
Co-author - Chandni Hotwani, Sagar Pawar, Sadhana Kannan, Vinod Hande, Kedar Deodhar, Supriya Chopra, Reena Engineer, Shyam Kishore Shrivastava, Tanuja Teni, Umesh Mahantshetty

Background: Limited available data on prognostic significance of estimation of human papilloma virus (HPV) titres during pre-treatment and post-treatment (radiotherapy) surveillance, magnitude of viral load reduction and its impact on clinical outcomes in invasive cervical cancer patients. Purpose/Objective: To evaluate the clinical impact of HPV-DNA assay in patients with invasive cervical cancer after curative treatment and to correlate HPV persistent or re-infection with local recurrences. Materials and Methods: Between May 2010 and April 2012, histo-pathologically proven invasive cervical cancer patients receiving radical radio(chemo) therapy were prospectively accrued in this study. All patients underwent cervical biopsies/brushings collection during pre treatment, at treatment conclusion, followed by 3 monthly visits upto 2 years for quantitative estimation of HPV 16 and 18 viral load using real time polymerase chain reaction (RT-PCR) targeting E6-E7 region. The HPV-DNA prevalence and viral load were correlated with treatment response. Quantification of persistence and re-infection of HPV during post treatment surveillance and its correlation with local recurrences was done. Results: Out of 150 patients accrued, 135 patients were considered for final analysis. Of them, 129 (95.5%) patients received concurrent chemo-radiation while 6 (4.5%) had radical radiation therapy. At baseline, 89 patients (66%) were HPV-16 positive only, 34 patients (25.1%) -HPV-16 & 18, 3 patients (2.2%) HPV-18 only while 9 patients (6.7%) were negative for HPV-16 & 18. The mean (+ SD) log HPV-16 and HPV-18 viral load was 4.7 (+ 2.5) DNA copies/10ng and 0.14 (+ 0.2) DNA copies/10ng, respectively which gradually reduced to -0.25 (+ 1.3) and -0.73 (+ 0.8) DNA copies/10ng by 24 months (p

Abstract Id: YUGP5011
Memory Retraining For Post Chemotherapy Breast Cancer Survivors

Presenter - Ms. Guru Prasanna

Breast cancer is the most common in the cities of India and 2nd most common in the rural areas (Population Based Cancer Registry). In India incidence rate of Breast cancer is less when compared to US, but the numbers variation is minimal. In the year 2012, in US 2,32,000 cases of breast cancer were reported, whereas as in India 1,45,000 new cases were diagnosed (GLOBOCAN 2012). The Primary emphasis in treating cancer is physical health rather mental health. The mental health of cancer survivors has not always been into consideration, as the medical professionals would be prioritized with treatment focused towards disease and its progression. Post-chemotherapy, cognitive impairment has been an issue of concern in cancer survivors. While most reviews are focused on patient-related factors, it is proposed that drug-related factors may also be determinants. ( Yin Ting Cheung a et.al .2012) Of the 9.6 million cancer survivors in the US who have completed active treatment, many report cognitive difficulties, with labels such as â€œchemo brain,â€â€œcant as sharp,â€â€œwoolly headedness,â€or the â€œmind does not work as quickly.â€ To date, most of our knowledge of cognitive impairment in cancer survivors comes from female breast cancer survivors. ( Graham J. McDougall Jr,et al: 2014) Cognitive deficits that occur from cancer or its treatment vary and may be subtle or dramatic, temporary or permanent, and stable or progressive(Schagen SB, et al: 2001) Breast cancer survivors want to lead their life independently as long as possible but their cognitive difficulties may prevent this desired lifestyle. In this study, 5 breast cancer survivors were participated, pre and post design was used, they were tested using Neuropsychological assessment before the intervention, and the results were indicated significant problems in visuo-spatial memory, verbal memory, sustained attention with mild subtle difficulties in working memory. So Intervention i.e Memory retraining along with attention enhancement techniques were planned for 12 sessions to improve the areas of attention, verbal memory, visuo-spatial memory and working memory etc. Post assessment results were positive with the evidence of showing the improvement in visuo-spatial memory, verbal memory, areas of attention and working memory, quantitatively and qualitatively enhanced their Quality of life.

Key words : Breast cancer survivors , Post chemotherapy, Memory retraining

Abstract Id: YUGP5013
Proximal Humerus Resection And Reconstruction In Sarcomas Of Proximal Humerus

Presenter - Dr. Jaymin Shah
Co-author - Dr Abhiljeet Salunke, Dr J P Pandit

Abstract Introduction: The proximal humerus is the third most common site for primary sarcoma of bone. Since the 1970â€™s, the treatment of primary bone sarcoma has changed from amputation to limb salvage. This has been due to advances in chemotherapy, imaging and surgical techniques. The literature has shown that the survival after limb salvage is similar to that of amputation. The optimum method of reconstruction of the shoulder remains controversial Aims & Objectives: The aim of our study was to review the cases of primary bone sarcoma of the proximal humerus treated at GCRI Material and Methods: 12 patients were treated,of which 9 were males, 3 were females. 4 patients were treated with endoprosthetic reconstruction and 8 were treated with Nail Cement Spacer. They were followed up for functional and Oncological outcome. Mean age of patients was 15. Follow up period of study ranged from 6 months to 2 years with mean of 16 months Result:Good functional outcomes were achieved with good MSTS score. At end of 2 yrs there was one LR. It was treated with FQ amputation. Conclusion: Proximal humerus resection and reconstruction provides good functional outcomes in patients with proximal humerus sarcoma.
Abstract Id: YUGP5017
Implementation Of Multidisciplinary Tumour Board Decision â€“ A Clinical Audit
Presenter - Dr. Rajkumar Arumugham
Co-author - Banu, Swarnalakshmi Chinnasamy,

Aim: To audit the implementation of Tumour Board Decision in clinical practice; Background: Multidisciplinary Tumour Board Meetings are crucial in decision making in Oncology treatment. They serve as a platform for planning the most appropriate treatment for cancer patients and also as a forum for continuing education. Our centre is one of the few in the country where it is mandatory for all the cancer cases reporting to the hospital to be discussed in the daily Tumour Board meeting before instituting any treatment. This audit was done to assess if the treatment recommended by the Tumour Board was implemented or not. Material and Methods: All consecutive patients discussed in the Tumour Board from Jan 2016 to June 2016 were taken for analysis. The Tumour Board register and patients records were the source of data collection. All attempts were made to contact telephonically the patients who did not take treatment subsequently. Results: A total of 965 patients were registered among which 197 of them did not take further treatment in the hospital. Among the remaining 769 patients, the Tumour Board decision was implemented in 619 (99.7%) which was slightly short of the 100% that we had set as standard. An analysis of the 197 patients who had not taken treatment revealed financial issues in 16%, while 8% took alternative medicine and 10% had gone elsewhere for treatment. 31% of them were not reachable. Conclusion: The implementation of Tumour Board decision was excellent and close to 100%. This implies a very good adherence to protocols which is important in the multidisciplinary care of cancer patients, especially in a country like India and in a private hospital setting. Contrary to expectations financial issues accounted for only 15% of dropouts while communication, like in any other centre in India, remained an issue in those patients who did not undergo treatment.

Abstract Id: YUGP5021
Efficacy & Safety Of Nivolumab In Indian Patients In Recurrent Non-Small Cell Lung Cancer, A Single Centre Experience
Presenter - Dr. Abhishek Kumar Singh
Co-author - Dr. Naresh Somani, Dr Rajshri Somani, Dr A. K. Sinha

ABSTRACT Efficacy & safety of Nivolumab in Indian patients in recurrent non-small cell lung cancer, a single centre experience Abhishek Kumar Singh*, Naresh Somani*, A.K. Sinha**, Pawan Agarwal*, Rajshri Somani*** * Department of Medical Oncology, BMCHR, Jaipur; ** Department of Clinical Trials & Research, BMCHR; *** MBBS, Mahatma Gandhi Medical College, Jaipur Introduction: Limited treatment options are available for recurrent non-small cell lung cancer (NSCLC). Nivolumab, which is a programed death-1 (PD-1) immune check-point inhibitor antibody, has shown effectiveness in NSCLC and is approved for this indication. The present study is a prospective, non-randomized; observational type; was conducted to evaluate the efficacy and safety of Nivolumab in recurrent NSCLC after 1st line platinum based combination chemotherapy failure. Aims- To evaluate the efficacy and safety of Nivolumab in recurrent NSCLC patients who have received 1st line platinum based combination chemotherapy. Material & Methods: Total 20 patients of recurrent NSCLC (both squamous & non-squamous) patients were enrolled from 15 December 2016 to 18 March 2017. Inclusion criteria were: (1) Histopathological or cytological diagnosis of recurrent NSCLC (EGFR & ALK negative) were taken (2) Age 718 to 75 years (3) ECOG performance status 0-2, (4) patient must have received platinum based doublet chemotherapy, (5) must have at least >/= 1 measurable lesion as per RECIST guideline (Version 1.1), (6) adequate organ function Exclusion Criteria were: (1) patient with any other prior malignancy, (2) known active endocrinopathy (3) cardiac disease (angina, CCF, MI) with in past 6 months or any other co-morbidities, (4) active infection Nivolumab 3mg/kg was given intravenously every 2 weeks until progressive disease or unacceptable toxicity. Response assessment was done every 4 cycles or as and when required. Results- Total 20 patients were evaluated; 3 (15%) were female and 17 (85%) were male with the mean age at the time of enrollment in the study was 59 years (maximum 47% patients were in the age group 60-69 years). All 20 patients (100%) were having stage IV disease; 11 patients (55%) had adenocarcinoma and 9 patients (45%) had squamous variety. 5 patients (25%) had ECOG performance status II and 15 had (75%) ECOG PS I. Maximum cycles of Nivolumab received was 7 cycles in 4 (20%) patients, followed in the decreasing order of Nivolumab cycles received were 4 cycles in 5 (25%) patients, 3 cycles in 4 (20%) patients 2 cycles in 5 (25%) patients and 1 cycle of Nivolumab till the time of study evaluation was in 2 (10%) patients. 4 patients (20%) showed stable disease response (SD); 4 patients (20%) showed partial response (PR) and 6 patients (30%) showed progressive disease 6 patients (30%) lost to follow-up. 3 patients (15%) haemato logical toxicity (anaemia) and 13 patients (65%) developed some form of non-haematological toxicities those were in decreasing order of increased blood sugars requiring oral hypoglycaemic agents (1 patient-5%) and primary hypophysitis (1 patient-5%), non-infectious pneumonitis (1 patient-5%). Conclusions- Nivolumab has shown promising clinical benefits in Indian patients with clinical benefit ratio of 40% (CR-nil +PR20% + SD20%). The present study shows Nivolumab is well tolerated in Indian patients and toxicity patterns are as per literature and most frequent toxicities are anaemia and hyperglycemia. Longer follow-up and data are required to assess fully. Address of correspondence Dr Naresh Somani MD, DM Senior Consultant Medical Oncology & Incharge Clinical Trials and Research Department BMCHRJ, Jaipur, India Email- drsomani69@gmail.com +91-9829014996

Abstract Id: YUGP5025
Bipaddle Pectoralis Major Myocutaneous (PMMC) Flap â€“ Best Alternative To Free Flap For Complex Oro-Cutaneous Defects.
Presenter - Dr. Parvinder Sandhu
Co-author - Dr Disha,

Bipaddle Pectoralis major myocutaneous (PMMC) flap â€“ best alternative to free flap for complex oro-cutaneous defects. Dr Parvinder Sandhu, Dr Disha Advanced Cancer Institute, Bathinda.

INTRODUCTION The pectoralis major myocutaneous (PMMC) flap is commonly used for head and neck reconstruction especially in impoverished nations. PMMC is a sturdy pedicled flap with relatively fewer complications and the learning curve is short.It has over a period of time undergone several modifications. One variant is the bipedal flap especially useful for full thickness defect of cheek . Free tissue transfer is a better way of reconstruction for majority of oral defects. All patients cannot be offered this form of reconstruction due to the lack of microvascular expertise, lengthy procedure, some contraindication to free flaps and infrastructural constraints in high volume centres. In such patients the skin defect is reconstructed by the second flap along with PMMC usually the delto-pectoral (DP) flap , forhead or temporal flap but this, for obvious reasons, is less welcomed by the patients. In our institution we use single bipaddle PMMC flap to reconstruct both mucosal and skin defect. Material and methods We present a series of reconstruction with bipaddle PMMC, of 20 patients with large full thickness cheek defects secondary to cancer ablative surgery. All patients were reconstructed primarily by bipaddle pectoralis major myocutaneous (PMMC) flap. The age of patients ranged from 25 to 60 years. All patients were male. The size of the paddle used for mucosal defect repair ranged from 5 x 3 to 9 x 7 cm and the size of the paddle used for skin cover ranged from 4 x 4 to 12 x 8 cm. The total flap size ranged from 10 x 5 to 17 x 7 cm. The follow up period varied from 1 month to 18 months. The modification adopted in bipadding the flaps was based on anatomical location of perforators to ensure good blood supply to both paddles of flap. Precautions taken included proper assessment of reach of the paddle, placing not more than one-third of the paddle outside...
Adrenal Myelolipoma: A Single Tertiary Care Center Experience
Presenter - Dr. Gyan Chandum
Co-author - Dr. S. K. Mishra,

Introduction: Adrenal myelolipoma is rare, nonfunctioning, benign tumor, generally unilateral and usually discovered incidentally or autopsy. Thus, often classified as Adrenal Incidentaloma. It presents more frequently in males in fifth decade of life. Mostly small (diameter < 30). All underwent surgery? 23 attempted laparoscopic adrenalectomies, 08 converted to open and 04 required terminal hand assisted surgery due to large size, rest were operated through open transperitoneal approach. Two patients underwent bilateral adrenalectomy, one open and one through laparoscopic approach. Mean weight was 256.27 gm (10-2186 gm) 09 cases were >1000 gm. Histopathologically all confirmed as myelolipoma. Conclusion Adrenal Myelolipomas are rare tumors, usually small and asymptomatic. Occasionally it become large and symptomatic, and complications like hemorrhage and pressure symptoms may occur. CT scan is diagnostic of myelolipoma and usually no further biochemical or radiological investigation is required. Though conservative management is recommended, in our experience myelolipoma tend to attain large sizes and thus it would be prudent to surgically remove them at an early stage.

Abstract Id: YUGP5055
Role Of Mri In Characterising Breast Lesions
Presenter - Dr. Shaziya Hassan Ali
Co-author - Dr. Shabber S Zaveri, Dr. Shabber S Zaveri,

Aims & objectives: To characterize breast lesions as either benign or malignant based on comprehensive approach taking into consideration the morphological features, internal enhancement pattern, kinetic curves and spectroscopic findings. To detect multicentricity and contralateral breast involvement at the earliest when they are occult Materials & methods: Prospective non randomized study from April 2014 to April 2016 involving 42 patients (n=42). All patients evaluated with a dedicated 8 channel MR breast coil on a SIGNA HDX TWIN SPEED 1.5 T MR scanner. Multiphasic scanning using T1, T2 AXIAL STIR and post contrast dynamic curves imaging with 10 ml gadolinium. Spectroscopy and Time intensity curves were generated along areas of interest. Results: 24 out of 42 patients showed features of malignancy which were later biopsy proven accounting for 100% sensitivity. Only 2 out of 4 patients who had multicentricity were identified by MRI accounting for false negatives in our study. Conclusion: MRI in identifying malignancy accounted for 100% sensitivity. Specificity of 94% and positive predictive value of 91.6% and negative predictive value of 90% Detecting of multicentricity yielded a sensitivity of only 50% The overall sensitivity was 83% as it failed in demonstrating multicentricity in 2 cases lobular carcinoma and invasive carcinoma with multiple foci of DCIS Spiculated appearance was seen in 62.5% of malignant lesions has a high predictive value for malignancy. Use Plateau or wash out pattern as indicator of malignancy yielded 100% sensitivity. MPD MR spectroscopy showed a sensitivity of 76.9% and a specificity of 89.6% in characterizing malignant lesion. Smooth margins and homogeneous enhancement have a high predictive value for benign nature of the lesion.

Abstract Id: YUGP5059
An Account Of Soft Tissue Tumors Treated At A Regional Cancer Center
Presenter - Dr. Ravi Kumar Reddy Mandadi
Co-author - Dr Srinivasulu M,

AN ACCOUNT OF THE SOFT TISSUE TUMOURS TREATED AT MNJO & RCC Background: Soft tissue tumors are rather uncommon tumors and are a remarkable motley in terms of their natural history. They are often underappreciated by community physicians and public alike. While most of the benign tumors are managed in non-specialty
centers, malignant soft tissue tumors need specialty oncological care right from the biopsy to adjuvant treatment. In the context of a tertiary cancer referral centre in south India, this study intends to observe the mode (primary or referral), site of presentation, the histological/immunohistochemical variants, the modalities used to treat these patients. Materials & Methods: The study period is from August 2015 to August 2017. All patients with soft tissue tumors treated surgically at MNJIO & RCC are included in this study. All cases were assessed clinically and diagnosed by biopsy and often also by immunohistochemistry. Imaging including MRI or CT scan were done to assess staging. Data was collected retrospectively and observations noted on a proforma. Cases referred for non-surgical treatment with palliative intent were not included. Results: Of the 106 cases analysed, lower limbs (48), upper limbs(17), trunk (14), retroperitoneum (15) and head and neck (12) were the sites in descending order of incidence soft tissue sarcomas in our present study. 11 cases were local recurrences. Most patients were in their 30s and 40s while 58 were male and 38 were female. Spindle cell sarcoma, synovial sarcoma, liposarcoma and fibromatosis were the most common histologies. Surgery was the mainstay of treatment. Most of our patients underwent wide excision and primary closure. 25 patients underwent reconstruction of some sort. 14 patients required amputation. 3 cases of the 5 unplanned excisions outside showed tumor tissue in final histopathology. Lung was the most common site of metastasis. 4 patients underwent metastectomy (pulmonary). 2 patients succumbed to rapidly progressive metastatic disease. Conclusion: Most patients get referred to us after biopsy elsewhere. Many also come after primary excision done by a non-oncologist, with the invariable need for margin revision and proper staging. Wide excision with reconstruction, when feasible, provides acceptable local control even for recurrences. Expert pathologist and plastic surgery team are invaluable. However, these tumors need intensive follow up in view of the significant incidence of local recurrences and metastases. The prognosis is fair after surgery for local and distant recurrences. Awareness among primary care physicians could aid in timely and proper referral and improved prognosis.

Abstract Id: YUGP5061

Profiling Of Lymphomas
Presenter - Dr. NAZREEN DESAI
PROFILING OF LYMPHOMAS DR DESAI NAZREEN DARA1, DR VIUTH SHETTY2. 1 -POST GRADUATE, DEPARTMENT OF GENERAL MEDICINE, K S HEDE MEDICAL ACADEMY, MANGALORE, INDIA ; 2- ASSISTANT PROFESSOR, DEPARTMENT OF ONCOLOGY, K S HEDE MEDICAL ACADEMY, MANGALORE, INDIA Background: Cancers arising in the lymphatic system are called lymphomas and are a commonly occurring blood cancer. All physicians come across a few cases in their general practice and most of the times timely diagnosis is important as curative therapies are available for most types. Objective: To analyze frequency and distribution of lymphomas diagnosed in a tertiary care center. Materials and methods: A retrospective study carried out over a period of 20 month from October 2015 to June 2017. All lymphomas diagnosed were reviewed and classified according to 2016 revision of WHO classification of lymphoid neoplasms. Results: In our study of 75 patients, 38 patients were NHLs (50%), 12 were Hodgkin’s (16%), followed by 9 patients with B cell lymphoma (12%), 6 patients with T cell lymphoma (8%) and the rest ranging from a variety follicular to mixed small and large cell lymphoma to Burkitt to lymphoblastic lymphoma (total - 14%). A predominantly higher male to female ratio was observed with age variation ranging from 8 years to 86 years. 46 of these patients (61%) were referrals from various other departments. Conclusion: Incidence of lymphomas is high and a timely detection and referral to a cancer specialist leads to a better prognosis and quality of life for many patients.

Abstract Id: YUGP5065

Bleeding Jejunal Metastases From An Alveolar Soft Part Sarcoma - A Case Report

TITLE : BLEEDING JEJUNAL METASTASES FROM AN ALVEOLAR SOFT PART SARCOMA Authors: Elvis Peter Joseph, Suraj Manjunath, Harish Kumar, Anuradha Ananthamurthy

Abstract Id: YUGP5071

An Insight Into The Awareness Of Breast Cancer And Early Detection Among Women And Their Spouses In An Urban Area Of Kerala

Abstract Id: YUGP5080

Quality Of Life In Breast Cancer Survivors In South Tamilnadu
Presenter - Dr. Anitha Gandhi
Co-author - Prof S.S.Sundaram, Dr Deepa Arumugam, Dr Arumugam Velappan
BACKGROUND In India, the incidence of breast cancer has overtaken cervical cancer in the recent times. With improvements in diagnostic and therapeutic armamentarium, the life expectancy of breast cancer patients has increased dramatically. But the restoration of QOL to pretreatment level is still questionable. AIM The aim of the present study was to evaluate the QOL in breast cancer patients in South Tamilnadu MATERIALS AND METHODS This was a cross sectional study conducted on 210 breast cancer patients who are attending breast cancer clinic in the Regional Cancer Centre, Tirunelveli Medical College Hospital, Tirunelveli between March to May 2017. All patients with diagnosis of invasive breast cancer were included in the study. Quality of life assessment was done using EORTC QLOC 30 version 3 + BR23 questionnaire. RESULTS The mean age of the patients was 50yrs [ age range: 22to 85 yrs] with mean global health status QOL score of 82.24%. Demographic factors like education , occupation , marital status and age did not contribute to significant differences in QOL. In univariate analysis , fatigue , pain, dyspnoea and diarrhea revealed a positive relationship whereas financial issue revealing an inverse relationship with global health status QOL. In multivariate analysis , fear about future perspectives had significant impact upon QOL [ p = 0.008] CONCLUSION The present study showed a good QOL index among breast cancer patients. The study also investigated the strength of relationship between various domains of QOL with Global health scale and found to have significance with certain symptoms like fatigue, pain, dyspnoea and diarrhea.In the present study , amidst the various parameters, fear about the future recurrences was the most significant factor impacting quality of life followed by financial burden. Hence the oncological care is not complete with mere treatment of the disease and improvement in survival but should include measures to improve the QOL.

Abstract Id: YUGP5092
Usefulness Of Narrow Band Imaging In Transurethral Resection Of Bladder Tumor
Presenter - "Mr. Kanuj Mallik
Co-author - Kanuj Mallik, Anand Raja

Abstract Id: YUGP5084
A Rare Case Report Of Synchronous Malignancy â€“ Squamous Cell Carcinoma Of Tongue And Adeno Carcinoma Of Liver
Presenter - Dr. Manraj Kang

A RARE CASE REPORT OF SYNCHRONOUS MALIGNANCY â€“ SQUAMOUS CELL CARCINOMA OF TONGUE AND ADENO CARCINOMA OF LIVER Kang MS1, Sunighda2, JaswalGaurav3, Uppal Deepak4, Garg Pardeep5, Banipal P S Raja6 1Senior Resident,2Junior Resident, 3Junior Resident,4Junior Resident, 5Assoc. Professor, 6Professor 1Presenting author â€“ Manraj Singh Kang, MBBS MD Radiotherapy, Dept. of Radiotherapy, GGSMCH Faridkot, manraj.kang42@gmail.com Introduction -The synchronous occurrence of primary squamous cell carcinoma of oral cavity with liver adenocarcinoma is very rare. We report a case of 75 years old female patient presented to CANCER OPD with complaints ulcer on left side of tongue. Patient also complained of abdominal pain 20 days later and hepatic mass found on ultrasonography of abdomen. We report this case to highlight a rare occurrence of synchronous malignancy of tongue and liver. Material and Methodsâ€“ We report a case of 75 years old female who presented to us with complaints of ulcer over left side of tongue. Ulcer was painless to touch and was associated with intermittent pain in left ear. FNAC of left tongue ulcer showed well differentiated carcinoma. Patient also complained of pain abdomen and hepatic mass was found out on ultrasonography of abdomen. Ultrasound guided FNAC of hepatic mass revealed a poorly differentiated adenocarcinoma. CA 19.9 levels were raised (395.8 U/ml). Patient has been started on Gemcitabine and cisplatin regime and is being closely followed for the treatment response. Conclusion â€“In recent decades multiple primary cancers in one patient is not uncommon. Second neoplasm are classified as â€“synchronousâ€™ defined as occurrence of index tumor and second malignancy within 6 months of each other.In conclusion our case highlights a very rare occurrence of synchronous double malignancy consisting of oral cavity squamous carcinoma and liver adenocarcinoma.

Abstract Id: YUGP5082
Feasibility Of Minimal Access Surgery In Head And Neck Tumours
Presenter - Dr. Hozefa Lokhandwala
Co-author - SAURABH GUPTA, MUDIT AGRAWAL, HARIT CHATURVEDI

INTRODUCTION Minimal access techniques has been recently adopted advancment in head and neck tumors to achieve accurate tumor margin and to provide good cosmetic and functional outcomes MATERIALS AND METHODS We analysed 17 patients over a period of 6 months. 6 patients underwent minimal access neck dissection (3 robotic, 3 endoscopic) via retroauricular approach. 11 patients underwent endoscopic thyroid (9 cases); and parathyroid (2 cases) surgeries, via retroauricular approach. RESULTS In our short term follow up, we found that in patients with neck dissection done- node retrieval, drain output, restricted shoulder movements, spinal accessory and marginal mandibular nerve injury were similar to that seen in open surgery with superior cosmetic outcomes. In patients who underwent thyroid/parathyroid surgeries, recurrent laryngeal nerve injuries and hypocalcemia rates were similar to that seen in open surgeries with superior cosmetic outcomes, with one case converted to open parathyroidectomy CONCLUSION The minimal access surgery is a feasible surgical option in head and neck malignancy, with short term results in our study comparable to open surgeries with similar oncologic outcomes; but with superior cosmetic outcomes, though long term follow up results are awaited.

Abstract Id: YUGP5093
Nivolumab In Various Solid Tumors: First Experience From India
Presenter - "Dr. DAVINDER PAUL
Co-author - VIJAY M PATIL, VIJAY M PATIL,

Purpose: Cancer cells can use the programmed death-1 (PD-1) immune checkpoint pathway to escape the immune surveillance by modulating the activity of T-lymphocyte. In part, this may occur through overexpression of PD-1 and PD-1 pathway ligands (PD-
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L1 and PD-L2 in the tumor microenvironment. PD-1 blockade has produced significant antitumor activity in various tumors. Nivolumab, a human A IgG4A anti-PD-1A monoclonal antibody, has been approved for use in malignant melanoma, non small cell lung cancer (NSCLC), head and neck cancer, renal cell carcinoma, urothelial carcinoma and classical Hodgkin lymphoma. We present the first experience with nivolumab from India. Methods: In this retrospective analysis of a prospectively maintained database, patients with various solid organ malignancies who received nivolumab at the dose of 3 mg/kg every 2 weeks at our hospital between November 2015 and August 2017 were analysed. We aimed to evaluate the safety profile and efficacy outcomes of nivolumab. Results: Twenty-one patients were treated with nivolumab with median follow-up of 4.6 months in surviving patients. Malignancies included lung, n=10; head and neck, n = 3; urinary bladder, n = 3; melanoma, n = 2; ureter, n = 2; kidney, n = 1). Patients had received a median of 3 (range, 1 to 5) prior systemic treatments in the palliative setting before starting nivolumab. Nine (42%), 10 (47%), and 2 (9%) patients were ECOG PS 1, 2 and 3 respectively. Radiological response rate was: 4 (19%) partial remissions, 3 (14.3%) stable disease, 2 (9.5%) mixed response, 2 (9.5%) pseudo progression and 5 (23.8%) progressive disease; in 5 (23.8%) patients, the first radiological assessment has not been done yet. Eleven (52.3%) patients have progressed and 5 (23.8%) have died. Median progression free survival was 4 months (95% CI = 2.157-5.843) and mean overall survival was 14.2 months (95% CI = 10.527-17.861). Two patients (9.5%) had grade 2 proteinuria (nephritis), 1 (4.8%) had grade 3 pneumonitis and 1 (4.8%) had adrenal insufficiency. No patient stopped nivolumab due to toxicity. Conclusion: Nivolumab was well tolerated and exhibited antitumor activity in extensively pre-treated patients with various solid tumor malignancies, which is consistent with the already published data.

Abstract Id: YUGP5100
Mixed Mullerian Cell Tumor- Homologous Type
Presenter- Dr. Kanika Tripathi
Co-author - Dr. Veena Ramaswamy

INTRODUCTION: Malignant mixed mullerian tumor, also called sarcomatoid carcinoma or carcinosarcoma, is the most common of uterine sarcomas. It is a biphasic neoplasm as it has both epithelial and mesenchymal components. Here we report a rare case of malignant mixed Mullerian tumor of the uterus with homologous elements. i).CASE REPORT: 68yr old female, postmenopausal woman appeared with history of pain in the abdomen since 5-6 months, weight loss for more than 4 months and metrorrhagia since 2 months. Clinical examination revealed palpable mass in the abdomen. USG abdomen revealed an enlarged uterus. Physical examination revealed a sense of fullness on deep palpation. Per speculum and per vaginal examination showed a normal cervix. Mild tenderness was noted. Total abdominal hysterectomy with pelvic and para-aortic lymph node dissection was done and specimen was sent to histopathology. Grossly, the cut section of the uterus showed a friable, polypoid tumor with grey white infiltrative areas. On microscopy showed malignant tumor consisting of the admixture of epithelial and mesenchymal components. The epithelial component consisted of cells arranged in glandular pattern and the mesenchymal component consisted of sarcomatous spindle cells arranged diffusely. The tumor cells were invading the myometrium. Bilateral ovaries and tubes, and parametrium were free of tumor. iii).Discussion: Malignant uterine neoplasms containing both carcinomatous and sarcomatous components are classified by the World Health Organization (WHO) as carcinosarcoma. The first case was reported by Gerhardt in 1989, which was confirmed by Meyer with personal examination of the slides. Most of the patients present in the fifth decade of life but lowest age of presentation at 15-17 years has also been reported. In the present study, the patient was a 68-year-old female. Malignant mixed mullerian tumor of the uterus is a rare, highly aggressive, rapidly progressive neoplasm associated with a poor prognosis. The outcome correlates with the stage of the disease and the depth of myometrial invasion. The case is being presented for its rarity. Keywords- Malignant mixed mullerian tumor, carcinosarcoma, endometrial polyph, uterus, hysterectomy.

Abstract Id: YUGP5102
The Tobacco Trail In Karnataka AÆ¬. Tracing Tobacco From Farm To Cancer
Presenter- Dr. Punith Shetty
Co-author - Dr. Murali.R, Dr. Murali.R,

INTRODUCTION: Tobacco use is a major public health challenge in India with 275 million adults consuming different tobacco products. Despite innumerable laws and campaigns an overall picture of the current system is not clear and the menace of tobacco persists. What does it take to stop this menace? The present study made an attempt to throw some light on the prevailing inconsistency in the current system. OBJECTIVES : To explore the knowledge and attitude of people involved in growth and sales of tobacco. METHODS: This qualitative research was aimed at farmers growing tobacco in Mysore and Hassan District of Karnataka and vendors selling tobacco in Bangalore. Snowball sampling technique was used to select the farmers. Simple random sampling technique was used to shortlist 20 vendors selling tobacco products, surrounding educational institutions in each zone of Bangalore. Data was collected using semi structured questionnaire through interviews. RESULTS: Inductive analysis was conducted and the responses were divided into three categories i.e. awareness of laws, compliance to laws, opinion regarding banning tobacco. 90% of the growers and all the tobacco vendors(100%) were aware of the laws governing them however the compliance was poor in both the populations. (32% and 20% respectively) All of the respondents knew tobacco causes cancer, and surprisingly a majority (95%) said a ban on tobacco will not affect them financially. CONCLUSION: Implementation of existing laws needs to be strengthened. Violations of these laws are not adequately reported, this matter should be dealt with. It was seen that the system which creates the laws itself promotes the growth and thereby the distribution of the tobacco products PUBLIC HEALTH SIGNIFICANCE: Exploring the tobacco trail by targeting the key stakeholders involved, can help us overcome the menace of tobacco in our country.
Abstract Id: YUGP5103
Poster Abstracts, Neo Adjuvant Chemotherapy In Patients With Stage II & III Squamous Cell Carcinoma Of Head & Neck.
Presenter- Dr. Shiv kumar Sharma
Co-author - Dr. MAHESH SRIVASTAV, DR. BHAWANA SHARMA, L. SONIYA

POSTER ABSTRACTS NEO ADJUVANT CHEMOTHERAPY IN PATIENTS WITH STAGE II & III SOUAMOUS CELL CARCINOMA OF HEAD & NECK Dr. Mahesh Shrivastava, M.D. Dr. Bhawana Sharma,Dr. S.K.Sharma, Sonia Shankar Institute of Cancer Therapy & Research, Mathura,U.P. India. Introduction: Head and Neck Carcinoma constitute about 70% of all cancers treated in our Institute during the year 2015-2017. Majority of these reported for treatment in stage III & IV. The purpose of this study is to find out the response in 250 the head & neck patients with stage II & III carcinoma subjecting them to chemotherapy followed by Radiotherapy. They were between the age of 35 to 65 years from both male & female sexes. All were Histopathologically proved squamous cell carcinoma. The site distribution was oral cavity, Oropharynx, Nasopharynx,Hypopharynx and Larynx. Methods: All patients were treated by Neo Adjuvant chemotherapy one or two cycles followed by Radical Radiotherapy (70 Gy/35#). Induction of chemotherapy Paclitaxel 100mg DDP 50mg and 5 FU (1000mg/m2 was done at weekly interval, after completion NACT, after one week the patient was subjected for radiotherapy. Result: Fifteen patients were lost to follow up of 205 evaluated, 70% and 5 FU (1000mg/m2 was done at weekly interval, after completion NACT, after one week the patient was subjected for radiotherapy.

Abstract Id: YUGP5105
Comparison Of 3 - Dimensional Conformal Radiation Therapy (3Dcrt), Volumetric Modulated Arc Therapy (Vmat) And Hybrid Technique For Treatment Of Oesophageal Cancer Presenter- Dr. Geeta Narayanan
Co-author - Geeta S Narayanan, Suresh Babu, Parikshith J, Daicy Georgy, S. Sowmya Narayanan

Introduction: 3D-Conformal Radiation Therapy(3D-CRT) is the standard of care for Carcinoma of esophagus cases. This treatment modality involves initial AP-PA field arrangement followed by 3-field technique (AP-RPO-LPO) for the boost volume. In this technique, PTV coverage is generally sub-optimal owing to the requirement of maintaining the spinal cord dose to its tolerance level. Intensity Modulated Radiation Therapy (IMRT) improves the coverage and reduces the Organ at Risk doses. With the continued advancement in Radiotherapy, Volume Modulated Arc Therapy (VMAT) came into existence. While both IMRT and VMAT tend to deliver large volume of low dose regions, VMAT has the advantage of delivering the plan with lesser MU as compared to IMRT. In order to have balance between various aspects of Dose Volume considerations, we intend to introduce Hybrid technique (combination of 3D-CRT and VMAT) and compare the results with other treatment techniques, such as 3D-CRT and VMAT. Objective: The purpose of this study is to carry out planning study on the potential benefit of Hybrid technique (3D CRT combined with VMAT concurrently) against full course of 3D-CRT & VMAT technique in the treatment of mid thoracic esophageal cancer patient. Materials and Methods In this planning study, 10 patients were planned for these three techniques. Mean target volume was 220cc (range 109.6-301 cc). Patients were simulated with appropriate immobilization devices. CT image of 2.5 mm acquired. All treatment plans were generated in TPS (Eclipse; v11.1; Varian Medical Systems, USA), to a prescribed dose of 5040 cGy in 28 fractions with 5 fractions/week. The calculation algorithm used for calculation for all the technique is Anisotropic Analytic Algorithm(AAA). In 3D-CRT plan, the first phase contained AP-PA (3600cGy in 20 fr) followed by boost (1440cGy in 8 fr) through 3-field technique. In VMAT plan, full dose was planned using single arc. In HYBRID plan, the dose is concurrently split as AP-PA (55% of the dose) and VMAT (45% of the dose). Quantitative and qualitative analysis were carried out using various dosimetric parameters for both target volume and OARs.

Abstract Id: YUGP5111
Ileoocaecal Collision Tumors Of Adenocarcinoma And High Grade B-Cell Non-Hodgkinâ€™s Lymphoma In A 16 Year Old Boy Presenter- Dr. Sumeet Dil
Co-author - Kunal Sharma,

Collision tumors of adenocarcinoma and lymphoma in the gastrointestinal tract are especially rare with only a few reported cases in literature, the possibility of synchronous occurrence is estimated to be 2%. Here we present a case of a 16 year old boy with history of intermittent fever since one month and episodes of vomiting and diarrhoea for 3 days. Clinical diagnosis of appendicular perforation and peritonitis was made. Exploratory laparotomy however showed a terminal ileal growth extending into caecum with perforation along with multiple enlarged lymph nodes. Gross examination revealed a large polyoidal growth in caecum, two polyps in ascending colon along with a large ulceroinfiltrating growth in ileum and large mesenteric lymph nodes. Histopathological diagnosis of caecal moderately differentiated adenocarcinoma with extensive nodal metastasis along with two tubular adenomata, coexistent with high grade B-cell Non-Hodgkinâ€™s lymphoma favouring Burkittâ€™s lymphoma was made, confirmed on immunohistochemistry. The etiology of these two tumors occurring simultaneously in our patient is not very clear. However, the importance of reporting such cases lies in further studying some possible common etiological factors or molecular genetic basis, appropriate selection of immunohistochemical tests for establishing the diagnosis and also to define management guidelines in such challenging case scenarios.
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the inclusion criteria, were included in this study. Twenty six (36.1%) cases were found to have psychiatric related problems. Adjustment disorder was the most frequent diagnosis (n=11), followed by major depression (n=6). Rest of the diagnoses made were generalized anxiety disorder, acute psychosis, delirium and depressive psychosis. Conclusion: Significant psychiatric morbidity associated with bone marrow transplantation was observed. This study indicates the importance of psychiatric intervention during the transplant procedure as well as pre-transplant psychiatric assessment.

Abstract Id: YUGP5115

Usual Complication Following Mastectomy Un Commonly Discussed
Presenter- Dr. Mohinder Viswanath
Co-author -Dr. Karthikesh Kuttipparan , Dr. Bhargav Swaminathan,

Aim Cancer breast is commonest cancer in India and accounts for 14 to 20 % of all cancer in women. Surgery is the primary treatment of cancer breast. It is estimated that 150,000 patients are treated for cancer breast every year in India. There is no english literature to find incidence and risk factors of flap necrosis. This is retrospective study to find incidence, risk factors of flap necrosis in all patients undergoing mastectomy in primary surgery, post chemotherapy and post neo adjuvant chemoradiation Methods: This is retrospective study which includes all patients who underwent mastectomy for early and locally advanced cancer breast from July 2002 to 2016 January. Result: Total there were 1671 histologically proven cancer breast patients who underwent mastectomy for early and locally advanced carcinoma breast during the study period. All 1654 were females and male were 17 cases during the study period hence excluded in study, as none developed flap necrosis. out of 1654 case, 546 underwent surgery is primary mode of treatment, 796 patient underwent neo adjuvant chemotherapy followed by mastectomy and 314 patient underwent both chemotherapy and radiotherapy to breast prior to surgery. Out of 1654 patient 219 patients developed flap necrosis, 75(13.2%) were in primary surgery, 103(12.97%) were neo adjuvant chemotherapy. 41 (13.05%) were in post chemo + radiation. Out of 1654 patients diabetes was present in 476(28.77%) patients, obesity was present in 222 (13.42%) patients. 257 patients were above the age of 60 years. In 219(13.2%) who had developed flap necrosis diabetes was present in 115(52.5%) patients and obesity in 99(45.2%) patients. 45(29.68%) patients were above 60 years of age. Conclusion Age more than 60 years, body mass index over 30 and diabetes influences flap necrosis significantly (P value less than 0.05) according to our study. Pre-operative chemotherapy or combined chemotherapy and radiotherapy does not have effect in flap necrosis.

Abstract Id: YUGP5117

Temozolomide As Concurrent And Adjuvant Therapy With Radiation: A Reasonable Option For Patients With Glioblastoma Multiforme.
Presenter- *Dr. BIBIN FRANCIS
Co-author -Dr. O P Singh , Dr Veenita Yogi, Dr. H U Ghorli, Dr. Vivek Tiwari, Dr. Manish Kumar Ahirwar

TITLE- Temozolomide as concurrent and adjuvant therapy with radiation: a reasonable option for patients with glioblastoma multiforme. AIM AND OBJECTIVES: The main objective of this study isâ€” â€œ To determine the survival benefits of concurrent temozolomide with radiotherapy followed by adjuvant temozolomide over radiotherapy alone in post-operated patients with GBM. â€œ We retrospectively observed 30 patients of age 40 years or older who had undergone debulking surgery for glioblastoma multiforme presenting at the department of radiotherapy GMC and Hamidia hospital Bhopal for further management. RPA [Recursive Partitioning Analysis] score was used for pre and post treatment evaluations. PATIENTS AND METHOD: According to patient age group, performance status and basic investigation profile they were divided into two groups. In one group patients received conventional radiotherapy alone (40 Gy WBRT in 20 fractions with 20 Gy wedge boost) while in another group conventional radiotherapy with concomitant temozolomide followed by temozolomide as adjuvant chemotherapy was given. RESULTS â€œ A total of 30 patients with median age of 42 years had undergone debulking surgery followed by conventional radiotherapy. â€œ At a median follow-up of 12 months, the median survival was 7 months with radiotherapy alone and 9 months with radiotherapy plus temozolomide group. â€œ Log rank test shows a significant difference in the hazard ratio (Z= 2.65, p= 0.00798 with CI- 95%). â€œ Concomitant treatment with radiotherapy plus temozolomide resulted in grade 3 or 4 hematologic toxic effects in 10% of patents. CONCLUSION: The addition of temozolomide to radiotherapy for newly diagnosed glioblastoma resulted in a clinically meaningful and statistically significant survival benefit with minimal additional toxicity.

Abstract Id: YUGP5121

Retrospective Analysis Of Spectrum Of Presentation And Treatment Outcome In Extremity Sarcomas: A Single Centre Experience
Presenter- *Dr. SAURABH BANSAL
Co-author - DR VIPUL NAUTIYAL, DR VIPUL NAUTIYAL,

Introduction: The most common site for soft tissue sarcoma is extremity. As complete surgical resection is possible in majority, outcome of this subset is relatively better. The effect of adjuvant radiation as well as chemotherapy has been reported variably and no clear consensus exists. There is paucity of data regarding extremity STS from Indian subcontinent. Material and Method: Retrospective analysis was done for extremity STS visiting the study center over a period of 5 years. Data was collected and analyzed for demography, disease characteristics, treatment modalities and outcome. Result: Extremity STS constituted 32.8% of all STS enlisted. Most common subtype noted was pleomorphic STS. Metastatic disease at presentation was noted among 7/45 cases with lung being most common metastasis site. Wide local excision was done in 39 cases while amputation was required in 5 cases. Adjuvant radiotherapy was given in 29 cases while 20 cases received adjuvant chemotherapy. Large proportion of cohort in this study was high risk which might have contributed to inferior outcome. The median event free survival was noted 48 months while overall survival was 54.4 months. Conclusion: Study depict single center experience of extremity STS. The population analyzed was from sub Himalayan region with significant lost to follow up. Pooling of data from different centers has been advocated to derive conclusive results.

Abstract Id: YUGP5123

Extralevator Abdominoperineal Excision (Elape) For Locally Advanced Carcinoma Rectum: Single Centre Experience
Presenter- *Dr Sayed Asif Iqbal
Co-author - Dr Nikhil Gupta, Dr Shivendra Singh,

Extralevator abdominoperineal excision (ELAPE) for locally advanced carcinoma rectum: Single center experience Dr Sayed Asif, Dr Nikhil Gupta, Dr Shivendra Singh Background: Extralevator abdominoperineal excision is associated with superior surgical outcomes at the expense of increased perineal complications for locally advanced carcinoma rectum. Methods: All patients with confirmed diagnosis of carcinoma rectum underwent MRI pelvis. In patients where MRI was suggestive of either anal sphincter or orifice involvement, pelvic floor muscle involvement or presence of fistula in ano were considered for ELAPE. All the patients received adjuvant concurrent chemoradiation. Results: From January 2014 to July 2017, 23 consecutive patients who underwent extralevator abdominoperineal resection were evaluated. There were 20 males and 3 females. The mean age of the patients was 51.3 years (25 years â€“ 69 years). 6
patients presented with fistula in ano, 11 patients with bleeding per rectum, 4 with perianal pain, 1 patient had fecal incontinence which aggravated after radiation (required diverting loop sigmoid colostomy) and 1 patient presented with constipation and alteration in bowel habits. Mean CEA was 15.16 (1.53-84.3). 19 cases were operated by conventional open method, 2 cases with robot and 2 cases laparoscopically. All patients underwent pelvic floor reconstruction â€“ myocutaneous flaps in 4 cases and biological mesh in 19 cases. Mean duration of surgery was 293.75 minutes (180-540) and mean blood loss was 329.37 mL (50-1200mL). 3 patients required blood transfusion. 7 patients (31.25%) developed perineal wound infection which was managed with daily dressings. Of these, 4 patients had urinary retention also. Average duration of perineal drain was 10.37 days (6-15 days). R0 resection could be achieved in 18 out of 23 patients (78%). Conclusion: ELAPE can be done in locally advanced lower rectal cancer with acceptable perineal wound complications.

**Abstract Id: YUGP5127**

**Genomic Profiling Of Triple Negative Breast Cancer: Novel Targets For Personalized Treatment?**  
**Presenter:** Mr. Rajesh Kumar KS  
**Co-author:** Shekar Patil, Shekar Patil, 

Basis of the Study: Triple Negative Breast Cancer (TNBC) defined by the lack of expression of estrogen, progesterone receptors (ER, PgR) and HER2 represent heterogeneous subtype tumors with different molecular and clinical-pathological features, with more prevalence among younger age woman showing worse. It has been reported that prevalence of TNBC in India is considerably higher compared to western populations. Conventional chemotherapy is currently the only treatment option, thus there is a critical need to find new and effective targeted therapies in this disease. The current study aim to identify the frequency of somatic and germline mutations (GRm) in TNBC. Methods: Out of 100 TNBC cases, 50 patients aged 24-76 years (Median Age: 44) were consented to be profiled by Next Generation Sequencing (NGS) using 48 gene TrueSeq Amplicon cancer panel from illumina on MiSeq platform in an IRB approved study. All the cases had pathology review for histological type and grade. Average coverage across 212 amplicons were greater than 1000X. The FASTQ files generated by MiSeq Reporter (v2.6) of Illumina were further analyzed for variant calling and annotation using Strand NGSâ€™. Mutations identified in the tumor were assessed for actionability, response to therapy and impact on prognosis. Results: Somatic variants were detected in 66 % of cases with direct impact on therapy or prognosis. Among these, disruptive and non-disruptive mutations in TP53 were observed in 29 cases (58%) raising the possibility of targeting the mutant p53 as a new approach of treatment of TNBC. A follow up of few cases showed shorter PFS and poor outcome in resected TNBC treated with NACT indicating its robust prognostic value in NACT setting. Genetic aberrations was found in PI3K/akt/ mTOR signaling pathway in substantial fraction out of which 12% had PIK3CA activating mutations, 4%, had PTEN deletions indicating a good response to mTOR inhibitors. It is interesting to note that aberration in this pathway was more prevalent in this TNBC subtype (61%) than in HR+HER2+ve tumors (10.6%) of IDC histology. However, no correlation was found with stage and ki67 index of the tumor. The other genes like AKT, KRAS, APC, EGFR, VHL and RB1 were also found to be mutated in 2% of cases. Majority of the variants identified indicated resistance to conventional therapy and suggested sensitivity to alternative targeted therapy, either approved or in clinical trials. Based on this study eligible patients have been enrolled in clinical trials and receiving mutation specific targeted therapy to monitor the response and outcome. GRm were detected in 24 cases (60%). Among all mutations detected, BRCA1/2 mutations were found in 52% (36% in BRCA1, 16 % in BRCA2) of cases. Out of 13 deleterious mutations in BRCA1/2 genes (9 in BRCA1 and 4 in BRCA2) only 9 were reported to be pathogenic (7 in BRCA1 and 2 in BRCA2) and rest were VUS. Functional assays are warranted to classify these variants and their role in cancer. The mutation frequency was found to be higher among high grade IDC this subtype (53%, p

**Abstract Id: YUGP5129**

**Segmentation Of Pet/Ct Fused Medical Images With Various Solid Tumor Malignancies Using Different Methods Of Watershed Algorithm**  
**Presenter:** Dr. Abhishek Sehrawat

Fluorine-18 fluoro-deoxy-glucose (18F-FDG PET/CT), a hybrid imaging modality used for evaluation of functions and anatomy, has proven to be a valuable tool in the initial diagnosis, staging and restaging of a variety of cancers. The common malignancies wherein 18F-FDG PET/CT plays an important role are breast cancer, lymphoma, lung cancer and hepatocellular carcinoma. In carcinoma breast there is no recommended role of 18F-FDG PET/CT in early stage and operable disease. But PET/CT can be used to detect nodal involvement or multiple axillary lymph nodes and can be helpful in identifying unsuspected regional nodal disease and/or distant metastases in locally advanced breast cancer. It plays an important role in recurrent disease advanced stage (IV) and recommended in inflammatory carcinoma. In Hodgkinâ€™s lymphoma 18F-FDG PET/CT is a standard investigation for staging of FDG-avid lymphomas and in response evaluation post treatment. In non Hodgkinâ€™s lymphomas (NHL)18F-FDG PET/CT scanning is highly sensitive for detecting both nodal and extranodal sites (e.g., skin, lung, gastrointestinal tract, bone, bone marrow) involved by NHL. The intensity of FDG avidity correlates with histologic aggressiveness. PET scanning detects an actively metabolizing tumor in residual masses following or during chemotherapy, and persistent abnormal uptake predicts early relapse and/or reduced survival. In hepatocellular carcinoma 18F-FDG PET/CT imaging has limited role in early diagnosis, however it plays an important role in detecting extrahepatic disease and prognosis. In lung cancer 18F-FDG PET/CT is useful in initial staging, localising tumour in collapsed lung to guide biopsy, detecting distant metastases and in evaluating response to therapy and recurrence after surgery in resectable tumors. In 18F-FDG PET/CT, 10 mCi, 18F-FDG is injected intravenously and scan is acquired after 40 minutes with the patients in fasting state, 4-6 hours prior to the study. 18F-FDG uptake determines the metabolic activity of that particular tissue. Higher the uptake value, higher is the metabolic activity of cells. Uptake of FDG higher than the normal uptake for that tissue can be associated with malignant cells . Standardized uptake value (SUV) is the semi-quantitative parameter which can be estimated from 18F-FDG PET/CT studies and routinely used for characterizing of the tumor and assessment of treatment response evaluation in these patients. There are many variables such as amount of activity injected, blood glucose level, time of injection and weight of patient, which can affect the estimation of SUV. Given these variables, use of SUV may not always be appropriate. Since the visual assessment is not objective, final report is subject to variation among nuclear medicine physicians.Hence, there is need for other reliable quantitative parameters that can be calculated from the whole body 18F-FDG PET/CT images that will help in the assessment of treatment response evaluation and characterization of the tumor. One such method can be provided by medical image analysis & the first step of medical image analysis is image segmentation. Image segmentation in nuclear medicine is used to (i) Study anatomical structure (ii) Identify region of Interest i.e, locate tumor, lesion and other abnormalities (iii) Measure tissue volume (and hence effect on size of tumor after therapy) and (iv) Help in treatment planning prior to radiation therapy, in radiation dose calculation. Image Segmentation refers to the process of partitioning image into multiple regions. These regions are group of connected pixels with similar properties such as gray level, color, texture, brightness, and contrast etc. and it may correspond to a particular object, or different parts of an object. The object/region of interest can be extracted manually on a good quality 18F-FDG PET/CT fused image by simply selecting image intensity.
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Abstract Id: YUGP5131
Development Of F18-Fdg Pet/Ct Database Of Lung Masses And Computation Of Their Feature Vector
Presenter - Dr. Abhishek Sehrawat

Cancer is a generic term for a large group of diseases that can affect any part of the body. Lungs cancer is one of the most common and serious type of cancer. Lung cancer is the leading cause of cancer death worldwide [1]. In US alone, the estimated new lung cancer cases for 2017 are 222,500 out of which 116,990 are males and 105,510 females. Estimated deaths are 155,870 out of which 84,590 are male and 71,280 are female [2]. In India, the estimated cases of men and women in 2012 were 54000 & 17000 respectively [1]. Lungs cancer is a malignant tumors lung characterized by uncontrolled cell growth in tissues of the lung. If it is left untreated, this growth can spread beyond the lungs by process of metastasis into nearby tissues or other parts of the body [3]. There are mainly two types of lungs cancer small-cell lungs carcinoma (SCLC) and non-small-cell lung carcinoma (NSCLC). NSCLC also categorized into three parts- Adenocarcinoma, Squamous cell carcinoma and Large cell carcinoma. The most common symptoms are coughing up blood, weight loss, shortness of breath, cough that does not go away, coughing up blood, fatigue, losing weight without trying, loss of appetite, shortness of breath and wheezing and chest pain. The vast majority (85%) of cases of lungs cancer are due to long â€‘term tobacco smoking. About 10-15% of cases occur in people who have never smoked but it happened due to genetic factors, exposure to radon gas, asbestos, second hand smoke or other form of air pollution. Lungs cancer may be seen on chest radiographs and computed tomography but diagnosis confirmed by biopsy which is usually performed by bronchoscope or CT or by PET/CT guidance. F18-FDG PET/CT scanning is best for all types of cancers because of better sensitivity and specificity compared to anatomical imaging such as CT as it provides estimates of tumor glucose metabolism [4]. Standardized uptake value (SUV) is the semi-quantitative parameter which can be estimated from F18-FDG PET studies and routinely used for characterizing of the tumor and assessment of treatment response evaluation in these patients. The cut off value of SUV is 3.5 above which tumor is malignant otherwise benign [5]. However, there are many variables such as amount of activity injected, blood glucose level, time of injection and weight of patient, which can affect the estimation of SUV. Hence, majority of nuclear medicine physician rely more on their visual assessment and use it for reporting the F18-FDG PET/CT Scan. Now, the nuclear medicine community is looking for another reliable quantitative parameters extracted from the image that will be used in diagnosis and/or treatment response evaluation. Image processing algorithms have potential to assist in lesion (e.g. nodule) detection on PET/CT studies and to assess the stability or change in size of lesion on serial PET/CT studies. Comparison and evaluation of image processing techniques against each other require common data sets and standardized methods for evaluation. Investigators developing image processing algorithms need standardized databases with which to work. Therefore, there is a need for F18-FDG PET/CT image database as research resource for medical image processing. PET image texture analysis was proposed to characterize the heterogeneity of tumor F18-FDG uptake [6-9,37]. F18-FDG uptake is not homogeneous across the tumor because of necrosis, cell proliferation, micro vessel density, and hypoxia [6,10-12]. It has been shown that tumor heterogeneity can be associated with disease progression, response to therapy, and malignant behavior of the tumor [6,13]. Texture analysis refers to a variety of mathematical methods that may be applied to describe the relationship between the grey level intensity of pixels or voxels and their position within an image. An advantage of measuring textural parameters is that it is a post processing technique that can be applied to data acquired during standard clinical imaging protocols thereby maximizing the information that can be derived from standard clinical images. A number of textural features can be derived that provide a measure of intralesional heterogeneity e.g. angular second moment, inverse difference moment, entropy, correlation etc. [6,14,26]. Texture analysis has been extensively used in CT images and has given promising results as a predictor of survival and in treatment response assessment in NSCLC and other carcinomas [15-18,27], but it is still new and emerging field in PET/CT. Very few studies has been found in the literature in which texture analysis is used in F18-FDG PET/CT scans to predict patient outcome and treatment response in oncology[19-22,34-36]. However, only one study has been found in literature on the prediction of treatment response of NSCLC using texture analysis in F18-FDG PET/CT scans [22]. Local Binary Pattern (LBP) is a method of texture analysis it is based on small area. It is based on the texture spectrum model and provides an additional statistical approach to texture analysis. In texture spectrum model a concept of texture unit is proposed. The texture unit is defined for each pixel value by the eight neighboring pixels values in a 3x3 matrix. Each neighboring pixel is compared to the central pixel and a texture unit value is assigned accordingly. Neighboring intensities with threshold lower values compared to the reference pixel are marked with 0, intensity values equal or greater than the reference pixel are marked with 1. The texture unit is read in starting from upper left corner of the newly calculated 3x3 matrix proceeding clockwise. The intent of this study is to construct a database of F18-FDG PET/CT images of lung masses.

Abstract Id: YUGP5133
Demographic Audit Of Pediatric Malignancies Enlisted At Single Tertiary Cancer Center Of Uttarakhand State
Presenter - Dr. Kunal Das
Co-author -Brahma Prakash Kalra , Tanvi Khanna,

Introduction: Pediatric malignancies constitute about 3% of all cancer cases. With better understanding of cancer biology and regimens, cure is possible in majority of cases. Uttarakhand state is situated in Shivalik foothill of sub Himalayan region and has major population at hilly terrain. Cancer research Institute, being the single referral cancer center caters majority of state cases. Material and
Megakaryocyte In Peripheral Blood: A Rare Presentation In CML from sub Himalayan region.

Introduction:
Presence of megakaryocytes (MGK) in peripheral blood smear (PBS) is a rare condition. This may be seen in myelodysplastic syndrome. I am presenting a case of CML with lymphoid blast crisis showing MGK in PBS, probably first case report of this kind. Method: The case was picked for study while reporting peripheral blood film smear. Results: Bone marrow aspirate smear examination showed 80% blasts in diluted marrow. Bone marrow biopsy showed hypercellular marrow with neoplastic proliferation. Flowcytometry revealed 51% blasts positive for CD19, CD34, CD10, CD38, CD33, CD117, CD64, CD4, CD5, CD7, CD8 & MPO. Diagnosis of ALL was given. On frequent routine haemogram, the value of platelet count was noticed always higher side (> 200 x 10^9/L). This raised suspicion of any other associated disease. Result: Cytogenetic study revealed chromosome XY, t (9, 22). RTPCR showed P210 positive. Finally the diagnosis chronic myeloid leukemia with blast crisis was considered. Close differential is Ph+ ALL. Conclusion: (1). MGK in PBS may be a presentation of CML. (2). Blast crisis may be the first presentation of CML. (3). Flowcytometry may not be useful in diagnosis of CML with blast crisis.

Abstract Id: YUGP5139
Megakaryocyte In Peripheral Blood: A Rare Presentation In Cml
Presenter- Dr. Amar Ranjan Singh
Co-author - Pranay Tanwar,

Abstract Id: YUGP5141
Mies (Minimally Invasive Esophageal Surgery)-Standard Of Care-Our Experience
Presenter- Dr. Satish Pawar
Co-author - Dr.Syed Nusrath, Dr.Syed Nusrath,

Background: Surgery is the most effective treatment for the resectable esophageal cancer of the middle & lower third and Gastro-Esophageal Junction (GEJ) tumors. We hereby scrutinise our experience in Minimally Invasive Esophageal Surgery (MIES) to evaluate its safety and efficacy as an Oncosurgical procedure. Methods The study included 99 consecutive patients. Depending on the location of the tumor, either Thoracoscopic TransThoracic Esophagectomy (TTE) in prone position or Laparoscopic Transhiatal Esophagectomy (THE) was planned. 2 field comprehensive nodal dissection were part of both the surgical procedures. Results: 05 patients were excluded, 18 were inoperable and 12 had open surgery. 64 underwent MIES (THE-37, TTE-27). Male: Female= 3.5:1. Acute myeloid leukemia was noted in relatively older age group with median age of 12 years. Among lymphomas, median age for non-Hodgkin group was 12 years and for Hodgkin lymphoma was 11 years. On analysis of solid tumors, brain tumor was most frequent subgroup with median age of 10 years and male to female ratio of 13:7. Cancers involving bone (Osteosarcoma, Ewingâ€™s sarcoma) constituted second largest solid tumor group followed by Germ cell tumor. While male dominance was noted in all subgroups, Germ cell tumor subgroup showed majority as female enlistment [14/15]. Median age of diagnosis for germ cell tumor was noted as 16 years. Soft tissue sarcoma was diagnosed amongst 9 cases with clear male dominance and median age of presentation as 14.5 years. While wilms tumor and retinoblastoma were noted among 7 and 3 cases showing reduced enlistment, unusually high incidence of rectal cancer was noted [7 cases, median age 17.5 years]. Occurrences of nasopharyngeal carcinoma, hepatoblastoma and neuroblastoma were noted as 2 cases each. Conclusion: Being the single referral center of state, audit of pediatric malignancies can be considered as parallel to state incidence. However hilly terrain and sparse health facility available might be a cause of referral bias or decline. This audit represents an interesting childhood cancer pattern from sub Himalayan region.

Abstract Id: YUGP5147
Expression Profile Of Kras & P16 Mutation In Periampullary Cancers
Presenter- Dr. JYOTIRANJAN SWAIN
Co-author - PROF.MALLIKA TEWARI, PROF HARI SHUKLA.

ABSTRACT
AIMS AND OBJECTIVES- To detect KRAS gene mutation and expression profile of p16 gene in periampullary cancers and to explore the clinical significance and prognostic relevance of these mutations. BACKGROUND: Activating point mutations in codons 12, 13, and 61 of the KRAS gene are the most common genetic alterations in periampullary cancer, approximately present in 30-40% cases. p16 is the most common tumour suppressor gene affected in the patients with periampullary cancers. Both these genetic alterations are found to have a negative prognostic impact on patients with periampullary cancers. MATERIALS & METHODS- 50 diagnosed cases of periampullary cancers who underwent potentially curative resections were included in the study. Formalin fixed, Paraffin embedded tissue samples were analysed for point mutations in codons 12 and 13 of KRAS and codon 9 of p16 using a sensitive polymerase chain reaction based assay. Survival curves were estimated by Kaplan Meir method and differences between the curves were measured using log rank test. RESULTS-Out of 50 resected pancreaticoduodenectomy specimens KRAS mutation in codon 12/13 was found in 32 cases (64%) and p16 mutation was found in 36 (72%) cases. KRAS mutation was found to be significantly associated with grade of tumour, higher pT stage, lymphovascular invasion (LVI), perineural invasion (PNI) and pathological lymph nodes on univariate analysis. However on the multivariate analysis KRAS mutation had significant association with higher grade of tumour (p=0.031), pT stage (p=0.09) and LVI (p=0.028). On univariate analysis loss of p16 expression was significantly associated with grade of the tumour, pathological lymph...
Abstract Id: YUGP5149
Correlation Between Tumour Grade & Myo Invasion With Lymph Node Metastasis In Carcinoma Endometrium: A 7 Year Experience Of Tertiary Regional Cancer Institute.
Presenter- *Dr. SONZ PAUL
Co-author - Dr. Senapati S.N., Dr Sonz Paul,

Aims & Objectives: The objectives of the study were to evaluate the clinicopatholgic profile & to examine correlation between tumor grade & myometrial invasion with pelvic & para aortic lymph node metastasis. Materials & Methods: It is a retrospective study of 220 cases of endometrial carcinoma treated at a tertiary regional cancer institute between 2009 and 2016. Data were obtained from Electronic Medical Records of Hospital database. Acquired data were analyzed using SPSS v.22 Results: The mean age of the patient was 56.4(range 25 to 80 years). Of 220, 177 (80%) patients belonged to Type I variety. 41 patients (18.6%) had grade 1, 131 patients (59.5%) had grade 2 histology and 48 patients (21.9%) had high grade endometrial carcinoma on post operative histopathology reporting. Of 220, 30 patients (13.6%) had pelvic or para aortic or both lymph node metastasis, of which 23 had pelvic & 7 had both pelvic & para aortic lymph node metastasis. Out of 48 high grade tumors, 27% had pelvic & para aortic lymph node metastasis. Out of 131 Grade II tumors who underwent lymphadenectomy, 117 patients (89.4%) did not have lymph node metastasis and was statistically significant (p=0.01). More than 50 % myometrial invasion was detected in 43 of 220 patients (18%) and 32.5% had retroperitoneal lymph node metastasis & was statistically significant (p=0.001). Conclusion: There was statistically significant higher nodal metastasis in both pelvic and para-aortic lymph nodes with increasing depth of myometrial invasion in carcinoma endometrium. 89.4% of Grade 2 tumours did not have lymph node metastasis, which was statistically significant. Hence retroperitoneal lymph node dissection must be done judiciously and in selected patients.

Abstract Id: YUGP5153
A Single Institutional Experience Of Adjuvant Radiotherapy In Treatment Of Early Stage Endometrial Carcinoma
Presenter- *Dr. Saumyaranjan Mishra
Co-author - Dr Ratika Gupta, Dr Ratika Gupta,

INTRODUCTION- Carcinoma endometrium is the 6th most common malignancy in females worldwide and fourteenth most common cancer overall. Most of the patients present in early stage disease and surgery with or without postoperative radiotherapy is the treatment of choice. Vaginal cuff brachytherapy used either along with external beam radiotherapy or alone is practiced in variable dose schedules with comparable outcomes. This study intends to analyze our cases of carcinoma endometrium treated with radiotherapy for outcome and toxicities. MATERIALS AND METHODS- 62 patients of carcinoma endometrium who received post-operative adjuvant radiotherapy (external beam radiotherapy with brachytherapy or brachytherapy alone) between years 2010 to 2016 were analyzed retrospectively. The treatment details and follow up data of patients were collected from the hospital information system and patient records. Early stage (stage I and II) disease was included in this study. External beam radiotherapy was given to a selected group of patients at a dose of 4500 cGy in 25 fractions. All patients received vaginal cuff brachytherapy with or without external beam radiotherapy. Vaginal cuff brachytherapy dose schedules were 2000 cGy / 5 fractions (21 patients), 1200 cGy / 3 fractions (40 patients), 1800 cGy / 3 fractions (1 patient). Genitourinary and gastrointestinal toxicities were assessed on subsequent follow-ups. RESULTS- Age group ranged from 39 years to 83 years (Median age 63 years). 18 patients were in stage I, 30 patients in stage IB and 14 patients in stage II. Only 5 patients had grade I genitourinary toxicity at last follow up. Grade I gastrointestinal toxicity was seen in 4 patients. Total 6 patients had developed recurrence (local or distant). CONCLUSION- Our institutional data review shows patients of early stage carcinoma endometrium treated by relatively low dose of HDR brachytherapy (with or without external beam radiotherapy) may have outcomes comparable with standard dose schedules with very less toxicities. Further detail analysis of outcome and toxicities are going on.

Abstract Id: YUGP5157
Bone Marrow Dosimetric Parameters And Acute Hematological Toxicity In Cervical Cancer Patients Undergoing Concurrent Chemoradiation.
Presenter- *Dr. Rajanigandha Tudu
Co-author - Dr.Vani Singh , Dr. Anoop Kumar , Payal Raina

OBJECTIVE:- To study the incidence of hematological toxicity in relation to bone marrow dosimetric parameters in cervical cancer patients undergoing concurrent chemoradiation. MATERIAL AND METHODS:- The data of 17 cervical cancer (stage IIB & IIB) patients who underwent concurrent chemoradiation during March 2017- June 2017 were analyzed. Radiation was delivered in a dose of 46Gy in 23 fractions with weekly cisplatin (40 mg/m2) on days 1,8,15 and 22 of the treatment. The clinical target volume consisted of uterus, cervix, vagina, parametrial tissue and pelvic and presacral lymph nodes. Pelvic bone marrow was defined within the treatment field which comprised of (i) lumbosacral spine (ii) ilium,ischium,pubis and (iii) proximal femora. The volume of bone marrow receiving 10,20,30 and 40 Gy and the median dose to bone marrow were correlated with haematological toxicity , graded by CTCAE V.4.0 criteria. RESULTS:- 17 cervical cancer patients treated with concurrent chemoradiation were analyzed. Among the 17 patients, 88% completed 4 cycles of weekly cisplatin . Patients treated with weekly cisplatin and 3DCRT pelvic RT had grades 1-5 hematological toxicity (35%,47%,5%,0%,0% of patients respectively).The median percentage volume of bone marrow receiving 10,20,30 and 40 Gy were 95%, 90%, 42% and 21% respectively. 75% of the patients with median percentage of bone marrow volume receiving 40Gy >21% had grade 2 hematological toxicity. CONCLUSION:- Concurrent chemoradiation is associated with hematological toxicity. The patients with median percentage of bone marrow volume receiving 40Gy >21 Gy were seen to have high grade of hematological toxicity. Evaluation of irradiated bone marrow volume maybe considered to limit hematological toxicity.

Abstract Id: YUGP5165
: Lived Experience Of Adult Female Cancer Survivors To Discover Common Protective Resilience Factors To Cope With Cancer Experience And To Identify Potential Barriers To Resilience
Presenter- *Ms. MARY WALTON

Title: Lived experience of adult female cancer survivors to discover common protective resilience factors to cope with cancer experience
Abstracts

and to identify potential barriers to resilience Mary Walton

Introduction: Cancer directly touches the lives of many women. This raises the question, how do women diagnosed with cancer cope with their diagnosis? One such positive adaptation is resilience. Resilience is an individual’s ability to bounce back from a negative experience. The study aimed to explore the lived experiences of adult female cancer survivors to discover common protective resilience factors that helped them to cope with the cancer experience and to identify the barriers to resilience. Based on the findings, a Resilience tool for cancer survivorship was developed. Methods: A Mixed approach using sequential exploratory design was used which was conducted in 2 phases. Qualitative approach, with Phenomenology design (Phase 1) and development and validation of a Resilience tool for cancer survivorship (Phase 2). Purposive and maximum variety sampling was used and 14 breast cancer survivors were selected between the age of 18 to 70 years till data saturation. Those with metastasis were excluded. An in-depth interview was conducted with open ended questions at the home of the participants. The audio taped data was transcribed, coding was done and emerging themes were identified. Results: The mean age of the participants was 57.07 years and the mean age at diagnosis was 55.5 with a range of 40 to 75 years. 9 of them were married, 8 underwent breast conservation surgery and 6 mastectomy, 11 of them chemotherapy and 13 had radiation therapy and 6 of them were on anastrozole and 8 were triple negative. Protective resilience factors are the factors which helped the survivors to accept, withstand, fight back and overcome the adversity they faced, and to move in life with an optimistic attitude. The emerged themes for protective resilience factors are as follows: Theme 1: Personal strengths: What it takes to be to be an âœœover-comerâ‡“ The initially reaction to the diagnosis of cancer is that of, unexpectation, shock, dread and disbelief, but an optimistic attitude is required to face the disease and the challenges related to treatment. But one thing I want to tell everyone who suffers from cancer, you should not get scared of cancer, your mindset should be strong, itâ‡“s how you think, we should think positive. I donâ‡“t mind talking to anyone who has cancer to encourage them, as I was a victim, I donâ‡“t want them to get scared of the disease.P10 Theme 2: Social security: Family, friends, Health care personnel and social media. Family support plays a pivotal role in the speedy recovery of patients. When a person is diagnosed with cancer family cohesion happens instantaneously. Survivors feel safe and secure because of the stable affectionate bond of family and close secure attachments especially with the spouse. My husband, mother-in-law and family were very supportive, that gave me strength to fight day by day and to move on, my children too.P6 Theme 3: Spiritual factors- Unshakeable Faith in God. They believed that God is the Healer and He is the one that works through people. Sharing all their troubles and pain with the Almighty brought a sense of comfort and reassurance to them. It has made me more closer to God. I have strengthened my prayer life. P3 I used to pray, read books and listen to music, which helped me overcome my feelings of worry, I did become closer to God, it was God who had saved me through this experience. P5 Theme 4 : Speedy Perioperative period. Self advocacy plays a key role in speedy recovery. I got admitted Friday I had surgery and Monday I got discharged they said. P11 Theme 5 Physical factors âœ‘ surfing through the waves of âœ‘ chemoaâœ™. Tolerating chemotherapy was a major area concern and fear. The common side effects of chemotherapy was seen in them, but it was more individualized in nature. I didnâ‡“t have much side effects. I didnâ‡“t get any mouth ulcers only tirednessâœ™, ate only home food, sometimes they used to ask what I eat, I ate bland food not pungent food. I had hair fall, I wore a scarf, the nurses you used teased me, sister all this white hair will fall and you will get black hair (laughing). P3 Theme 6 :The Transition âœ‘Celebrating âœ‘ new lifeâœ™ Celebrating new life and being glad that the whole episode was over is what many of them expressed in different ways. They accepted things with a positive attitude, followed the medical advice; were regular with the follow up and had a strong determination to move on with life. In my mind, I accepted everything, I am celebrating life, I get back to work, be pray full and enjoy life, I plan to go to Dubai and enjoy and come back fresh and get back to work.P10 Theme 7: Psychological and emotional factors-Coping strategies. Acceptance of the fact that one has cancer, getting treated, getting rid of the part and moving on with life. It is okay to cry as it releases all of oneâœ™s worries and pains through tears and after that one feels lighter. I cried when I got the news and I prayed. I wept and said give me the strength and grace to bear, I felt lots of support and energy. I said I will face it the best way I can. I am not going to lament. P3 We should not get scared, we should be happy, more you are happy the more you laugh, humor is important, we should not sit and brood, it will eat you up, you should eat the right type of food, and be happy and have faith in God, thatâœ™s what I think. P10 1 learnt yoga, it helps, not regularly, during treatment also did, I also read a lot and listened to music and did some meditation. I also used to read a lot. I also spoke to many of my community.P3 Theme 8: Financial security Not having to worry about financial issues is one of the major protective resilience factors which would have otherwise been a major barrier. I put in my group, I did not know my class mates would help me, I have cancer and I have no money, I didnâ‡“t say how much, they all sent and itâœ™s all in the bank, with that only I managed. Some said they will pray for me, some sent me money and others encouraging messages.P1 Barrier to Resilience. The major themes that emerged from the clusters of surgery and radiation therapy. Most participants had physical barriers related to surgical FNAC, I donâ‡“t know this Dr was so experienced, anyway that is benign. By touch they (Dr) said it was benign, no they did not do any test. They took a piece of tissue for testing and they said that it is a growth. They checked me and said are you getting pain, keep it monitored, its fine (P1) Theme 3: Biological/medical Barriers Delay on the part of the family doctors in giving the correct advice, delay in diagnosis and referrals to other tertiary hospitals or oncologists resulted in identification at later stages of cancer. No clear communication from the doctors also results in delay in treatment. Casual attitude and insensitiveness of some family doctors in providing correct advice and referrals to patients resulted in delay of treatment. I felt a lump I showed one Doctor they said that is nothing so I left it like that. I had a doubt so I showed it to another doctor he said I will give you a letter of reference you need to go and get it tested and show it to me. I went to St Johnâ‡“s, they did all the tests, they took a piece of tissue for testing and they said that it is a growth. P1 Misused diagnosis and contradicting pathology reports causes stress and delay in treatment. I went to these good path labs, she checked me and said are you getting pain, keep it monitored, its benign. By touch they (Dr) said it was benign, no they did not do FNAC, I donâ‡“t know this Dr was so experienced, anyway that is over.P8 Theme 4: Financial barrier Finance was a major concern for some of them as they did not get financial support from spouse or children. But my son takes care. They take to hospital but I have to pay the money. I still I have credit to pay. No support from spouse or children, I have credit still to pay back. P1 Theme 5: Physical Barriers Physical barriers were expressed in terms surgery, chemotherapy and radiation therapy. Most participants had physical barriers related to the inability to tolerate and manage the side effects of chemotherapy. I had quite bad vomiting, twice it was very bad I had got admitted for it, no mouth ulcers, within first cycle there was hair fall, I had long thick hair, I cut it as only front hair was falling.P4 Denial and avoidance of chemotherapy, by compensating with changes in lifestyle especially in food patterns. I know that I donâ‡“t need chemo, I know that nothing is in me, everything is gone, its all in the mind, my food pattern changed, I used to eat bland food not pungent food. I had hair fall, I cut it as only front hair was falling, I ate bland food not pungent food. I had hair fall, I wore a scarf, the nurses you used teased me, sister all this white hair will fall and you will get black hair (laughing).
which has B17, I got this Himalayan salt. I add this salt with orange juice a school too, then I have black tea. P10 Theme 6; Social barrier Social barriers were mainly in terms of stigma towards cancer, family issues and pitiful attitude by co-workers. Survivors expressed they would like to be independent as soon as possible and not be a burden to anyone. I left it, did not tell anyone, even if neighbors asked I used to just say I had some leg pain and go to hospitalâ€“ P1 Theme 7; Psychological Barriers The psychological barriers identified were loneliness, inability to ventilate feelings, wanting to forget the bitter experience and move on, depression, disturbance in body image and losing interest in family roles. In the evenings I used to get depressed P2 I Donâ€™t want to discuss bitterness, on groups we will send messages in the group and forget the bitter experience. I donâ€™t want to think..P7 Theme 8; Impending Fear of Recurrence Fear of recurrence is one of the main psychological barriers.. As the date for follow up approached or time for scans there was lot of apprehension, fear and anxiety not knowing what the result would be. We have to be careful, I feel I will not get,P7 Conclusion : The findings of this study will better inform individuals diagnosed with cancer, their families and the medical community to develop more effective ways to intervene to assist female cancer survivors to successfully cope with the various aspects of their cancer experience. Based on the protective resilience factors and barriers to resilience, a fundamental structure was created and a resilience tool for cancer survivorship was developed by the researcher. Mary Walton. M.Sc Nursing, MA Soc. PhD Scholar Associate Professor/ Deputy Nursing Supdt St Johnâ€™s College of Nursing, Koramangala, Bangalore-560034 marywalton_sw11@rediffmail.com

Abstract Id: YUGP5167
Audit Of Chemotherapy Induced Hypersensitivity Reactions At A Tertiary Cancer Center: Prospective Database Needed At National Level
Presenter- Dr. SUJITH KUMAR M
Co-author - Kumar Prabhash, Kumar Prabhash,

Background: Hypersensitivity reactions (HSRs) are considered rare complications of chemotherapy and are also under reported. No studies in India have been published describing the magnitude of chemotherapy induced HSR. Aim: To study the incidence and pattern of chemotherapy induced HSRs among adult patients receiving chemotherapy at our hospital Materials and Methods: A retrospective audit of chemotherapy induced HSRs in patients who underwent chemotherapy at our general day care during September 2015 to October 2015 was conducted based on electronic medical records and the daily chemotherapy day care adverse event records. All patients received standard pre medications including steroids, anti emetics and anti histaminic as per the chemotherapy protocol. The data on any further occurrence of HSRs due to any other chemotherapy agents in these patients over next 1 year till December 2016 also was collected. Statistical analysis was done. Results: A total of 6342 sessions of chemotherapy were administered in adult patients during the study time period of 57 days (Median: 116, range: 35-184).Median age was 50yrs (18-68).Male female ratio was 1: 5. The total number of HSRs recorded was 11 (0.2%). Recurrent/Relapse Carcinoma ovary was the most common diagnosis (40%). 2/3rd of patients were treated with palliative intent and were receiving combination chemotherapy.1 patients had prior history of Grade 2 reaction to carboplatin. The most common drug causing HSR were carboplatin (50%) followed by paclitaxel (25%), cisplatin and oxaliplatin. The median time of infusion when HSR occurred was 15 min (10-120).Chest discomfort, anxiety and sweating were most common complaints. Grade 3 HSR was most common (50%) with Grade 4/5 in 21%. All patients were managed with bolus intravenous hydrocortisone 100mg, pheniramine 12.5mg and about 60% of patients required O2 support by nasal prongs/ mask. At 1 hour post HSR episode, 80 % patient had recovered completely. Median prior infusion cycles of carboplatin received in total was 14 (6-25). No patient was re-challenged with same drug. Cisplatin and Docetaxel were used for replacement for Carboplatin and Paclitaxel respectively in 6 patients and 2 of them had further HSR with these alternative drugs. No HSRs were seen in these patients with other chemotherapy drugs in the follow up period of 1 year. Conclusion: The incidence of chemotherapy induced Hypersensitivity reactions in our study was 0.2%. Majority was Grade 3 or above . Carboplatin showed highest risk of HSR especially when multiple prior infusions have been received. In spite of being a retrospective analysis, this study points to the need of proper pre medications and the prompt administration of rescue medications as most of the patients fully recover. Prospective database for chemotherapy induced hypersensitivity reactions is being planned at our institution and may also be needed at national level for the estimation of the magnitude of the problem. This is especially important as there are more molecular agents being used in clinical practice than ever before.

Abstract Id: YUGP5170
Perioperative Concerns In Transoral Robotic Surgeries (Tors)- Our Initial Experience
Presenter- Dr. SRIHARI S SAMEROY
Co-author - DR SHASHIDHAR G S , DR NAMRATA RANGANATH

Introduction: Robotic surgery being minimally invasive is becoming popular due to decreased postoperative morbidity, shorter hospital stay, faster recovery and better cosmetic results when compared to open conventional techniques. Weinstein and Oâ€™Malley first developed TORS. [1] In this case series of three patients who underwent TORS, we would like to share our experience in perioperative concerns for TORS. Case report: All patients described were scheduled for TORS underwent preanesthetic evaluation. Preoperative investigations done as per institutional protocol. General anesthesia with nasotracheal intubation was planned for one case to facilitate surgical exposure and two cases were electively tracheostomised preoperatively. As per ASA standards monitors connected and General Anesthesia was conducted as per institutional protocol.(2) After surgery, residual NM blockade was reversed and decision to extubate the trachea immediately or after a period of observation was taken depending upon operative course and possibility of airway edema. Patient was shifted to postoperative recovery room for further monitoring and management. Conclusion: TORS benefits the patient, operating surgeon and anesthesiologist and improves the overall outcome.

Abstract Id: YUGP5172
Oligometastatic In Ovarian Cancer Successfully Treated With Stereotactic Radiotherapy
Presenter- Dr. SATYA NARAYAN
Co-author - Puneet Bagri, Puneet Pareek, Tej Pratap Soni

Introduction: The advancement of radiation delivery technology improved the precision with minimal toxicity to various anatomic sites. So the newer technology has emerged as competitive alternative to surgical resection in oligo metastasis. The authors report a case of 48 years old female she was a known case of papillary serous carcinoma of ovary. On routine visit she was diagnosed with metastatic lesion in L1 vertebra and single SOL in segment V of Liver. After complete evaluation she was treated with SBRT. Case Report: A 48 years old female previously known case of right sided ovarian papillary serous adenocarcinoma. Previously she underwent complete surgical excision followed adjuvant chemotherapy. After 6-8 months during follow up her CA-125 level increased to 61.3U/ml without any clinical symptoms and PET-CT showed lesion in L1 vertebra, with Liver had lesion in segment V (2.1 x 2.1cm.). Because of oligo metastatic disease and good general condition in multidisciplinary panel she was offered SBRT. The dose to Liver segment V 30 Gy in 10 fractions and 40 Gy in 5 fractions in one week was planned. On follow up visit on
Approx 9 months. She has still no sign of relapse neither PET-CT scans nor biochemically. She remains in excellent clinical condition. Conclusion: The SBRT can be considered as an alternative option for oligo metastatic sites and also better option in surgically unfit patients. To reach any final conclusion the large comparative study is required.

Key Words: Ovarian malignancy, Oligo metastasis, SBRT

Abstract Id: YUGP5174
Role Of Extracorporeal Irradiation In Bone Tumours : A Single Institutional Experience
Presenter- Dr. Sarath chandra Reddy
Co-author - Dr.RAMESH BILIMAGGA, DR.KUMARASWAMY

Introduction: Limb salvage therapy is now considered the standard of care in the management of malignant bone tumours. It includes En bloc resection of the tumour, extra corporeal irradiation(ECI) followed by re-plantation of the bone segment, who received treatment with Limb salvage therapy. Materials and methods: During the period of 2013-2015, 8 patients underwent limb salvage surgery in our institution. We have analysed these 8 cases of malignant bone tumours . All the patients except one received neoadjuvant chemotherapy (five with VAC-IE regimen and 2 with MAP regimen) following which surgery was done 4 weeks later. All underwent En bloc resection of the tumour involved segment, irradiated with a dose of 50gray in single fraction extracorporeally followed by re-implantation of the bone segment. The primary objectives were local control and short term survival and the secondary objective was the Functional outcome using the Musculoskeletal tumour society (MSTS) scoring.

Results: Among the patients, 5 were male and 3 were female with a mean age of 18years. Based on histology,3 were osteosarcoma,4 were Ewings sarcoma and 1 was epitheliod sarcoma. At a median follow up of 37 months, no patient developed local recurrence. Three recurrences had occurred (osteosarcomas), which was also in nature (Lungs) and one patient died of the disease. The median survival was 29months ,3 yr Overall survival being 62.5% and the mean MSTS score was 25. Conclusion: The results show that ECI is a useful technique in the management of malignant bone tumours and it provides good local control and a long term biological reconstruction.

Abstract Id: YUGP5178
A Prospective Study Of Two Fractionation Schedules Of Palliative Irradiation In Patients Of Brain Metastases: Early Results
Presenter- Dr. Manju lata Yadav
Co-author - Dr. Neeli Sharma, Dr. Shankar Lal Jakhad, Dr. H.S.Kumar

Background: Management of Brain Metastases is a significant health care problem and is a most common intracranial malignancy in adults. Estimated 20-40% of all cancer patients develop brain metastases during the course of their illness. Whole brain radiotherapy is a mainstay of treatment in patients with both identifiable brain metastases and as prophylaxis of microscopic disease. However, there is need to develop fractionation schedules, but total dose still remains a dilemma. It is therefore important to weigh the life expectancy against results and hospital stay of patients in all palliative regimens. Aim: To assess disease outcome and toxicities in terms of palliative hypofractionated radiotherapy schedules to provide with a better quality of life in the terminally ill patients. Materials and methods: 26 patients presented with symptomatic brain metastases previously untreated with whole brain radiotherapy were randomized in two arms containing 13 patients in each arm. In arm A treated with total 30 Gy, 3 Gy/fraction over two weeks and in arm B total 20 Gy, 4 Gy/fraction divided bilaterally 2 Gy/fraction in one week. Results: The median age of presentation in arm A and arm B was 52 and 60 yrs. After one month and three months of completion of whole brain radiotherapy on follow up, KPS scale improved in both arms and toxicities were also in acceptable and comparable levels. Radiological response in the form of number and size of lesions also improved in both arms, showing decreasing number and size of lesions in CT/ MRI scan. Conclusions: We conclude that, the two fractionation schedules, i.e. 20 Gy in 5 fractions (4Gy/fr) and 30 Gy in 10 fractions (3Gy/fr) shows comparable results. Therefore, the prior one may be used as an effective option in favour of small treatment time. However, as the limitation of present study is small number of patients and lack of long term follow-up, we hope to update this prospective study in future in order to establish a standard regimen. Key words: Whole brain radiotherapy, Metastases,Fractionation schedule.

Abstract Id: YUGP5180
Early Experience With Ramucirumab In Indian Patients With Advanced Gastric Cancer: A Single Centre Retrospective Analysis
Presenter- Dr. TANSI SOOD
Co-author - Dr. Amit Raouthan, Dr. Poonam Patil, Dr. Shrinivas Shrivastava

Early Experience with Ramucirumab in Indian patients with Advanced Gastric cancer: A Single Centre Retrospective Analysis Tansi Sood1 MD, Amit Rauthan2 DM, Poonam Patil2 DM, Shrinivas Shrivastava1 DNB 1 DNB Resident 1st year, Medical Oncology 2 Consultant, Medical Oncology Corresponding Author: Tansi Sood, MD DNB Resident 1st year, Medical Oncology Manipal Hospital, 98 HAL Airport Road, Bengaluru, Karnataka 560017 Tansi_sood@yahoo.com ABSTRACT Background: Ramucirumab is a novel anti-VEGFR2 monoclonal antibody. In combination with paclitaxel, it has demonstrated a median progression free survival (PFS) of 4.4 months (RAINBOW trial) and overall survival (OS) benefit which led to its approval as second line chemotherapy in advanced gastric cancer. This combination therapy has been sparsely studied in Indian population possibly due to unavailability and cost constraints. Methods: We retrospectively investigated the efficacy and safety of ramucirumab in patients with advanced unresectable or metastatic gastric cancer in our institution from May 2015 to August 2017. Results: 14 patients were eligible (9 males and 5 females) with median age 45 years (range 36-69). They all received ramucirumab (8mg/kg) given on Day 1 and Day 15 in combination with once weekly paclitaxel for 3 weeks (every 28 day cycle). 8 patients received this regimen as 2nd line treatment and 6 patients as third or further lines. Progression free interval before starting treatment with ramucirumab was less than 6 months in 9 patients and more than 6 months in 5 patients. Response assessment was done after 2 months of starting treatment and response rate was found to be 50% of which 3 patients had partial response and 4 patients had stable disease. Revaluation of assessable patients at 6 months showed 3 patients with stable disease and 3 patients with disease progression. Median PFS of all assessable patients was 3.75 months. Some patients experienced grade1/2 adverse events: abdominal pain and neutropenia (42.85%), thrombocytopenia (28.57%), diarrhea (21.4%), hypertension, anaemia, mucositis and febrile neutropenia (14.28%). However, no life threatening grade 3/4 adverse events were observed. 2 patients died while on therapy, possibly due to aggressive disease biology itself. Conclusions: It is known that patients of metastatic disease with 1st line chemotherapy failure have median OS of 3.8 months and median PFS of 1.3 months if treated with best supportive care only. Our study showed a survival advantage in such a patient population when treated with ramucirumab combined with paclitaxel. Hence, Ramucirumab in combination with paclitaxel seemed to be effective and safe in clinical setting against advanced gastric cancer. Based on RAINBOW and REGARD trials, it is known that Asian (Japanese) patients have PFS advantage but no OS benefit as compared to non-Asian counterparts with this combination therapy. Hence, there is a need to conduct larger studies to demonstrate the response, PFS and OS advantage in Indian population. Key words: Ramucirumab, advanced gastric cancer
Abstract Id: YUGP5182
A Comparison Of Digital Mammography And Digital Breast Tomosynthesis Findings With Histomorphological Characteristics Of Breast Cancer
Presenter- Dr. Chaitra Sonthineni
Co-author-NamitaMohindra ZafarNeyaz, SabaretamMayilvaganan, Gyan Chand, Anjali Mishra, Amit Agarwal, Ashok Kumar Verma, Saroj Kanta Mishra, Gaurav Agarwal

Background: Digital mammography (DM) and digital breast tomosynthesis (DBT) are important tell-tales of tumor characteristics and behaviour. Some series have shown that DBT helps delineate features of breast lumps, often better than DM. In this prospective study, we correlated the DBT features with histomorphological characteristics of breast cancer specimens. Methods: From January 2016, 150 consecutive patients undergoing breast imaging had their DM and DBT reviewed separately by two radiologists independently, who were blinded of the cytology/histology of the lumps and the original DM/DBT reporting. Out of these, patients with final histopathology of breast cancer were recruited for this study, and their DM and DBT findings were compared, and were correlated with histomorphological features. Results: Ninety three patients were included in this study. Significant inter-observer variability was seen in interpreting both DM and DBT. The reporting of mammographic findings also varied significantly between DM and DBT reporting of each individual observer. DBT significantly increased the forced BI-RADS scoring (p

Abstract Id: YUGP5188
Can We Predict The Subset Of Head And Neck Cancer Patients With Laryngeal Obstruction Who Will Benefit From Prophylactic Tracheostomy?
Presenter- Dr. KIRAN KUMAR BR
Co-author- Vijetha Jayakumar, Geeta Narayanan ,

Introduction: Head and neck cancers are among the 10 most common cancers globally. In India, it accounts 1/4th of male cancers and 1/10th of female cancers. Airway obstruction is one of the major morbidities caused by these tumours. Prompt relief of the obstruction would not just save lives but also makes delivery of definitive treatment more effective. Here, we attempted to analyse the correlation between the degree of obstruction at the level of larynx with outcome of the patients in terms of tracheostomy rates and completion of definitive treatment without tracheostomy. Materials and methods: All patients diagnosed to have primary cancers of head and neck (includes oropharynx, hypopharynx and larynx) with significant airway obstruction at the level of larynx who were treated with definitive radiotherapy or definitive chemoradiation between the year January 2014 â€“ June 2017 were included in the study. On simulation CT scan of 5 mm slice thickness without contrast, the airway was contoured in the slice showing narrowest opening of the larynx. The equivalent sphere diameter (ESD) was automatically calculated by the Eclipse contouring system version 11, which would be directly proportional to the area of the airway contour. ESD or = 0.5 cm required tracheostomy and all 10 patients with total block required tracheostomy. Among patients with ESD = 0.4 cm, 7.7% of patient had to undergo tracheostomy. The rates of tracheostomy showed steep increase after this corresponding to 31.25%, 50% and 62.5% for ESD of 0.3, 0.2 and 0.1 respectively. Conclusions: We conclude that Maximum benefit of prophylactic tracheostomy was seen in patients with ESD of 0.2 and 0.1. Identifying this would help in avoiding unnecessary tracheostomies for patients who may not require based on subjective evaluation and also avoiding gap during treatment in patients who may benefit from prophylactic tracheostomy prior to start of radiation.

Abstract Id: YUGP5190
Mammography Breast Density: Impact On Breast Cancer Risk And Implications For Screening:
Presenter- Dr. NEHA SHAH
Co-author- DR DIPALKUMAR SHAH

INTRODUCTION: Mammographic breast densityâ€¢ a reflection of the proportions of fat, connective tissue, and epithelial tissue in the breastâ€¢ is a well-established risk factor for breast cancer. Women with higher amounts of epithelial and stromal tissue have higher density and higher risk. The impact of mammographic density is two-fold, as women with dense breasts are not only at increased risk of developing breast cancer, but also have a greater chance of a tumour going undetected because of the masking effect of mammographic density. Because of increased breast cancer risk, women with increased breast density should be advised supplemental screening tests such as ultrasound, tomosynthesis, MRI. Given its association with a higher risk for breast cancer, breast density may become a component of overall risk-assessment models. MATERIALS AND METHODS Study population Total 184 women who visited our centre from February 2017 to July 2017 were included in the study. All mammograms were obtained on Siemensâ€™s Mammomat Inspiration digital mammography with Tomosynthesis machine. Mammographic density assessment Using raw data of 2D images density was assessed by automated volpara (version 1.5.1) density software. Breast density is associated with the amount of fibroglandular tissue present on the mammogram; it is not determined by the degree of breast nodularity or firmness present on palpation and/or physical examination. As per the latest Breast Imaging Reporting and Data System (BI-RADS) fifth edition, breast density is defined according to 1 of 4 categories: 1. Almost entirely fatty 2. Scattered areas of fibroglandular tissue 3. Heterogeneously dense, which may obscure small masses 4. Extremely dense, which may lower the sensitivity of the mammogram. Questionnaire data All women were asked to report on reproductive history, use of hormone replacement therapy (HRT), previous benign breast disease and surgery, previous mammography details and family history of breast cancer. A positive family history was defined as a diagnosis of breast cancer in at least one first degree relative (i.e. sister, mother or daughter). RESULTS The study group was 184 women with age ranging from 25 year to 81 year and mean age of 49.8 year. Mammographic breast density distribution data according to breast density group is as described in table 1 which shows the density correlates with age of the women. The younger women had higher density, however, significant number of women in age group more than 50 year also had dense breast. The density distribution data among women with breast cancer, women taking hormonal replacement therapy and those with family history of breast cancer is described in table 2. In symptomatic women presented with breast cancer, 5 patients were younger than 50 years of age which suggest more women are affected with breast cancer in our population. Among studied data, 127 (69.1 % ) women were asymptomatic and 57 (30.9 % ) women were symptomatic who had presented with various symptoms of lump, pain in breast and nipple discharge. Commonest benign pathology seen in women were cysts and fibroadenoma. Other benign pathology seen were abscess & mastitis, complicated cyst and lipoma. Total 38 women had breast surgery and intervention procedures which include 22 modified radical mastectomy for breast cancer, 8 lumpectomy, 4 biopsy, 1 cyst aspiration and 3 surgery for infective etiology. 85 women (46 % ) had history of previous mammography. For rest of the women, this was the first mammogram. 161 (87.5 % ) women had history of child birth and breast feeding and 9 (4.8 %) women were nulliparous and records of reproductive history was not available for 14 (7.6 %) women. Table 1: Breast density grading according to age distribution Age ( years ) BI RADS Grade a BI RADS Grade b BI RADS Grade c BI RADS Grade d Total < 35 0 1 2 3 5 6 40 0 4 11 11 26 41 45 1 8 18 8 35 46 50 0 12 23 6 42 51 55 0 10 12 4 26 56 60 0 12 11 24 61 65 0 8 3 2 13 66 70 0 2 2 1 5 71 75 0 4 1 5 75 0 1 10 2 3 Total 2 (1 %)
Abstract: Breast density is important because of the associated increased breast cancer risk and the known limitations of mammography. Radiologists and primary care physicians should be knowledgeable about the significance of breast density and the associated benefits and potential harms associated with supplemental screening.

**Abstract Id: YUGP5192**

**Esophageal Carcinoma â€“ Analysis Of Demographic, Disease And Treatment Patterns**

**Presenter:** Dr. Kanuj Malik  
**Co-author:** Dr. Balasubramaniam, Dr. Madhupriya, Dr Arvind Krishnamurthy

Abstract: Esophageal Carcinoma â€“ Analysis of demographic, disease and treatment patterns Dr Kanuj Malik, Dr Balasubramanian, Dr. Madhu Priya, Dr Arvind Krishnamurthy Department of Surgical oncology, Cancer Institute (WIA), Chennai

**Introduction:** Esophageal Cancer is the eighth most common incident cancer in the world and because of its extremely aggressive biology leading to a poor survival outcome. Analysis of the population based cancer registries in India, suggests esophageal cancer to be the 7th most common cancer among men; however, there seems to be a varied distribution across the tumour registries. Materials and methods: We performed a retrospective analysis of the medical records of patients treated at our regional cancer centre between 2007 and 2011. Demographic patterns, histological distribution and stage distribution were analysed along with pattern of treatment. Results: Esophageal cancer accounted for nearly 4.1% of the total cancer burden treated at our centre during the said period. The mean age of our patient cohort was 54.38 years, the maximum incidence occurring in age group between 50-60 years (40.9%). The male: female ratio was nearly 1.8:1. With regards to the habits, tobacco chewing was noted in 29.3%, smoking (including cigarettes and beed) in 40.5% while alcohol consumption was noted in 31.1% of the patients. Among those with a smoking history, the mean duration of exposure to smoking was 28.37 years. 85.1% of patients consumed a mixed diet. Squamous cell carcinoma was the most common histology (78.6%) and adenocarcinoma constituted only 15.2%. Within the esophagus, mid thoracic esophagus was the most common site (33.7%) followed by lower thoracic esophagus (27.5%). While considering the stage distribution, 61.8% patients presented with locally advanced cancers and 7.9% presented with metastatic disease. Among the sites of distant metastasis peritoneal metastasis was the most common site among patients with adenocarcinoma, while lung was the most common site in patients with squamous cell carcinoma. Analysing the treatment modalities, 76.7% of patients were treated with a curative intent. Definitive chemo radiation was the most common modality of therapy (44.4%), radiation only in 14.9% and curative surgical therapy was offered to 22.3%. The management trends have changed over the past 4 years following our shift in management favouring the neo-adjuvant chemo-radiation protocol. Conclusion: Our study showed that despite the rising global trend of adenocarcinoma worldwide, squamous cell carcinoma is still the most common histological subtype presenting in the our study cohort. We hope that this study will help clinicians and policy makers, better understand the magnitude and the evolving trends of esophageal cancer in the Indian sub-continent.

**Abstract Id: YUGP5193**

**Hypofractionated Radiotherapy For Breast Cancer: An Indian Experience**

**Presenter:** Dr. Arijit Sen  
**Co-author:** Dr. Sayan Das, Dr. Sayan Das

Background: Radiation therapy is an integral part of management in all breast conservation surgeries (BCS) and for a large percentage of postmastectomy patients. A typical course of radiation therapy lasts for 6 weeks in post-BCS patients and nearly 5 weeks for postmastectomy patients (conventionally fractionated 1.8-2 Gy/ fraction). However, over last 02 decades few large randomized control trials have confirmed that appropriately dosed hypofractionated radiotherapy is equally safe and effective. Here we present our institutional experience with hypofractionated radiotherapy in breast carcinoma. Objectives: Locoregional control, acute normal tissue toxicities and cosmosis Materials and methods: In this prospective, single arm, single institutional, phase II study, between July 2013 to December 2015, 94 early and locally advanced breast carcinoma patients without any evidence of distant metastasis have received hypofractionated radiotherapy to whole breast or chest wall followed by tumour cavity boost (as applicable) (40 Gy/15#/03 weeks followed by boost 12.5 Gy/05#/ or 12 Gy/ 04#/ over 01 week). After completion of radiation patients were followed up every 03 monthly and assessed for locoregional control, toxicities and cosmosis clinically. Results: 94 women (46 post BCS and 48 post MRM) received hypofractionated radiotherapy between July 2013 and December 2015. After a median follow up of 31 months 1 patient each developed local and regional recurrence and 2 patients developed distant recurrence. No post-BCS patient developed in-breast recurrence. At the time of last follow up there were 4 deaths (1 was due to cancer and 3 were alive with disease). Mean disease free survival was 30.2 months (96% CI 28.66-31.74), median DFS was 31 months (95% CI 28.94-33.06). There was no grade 4 acute toxicity and at the time of last follow up 16 patients (34.78 %) had fair, 26 patients (60.86%) had good and 2 patients (4.34%) had poor cosmosis. Conclusion: Hypofractionated breast radiotherapy is safe and effective across both early and advanced stages with good cosmetic outcome. The paucity of published Indian data served as an initial deterrent for its widespread use but the present experience suggests that hypofractionated radiotherapy for breast cancer should become the standard of care in India.

**Abstract Id: YUGP5199**

**Advanced Radiotherapy Technology**

**Presenter:** Prof. YASUSHI NAGATA

Recently, the development of imaging modalities, treatment planning computers and image-guided radiotherapy system enables us new high-precision radiotherapy. Stereotactic radiosurgery (SRS), Stereotactic body radiation therapy (SBRT), Intensity-modulated radiotherapy (IMRT), Image-guided radiotherapy (IGRT) and Particle therapy. SRS is a technique mainly for intracranial tumors and a single radiotherapy with precise fixation system. SBRT is a technique for lung tumor and liver tumor using 3 to 5 fractions with fixation and respiratory monitoring system. IMRT is a technique using static or dynamic intensity-modulated beams. Inversed treatment planning system and precise quality assurances are mandatory. IGRT is a technique using an x-ray IGRT linear accelerator system accompanied with imaging system for verification. Particle therapy is proton therapy, carbon therapy and boron neutron captured therapy (BNCT). Their updated high technology and clinical applications will be reviewed.

**Abstract Id: YUGP5202**

**Circulatory Micromars As Predictor Of Response To Locoregional Therapy In Hepatitis B Virus Induced Hepatocellular Carcinoma**

**Presenter:** Dr. Balaswata Nayak

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Abstracts

Co-author - Shalimar, Shalimar,

Background: Circulatory microRNAs (miRNAs) dysregulated in cancer are considered to be potential candidate biomarker due to its ease of detection and high stability in circulation. Antiviral treatment and locoregional therapy is standard of care for HBV induced HCC. However, therapeutic response is mostly assessed by radiological imaging techniques due to the absence of suitable markers. It is interesting to study miRNAs (miR21, 221 and 16) those are upregulated in HCC as predictor of response to locoregional therapy in HCC patients. Objectives: To evaluate the role of circulatory miRNA-21, -221 and -16 as predictor of response after locoregional therapy in HCC Methods: The HCC patients of HBV etiology (n=62) were staged and treated with locoregional therapy as per BCLC criteria. The therapeutic response was assessed by radiological imaging using mRECIST criteria. The circulatory miRNAs were isolated from serum, polyadenylated, reverse transcribed and amplified by real time PCR using universal and miRNA specific primer. The differential expression at pre and post locoregional therapy was assessed by comparative Ct method. The correlations of miRNA-21, -221 and -16 expressions and changes due to locoregional therapy were assessed for predictor of therapeutic response by logistic regression analysis. Result and Discussion: We have observed changes in miRNA expression during locoregional therapy. Reduced expression for miR-21, -221 and -16 were observed at one month post locoregional therapy in 50%, 55.5% and 60% patients respectively. Significant correlation of miRNA expression with clinical parameters was found for miRNA-21 with tumor size (P=0.039), pre therapy miR-221 expression with number of lesions (P=0.021), and post therapy miR-221 with child status (P=0.051) and haemoglobin levels (P=0.016) in HCC patients. Logistic regression analysis for prediction of the response found significance for miR-221 (P=0.05) but not miRNA-21 and -16 (P=0.231). The miRNA-221, -21 and -16 have potential as biomarker for predictor of therapeutic response.

Abstract Id: YUGP5206

5-Fu Induced Leukoencephalopathy

Presenter- Dr. Puneet Kumar Bagri

Co-author - Satya Narayan, Puneet Pareek, Ajay Prajapat

Background: 5-Fluorouracil (5-FU) based chemotherapy is widely used in the treatment of carcinoma of the head and neck, intestine and ovaries. Some adverse reactions of the drug, which include toxic effects to the central nervous system, have been reported. Among them, leukoencephalopathy is rare and may present as disorientation, confusion, agitation, seizure, and even coma. However, since chemotherapy induced neurotoxicity is reversible, it remains obscure whether drug reintroduction is beneficial. To the best of our knowledge, only a few cases have been reported to date in literature. We report this unique case that developed 5-FU induced leukoencephalopathy as a result of TPF (docetaxel, cisplatin & 5-FU) chemotherapy in locally advanced oral cavity cancer. Case report: A 40 years old female treated with docetaxel, cisplatin and 5-fluorouracil (TPF) chemotherapy for locally advanced oral cavity cancer presented abnormal behavior, dysphagia and dysarthria on the second day of fourth cycle of chemotherapy. Although computed tomography (CT) brain revealed no abnormal findings. Diffusion-weighted magnetic resonance imaging (DW-MRI) brain was showing high signal intensity in the deep white matter of the bilateral cerebral hemispheres including corpus callosum symmetrically. A diagnosis of acute leukoencephalopathy was made based on these findings. Her clinical symptoms normalized five days after the discontinuation of the chemotherapy. Magnetic resonance imaging findings detected in the deep white matter had disappeared completely one month after the onset of symptoms. Conclusion: Early detection of chemotherapy induced leukoencephalopathy is important as the clinical symptoms can be reversed by early discontinuation of the causative drug.

Abstract Id: YUGP5208

Dosimetric Comparison Of Intensity Modulated Radiation Therapy (IMRT) Vs. Conventional Three Dimensional Conformal Radiotherapy (3DCRT) In High Grade Glioma

Presenter- Dr. Vezokhoto Phesao

Co-author - Govardhan H B, Govardhan H B,

Comparison of intensity modulated radiation therapy (IMRT) and conventional three dimensional conformal radiotherapy(3DCRT) in High grade glioma Vezo, khaleesi I A, Senthil Kumar, Govardhan H B, Sridhar P, ABSTRACT Objectives To determine whether Intensity Modulated Radiotherapy (IMRT) improves target coverage, target homogeneity, target conformity, critical tissue sparing without increasing the total integral dose to the non target brain tissue to the three dimensional conformal radiotherapy in Supratentorial Astrocytic series WHO grade III-IV primary malignant brain tumor. Methods and Materials 50 patients of malignant glioma treated with 3D CRT were selected for a comparative dosimetric evaluation with IMRT. Target volumes, organ at risk (OAR), dose volume constraints were used for planning. Cumulative dose volume histogram of target volume and organ at risk (OAR), normalized tissue inhomogeneity, target coverage, target homogeneity, target conformity, and normal tissue sparing with 3DCRT and IMRT planning were compared. Relevant Statistical test was performed to determine the differences and significance. Results In all 50 patients examined, there was no significant difference in target coverage between IMRT and 3DCRT plans with slightly superiority in 3DCRT plan in the range of 95-100% of prescribed. IMRT improved target conformity, dose reduction to normal tissues including brain stem (Dmean by 17%, Dmax by 12%), optic chiasma (Dmean by 33%, Dmax by 22%), ipsilateral optic nerve (Dmean by 54%, Dmax by 46%), contralateral optic nerve (Dmean by 42%, Dmax by 38%), Rt eye (Dmean by 37%, Dmax by 29%), Lt eye (Dmean by 33 %, Dmax by 35%), Hippocampus-combined (Dmean by 42%, Dmax 30%), p < 0.001. The 3DCRT reduced the overall integral dose to brain tissue by approximately 8%, p < 0.001 with IMRT. The Sub ventricular zone radiation dose was better covered by 3DCRT when compared to IMRT (ipsilateral SVZ mean dose- 54Gy Vs 42Gy, contralateral 44Gy Vs 35Gy, P

Abstract Id: YUGP5210

A Retrospective Study Of Clinical Outcomes With Two Different Radiation Dose Fractionation Regimens In Treatment Of Carcinoma Cervix Â€ Experience Of A Tertiary Care Hospital In South India

Presenter- Dr. Hemanth Kumar

Co-author - Dr.Pranabandhu Das, Dr.B.V.Subramanian, Dr.D.RaviSankar

Aim: To study the clinical outcomes with two different dose fractionation regimens in treatment of carcinoma of uterine cervix in terms of toxicities and survival outcomes. Material and methods: A total of 100 patients with stages I Â€ III (FIGO) who attended SVIMS hospital cancer centre from January 2014 to December 2015 were taken into the study. Patients were divided into two arms. Patients in Arm-A received 46 Gray in 23 fractions @ 2 Gy/#, 5/#week EBRT and 24 Gray in 3 fractions @ 8Gy/#/week ICRT. Patients in Arm-B received 50 Gray in 25 fractions @ 2 Gy/#, 5/#week EBRT and 21 Gray in 3 fractions @ 7Gy/# ICRT. Toxicities were analysed in terms of acute upper gastrointestinal toxicity, acute lower gastrointestinal toxicity, acute genitourinary toxicity, chronic small/large intestinal toxicity and chronic genitourinary toxicity and graded according to RTOG radiation morbidity scoring criteria. Results: Mean age of patients in both arms is 51 years. After a median follow up of 26 months acute upper GI
Abstracts

Abstract Id: YUGP5218

Anasthetic Concerns Of Robotic Assisted Transthoracic Thymectomy (Ratt)- A Case Report

Presenter- Dr. Gifty Susan Philip

Co-author- Dr Rachana N D, Dr Namrata Ranganath

Thymectomy for thymoma , a common anterior mediastinal tumor is one of the most frequently done surgical procedure involving the mediastinum both for benign and malignant diseases. Approaches range from open to minimally invasive. Introduction of minimally invasive techniques has lead to increased acceptance of thymectomy due to reduced postoperative morbidity , faster recovery, shorter hospital stay, and better cosmetic results. The introduction of robotic assisted minimally invasive procedures have been a further step up in the development and evolution of minimally invasive techniques. Anaesthetic implications of anterior mediastinal mass and associated complications with robot and OLV are the challenges to the anaesthesitist. Case report: 51 year old male patient weighing 65kgs diagnosed with thymoma was posted for RATT. Patient had complaints of cough -15days and no history suggestive of pressure symptoms or myasthenia gravis. O/e : Patient had METS >4,Vitals and systemic examination were normal.On admission all routine investigations done were within normal limits along with which PFT,bronchoscopy,CXray and lateral STN X-ray were normal. CT showed anterior mediastinal mass - 7.1x2.9x3.7 cm. Resting HR- 74 bpm, BP- 120/70mmhg. NPO confirmed,anaesthetic plan explained and consent taken. Patient was shifted to OT,standard ASA monitors connected.16 G venous cannula secured in right upper limb. Epidural catheter inserted at T6-T7 level. After induction of anaesthesia ,trachea intubated with 39 F L sized DLT. Position confirmed with fibre optic bronchoscope. Patient connected to PCV. 5-7 ml/kg tidal volume was the target. Left radial artery cannulated for IBP and central line catheterization done in Right subclavian vein. neuromuscular blockade achieved through continuous infusion with NDNR. Patient was placed in supine posibogn with 30 degree tilt to the left. OLV initiated. Patient developed bradycardia(HR -45 bpm), after insufflation of CO2( pressures 10mmhg), inj atropine 0.6mg iv was given. Pressures reduced to 8mmhg. Heart rate increased. Patient was stabilized. Once the patient was stabilised robot docking was done.Docking took 35min and thymus was dissected along the mediastinal pleura from the inferior pole and lastly the anterior pole in two hours and the specimen was removed through trocar site by placing it in an endobag. After hemostasis was achieved, 28 F ICD was inserted through 5th intercostal space at the port site, lungs inflated and incisions closed. Blood loss- 300 ml. Patient shifted to SICU after changing DLT to PVC ETT. Connected to SIMV , reversed after an hour when patient had attempted.Bupivacaine infusion(0.125% @ 5 ml/hr) was given through epidural catheter post operatively. Patient was extubated the next day morning and shifted out from SICU. Patient was comfortable and rest of the postoperative period was uneventful. Conclusion: Robotic thymectomy poses new challenges to anaesthesiologists Main concerns of anaesthetic management of RATT: Airway management Patient positioning Capnothorax Surgical site Anaesthetist should be vigilant throughout, monitor the airway pressures, ETCO2 and signs of cardiovascular collapse. Special care should be given to protect vulnerable pressure points and avoid nerve injury. Most importantly , entire OT team should be ready for emergency undocking. Postoperative analgesia also plays an important role.

Abstract Id: YUGP5224

Isolated Trigeminal Neuropgia: An Early Weird Presentation Of Carcinoma Breast

Presenter- Dr. Irappa Madabhavi

Co-author- Apurva Patel

ABSTRACT: Title: Isolated Trigeminal Neuropgia: An Early Weird Presentation of Carcinoma Breast. Breast carcinoma accounts for...
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12-20% of brain metastases, second only to lung cancer. Isolated trigeminal cranial nerve involvement in patients with metastatic breast cancer has been rarely documented in the literature, but presenting as an early sign of breast cancer is not yet been documented except one case report. We are reporting an interesting case of, triple receptor-negative breast cancer (TNBC) presenting as early trigeminal neuralgia, without any symptoms breast cancer parse. She was managed with cranial radiotherapy and palliative chemotherapy and she is at present on oral capecitabine since 8 months without any neurological symptoms. This is the second case report in the literature with this type presentation but without any disease progression.

Abstract Id: YUGP5226
The Epigenetic Silencing Of The Estrogen Receptor (Er) By Hypermethylation Of The Esr1 Promoter Is Seen Predominantly In Triple-Negative Breast Cancers In Indian Women
Presenter- Dr. Sandeep Goud
Co-author - B.S Smath , T.S Sridhar, Aruna Kori, Jyothis Prabhu, Sandeep Goud

The proportion of estrogen receptor (ER)-negative and triple-negative (TN) breast cancer in Indian women is higher than that reported in the West, and this difference persists even after their migration to the West. The causes for this significant difference are not entirely clear. Hypermethylation of the ER promoter, an epigenetic alteration, is known to be one of the mechanisms by which the expression of ER is suppressed. Two thirds of breast cancer specimens from an Indian center tested, using the highly sensitive, methylation-specific polymerase chain reaction (MSP) technique, were reported positive. We have used a quantitative assay, the MethyLight, to better assess the extent of methylation in the ESR1 promoter region in 98 breast cancer tumor specimens from Indian women. In addition, the amount of ER transcripts was determined by quantitative reverse transcriptase polymerase chain reaction. Using the stringent cutoff of at least 4% of the target sequence being methylated, 27% of TN tumors were methylated. In addition they demonstrated the highest levels of methylation. In contrast less than 2% ER-positive tumors were hypermethylated. While the proportion of hypermethylated tumors are lower in this study than that estimated using MSP, our results support the notion of increased epigenetic deregulations in ER-negative tumors in general and TN tumors in particular. The development of this assay also permits a rational approach to the selection of patients for clinical trials examining the efficacy of demethylating agents in the treatment of ER-negative breast cancer

Abstract Id: YUGP5228
Immediate Breast Reconstruction And Quality Of Life
Presenter- Dr. Parvinder Sandhu

IMMEDIATE BREAST RECONSTRUCTION AND QUALITY OF LIFE ABSTRACT Background: Immediate breast reconstruction is although a well accepted option but is not commonly offered (in our setup). The purpose of present study was to evaluate the technique, morbidity and outcome of immediate breast reconstruction in our institute. Materials and methods: A prospective study with 40 patients of operable cases of carcinoma breast done where patients undergoing modified radical mastectomy were compared with patients undergoing MRM followed by immediate breast reconstruction using autologous tissue. Their psychological outcome was evaluated through body image scale. Results: The study group consisting of 20 patients who underwent MRM along with immediate breast reconstruction (IBR) with autogenous tissue either TRAM or LD flap was evaluated in terms of technical issues, morbidity and clinical outcome and was compared with 20 patients of control group who underwent MRM only. In the post operative period, a total complication rate of 35% was noted in study group as compared to 10% of control group. Among these complications, the rate of Seroma was 10%, which of superficial skin necrosis was 15%, total flap loss was 5%, and fat necrosis was 10%. No patient undergoing TRAM flap reconstruction had abdominal wall hernia. One patient in the study had total flap loss. The psychological satisfaction of the patients in either group was noted on body image scale consisting of 8 items which was in turn rated on a five point Likert scale. In study group, 95% of the patients were satisfied with the body image; out of these, 20% patients were highly satisfied and 75% were moderately satisfied. 5% were not satisfied with the surgical results because of total flap failure. Conclusion: Immediate breast reconstruction is a valid option to preserve the femininity and gives a higher level of patient satisfaction than external prosthesis. It can be learnt easily and requires a change in the mindset of the surgeon to incorporate this into practice.

Abstract Id: YUGP5232
Comparison Between Unplanned Interruptions After Standard Corrections Versus Uninterrupted Treatment By Conventional Radiotherapy In Locally Advanced Oropharyngeal Cancer
Presenter- Dr. SATYA NARAYAN
Co-author - AKHIL KAPOOR, AKHIL KAPOOR,

Background To achieve the complete response after treatment, radiation must eradicate every tumor stem cell. If the duration of treatment is longer, the stem cells can repopulate more, increasing the number of stem cells. The purpose of the study was to evaluate outcomes and treatment time prolongation. The study concludes that patients with advanced head and neck cancer if once interrupted, should require gap correction to overcome increased risk of local failure due to treatment time increases, the probability of local cure by radiation decreases. So for better outcome radical radiotherapy (RT) treatment should not be interrupted. Material and Method The study consists of 105 patients of oropharynx with ECOG performance score > 2, have histo-pathologically proved squamous cell carcinoma and presented with stage III and IVa were enrolled and 95 patients have completed treatment accordingly to plan. Patients were planned for Concurrent chemo-radiotherapy with Cisplatin 40mg/m2 with EBRT (66Gy/33#2Gy/#) treatment completed in 6.5 weeks. During the treatment the patients were grouped into uninterrupted arm (48) and interrupted arm with standard correction (47). The tumor BED10 of 63.9 Gy10 is to be maintained in both arms. The correction was made on RCR based biological compensation. The end point of the study was comparison between disease free survival (DFS) and overall survival (OS) at 24 months. Results The enrolled patients mean age: 50 years, males 76.8%, stage IVa disease 50.5%, ECOG performance status 0/1: 68.4%). The complete response (CR) in uninterrupted arm was 64.5% and CR in interrupted arm with standard correction was 61.7% at 6 months (72= 1.883, p value=0.169). But when considering only Stage IV cases, had found that the locally advanced cases of uninterrupted arm have significant better response (72= 5.90, p value=0.015). The 2-year LR RFS, DFS and OS rate was 41.6%, 37.5%, and 47.9% respectively in interrupted arm while in corrected arm patients 36.1%, 31.9% and 42.6% respectively. The quality of life was slightly poor, but was statistically insignificant in interrupted arm. Conclusion Study concluded that treatment with CCRT for locally advanced head and neck cancer if once interrupted, should requires gap correction to overcome increased risk of local failure due to treatment time prolongation. The study concludes that patients with advanced stage (i.e.IVa) have significantly poor treatment outcomes even the standard correction once treatment interrupted. Even after gap corrections and short interruptions decreased the survival.

Abstract Id: YUGP5236
Clinicopathological Analysis And Treatment Outcomes Of Paediatric And Adolescent Papillary Thyroid Carcinoma Treated At A Tertiary Oncology Centre
Presenter- Dr. RAVISANKAR P
Co-author - PROF ARVIND KRISHNAMURTHY,

Introduction: - Papillary carcinoma of thyroid (PCT) is a rare disease in children and adolescents and contributes to 1.4% of all pediatric
malignancies. Methodology: Retrospective analysis of the patients treated for PTC in the age <21 years between the years 1998–2013 at a tertiary cancer center from South India. RESULTS: 67 patients were treated in the said period with a male: female ratio of 1:1.6 and a median age of 18 years. 52 patients clinically presented as a thyroid swelling with or without nodal mass, while 13 patients presented with a neck nodal swelling alone, 2 patients initially presented with hoarseness of voice alone. 8 patients additionally had vocal cord palsy at presentation. Surgery was performed in 30 patients in a non-oncological hospital and were subsequently referred/presented to our institute, more than half of them (53.3%) needed a revision/ completion surgery in our hospital. Pathologically, multifocal tumours were found in close to a quarter of the patients (25.37%). Among the pathological variants, classical, follicular and tall cell variants comprised 65.7%, 28.4% and 5.9% cases respectively, 56 (83.5%) and 11 (16.5%) patients were finally staged grouped as Stage I and Stage II cancers respectively. Nodal positivity was noted 71.6% of the cases of which 14.5% were N1a disease and the vast majority (85.5%) harboring N1b disease. The median follow up period of the study cohort was 104 months (25-235 months). There was local recurrence in 3 patients, nodal recurrence in 6 patients and systemic recurrence in 2 patients. The 5 and 10 year DFS were found to be 85.9% and 81.4% respectively whereas the 10 year OS was 100%. Univariate analysis showed no significant clinical and pathological feature defining the disease outcome except that the T2 tumours behave better than T4a tumours (HR-0.15, P <0.05). Logistic regression revealed extra-thyroidal invasion (OR 3.3, P=0.038) and the age > 15 years (OR-11.79, P=0.021) predicted the nodal positivity. Conclusion: Being a rare malignancy, pediatric and adolescent PTC tumours behave better than T4a tumours (HR-0.15, P <0.05). Logistic

Abstract Id: YUGP5244
Pelvic Exenteration For Locally Advanced Rectal Cancer: A Short Term Morbidity Analysis
Presenter - Dr. Krunal Khobragade
Co-author - Ashish Pokharkar, Ashwin L Desouza, Avanish Saklani

TITLE: PELVIC EXENTERATION FOR LOCALLY ADVANCED RECTAL CANCER: A SHORT TERM MORBIDITY ANALYSIS
Khobragade K, Pokharkar A, Desouza A, Saklani A Background: The role of pelvic exenteration in locally advanced rectal cancer has not been clearly defined and is still not routinely performed in many institutions. The procedure demands advanced surgical technique and it may be difficult to obtain clear resection margins. The procedure carries a mortality rate of approximately 10% and one half of the patients experience significant morbidity. We analyzed the short term morbidity for patients who underwent pelvic exenteration at our institute. Methods: Medical records of patients with locally advanced rectal cancer undergoing total pelvic exenteration, posterior exenteration and supra-levator exenteration from April 2014 to December 2016 were retrospectively reviewed. Results: A total of 30 cases were included in the analysis. 28 patients had primary cancer and 2 had recurrent cancer. 20 patients underwent total pelvic exenteration, 7 posterior exenteration and 3 underwent supra-levator exenteration. Microscopically clear margins were achieved in 28 patients (93.3%). The average blood loss was 1900 ml and the mean post-operative stay was 14.7 days. There was no in-hospital mortality. Eleven patients (36.6%) experienced postoperative complications. Perineal wound dehiscence was the commonest postoperative complication (n=4, 13.3%), for which one patient required V-Y flap reconstruction. Two patients (6.6%) developed bowel anastomotic leak and two developed urinary leak (6.6%). One patient experienced prolonged ileus requiring total parenteral nutrition (3.3%). Conclusion: Pelvic exenteration can be offered to patients with locally advanced rectal cancer with an acceptable rate of short-term morbidity.

Abstract Id: YUGP5252
Dosimetric Impact Of Using Two Different Safety Margins For Ctv Delineation For Apbi Using Interstitial Brachytherapy
Presenter - Dr. Ayush Naik
Co-author - Jamema Swamidas, Jamema Swamidas,
Abstracts

Between Technologies.

Incidental Radiation Dose To Axilla And Internal Mammary Chain
Abstract Id: YUGP5258

Incidental Radiation Dose To Axilla And Internal Mammary Chain in Carcinoma Breast: A Question Of Benefit Versus Complication Between Technologies.
Presenter: Dr. SAIKUMAR VENKAPPA
Co-author - .

Purpose: Using Conventional 3 Dimensional Conformal Radiation Therapy, IMRT and Conventional Tangential Radiation therapy, to quantify the incidental dose delivered to Internal mammary nodal area and axilla. Methods and Materials: Evaluation of incidental radiation dose to Internal mammary chain and axilla in thirty cases of Breast cancer treated with adjuvant radiation therapy. Radiation doses to IMN areas and axillary levels I, II, and III were evaluated for mean doses, V95, V80 and V50 after generating three plans for each case comprising IMRT, 3DCRT and conventional tangential radiation therapy. Comparisons were made using ANOVA. Results: The V50 values were 75%, 65%, 41% and 66% by IMRT; 82%, 53%, 57% and 84% by 3DCRT; 89%, 42% AND 90% by CRT ( IMRT Vs. 3DCRT, IMRT Vs CRT, and #DCRT Vs CRT-p<0.05). V80 were 49%, 53%, 29% and 57% by IMRT; 55%, 47%, 34% and 68% by 3DCRT; 85%, 77%, 44% and 69% by CRT (IMRT vs 3DCRT for level III axilla and IMN, IMRT vs CRT and 3DCRT vs CRT-p<0.05) The V95 values (volume receiving 95% of dose) for the three techniques were 43%, 39%, 17% and 49% by IMRT; 40%, 45%, 21% and 59% by 3DCRT; 72%, 61%, 24% and 65% by CRT (IMRT vs 3DCRT for level II axilla, IMRT vs CRT and 3DCRT vs CRT-p<0.05). The mean volume and range of the axillary level I, II, III and IMN were 61.1 cc, and 142-57cc; 42.6cc and 61-21cc; 19.5cc and 34-15cc; 13.2cc and 21-9cc respectively. The mean dose to axilla by 3 techniques (by CRT, IMRT and 3DCRT) to Level I, II, III and IMN were 75%, 53%, 38% and 61% vs 81%, 64%, 44% and 77% vs 92%, 86%, 53% and 92% respectively (p<0.05). Conclusion: Axillary and Internal Mammary nodal areas receive substantial radiation with all three techniques: CRT technique delivered least incidental dose to lower axilla in comparison with conformal techniques (IMRT and 3DCRT).

Abstract Id: YUGP5264

Role Of Circulating Tumor Cells In Gall Bladder Carcinoma
Presenter: Dr. Akash Agarwal
Co-author - .

Liquid biopsy has entered the arena of cancer diagnostics in the past decade and detection of circulating tumor cells (CTC) is one diagnostic component. CTCs in Gall bladder cancer (GBC) have not been comprehensively analysed with a single case series of biliary cancers reporting CTC in one of three cases of GBC. The current study evaluates the diagnostic role of CTC in 27 cases of treatment naive GBC and 6 normal controls as well as 6 cases of cholecystitis. EasySep kit using negative immunomagnetic bead separation and flowcytometric detection of EpCAM positive and CD45 negative cells revealed CTC in 25 of 27 cases of GBC. At a cut-off point of ≥1, CTC count significantly discriminated GBC from controls with sensitivity, specificity and diagnostic accuracy of 92.59%, 91.67% & 92.31% respectively. CTC levels in turn correlated significantly with clinicopathological parameters of cases in terms of known prognostic indicators. CTC count showed significant diagnostics at cut-off point of ≥4, to discriminate stage I&II vs. III &IV GBC, and at a cut-off point of >3, CTCs count discriminated tumor stage I&II vs. III &IV. At a cut-off point of ≥6 CTCs, significant diagnostic discrimination of metastatic vs. non metastatic GBC with sensitivity, specificity and diagnostic accuracy of 55.56%, 100.0% and 85.18 respectively was achieved. It appears that an integrated liquid biopsy approach with molecular information derived from circulating free DNA, coupled with data from CTCs may maximize its prognostic and predictive performance.
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Presenter- *Dr. Amar Jain

Primary tracheal tumours are extremely rare with most of them being malignant. Histologically, both primary tracheal tumours and main stem tumours are similar but the former is about 100 times less common than the latter. Primary neurogenic tumours of trachea account for only about 1% of all neoplasms of trachea. Tracheal schwannoma is the rarest of all neurogenic tumours and there is no unanimous opinion regarding line of treatment. They are usually seen in females and their clinical features are not specific. Chronic cough, progressive respiratory distress and sometimes asthma-like symptoms prevail as the presenting complaints.

Abstract Id: YUGP5272
Limb Salvage Surgery With Endoprosthetic Fixation For Bone Tumors Around Knee
Presenter- *Dr. Amar Jain
Co-author - , ,

In this observational study, four consecutive patients who were treated for bony tumours around knee using endoprosthetic replacement in two years were studied. The patients were within the ages of 20-65 years at the time of surgery. All patients had endoprosthetic fixation, in 3 of them custom made megaprostheses was used whereas one got fixed using modular endoprostheses. These were evaluated using the Musculoskeletal Tumour Society Scoring System. Numerical values from 0 to 6 points were assigned for each of the following: pain, function, emotional acceptance, use of supports, walking ability and gait. These values were added and the functional score was presented as a percentage of the maximum possible score. Of the 4 patients evaluated, one had a diagnosis of Giant Cell Tumour (GCT) of the distal femur; second patient had osteosarcoma; third was diagnosed PNET and the fourth one had chondrosarcoma. All underwent local resection with endoprosthetic reconstruction around knee depending on proximal tibia or a distal femur lesion. The MSTS functional scores calculated were 67%, 70%, 86% and 60% respectively. Complications noted included mild flap necrosis and surgical site infection in two patients.

Abstract Id: YUGP5274
Total Laparoscopic Anterior Resection
Presenter- *Dr. Satish PAWAR

Video Abstract

Method- this is an edited video of total laparoscopic anterior resection with retrieval of specimen through posterior colopotomy and placement of anvil of the circular stapler through the posterior colopotomy incision

Abstract Id: YUGP5276
Robotic Radical Cholecystectomy Video
Presenter- Dr. Sagar Kurunkar
Co-author - Dr. Syed Nusrath, Dr. Syed Nusrath,

In this observational study, four consecutive patients were treated for biliary system diseases. The patients were within the ages of 20-65 years at the time of surgery. All patients had robotic cholecystectomy. Post-operative period was uneventful. patient on regular follow up.

Abstract Id: YUGP5278
Minimal Invasive Esophageal Surgery- Retrospective Analysis Of Prospectively Maintained Data Base From A Tertiary Cancer Centre

Presenter- *Dr. Satish PAWAR
Co-author - Geeta Narayanan, Geeta Narayanan,

Background: Surgery is the most effective treatment for the resectable esophageal cancer of the middle & lower third and Gastro-Esophageal Junction (GEJ) tumors. We hereby scrutinise our experience in Minimally Invasive Esophageal Surgery (MIES) to evaluate its safety and efficacy as an Oncosurgical procedure.

Methods: The study included 257 consecutive patients between January 2010 to December 2015. Depending on the location of the tumor, either Thoracoscopic Transthoracic Esophagectomy (TTE) in prone position or Laparoscopic Transhiatal Esophagectomy (THE) was planned. 2 field comprehensive nodal dissection were part of both the surgical procedures. Results: 43 patients had undergone diagnostic laparoscopy/thoracoscopy and deemed Inoperable, 106 patients underwent laparoscopic assisted TTE- 106, 85 patients underwent laparoscopic assisted TTE, 13 underwent Diagnostic laparoscopy & open THE and 4 patients underwent Diagnostic thoracoscopy & open TTE- 4. Male: Female-124:133. Nodal Harvest (nodes): 13. Margins (cm): THE-proximal (P) - 6.70, distal (D) -2.51, TTE: (P)-5.41, (D)-5.11. 30 days Morbidity : Median clav vein dindo score 2 , mean score 2.8 Respiratory complications â€¢ 26 Cervical leak 11, Recurrent laryngeal nerve palsy 8, oes 4, infectious 5, cardiac 2, chyle leak 4, pylormyotomy leak 1, jj leak 1 30 days Mortality - 3 Operative time (minutes): THE-234, TTE-322. Blood loss (ml/patient): THE-265, THE-380. Hospital stay (days): THE-7.3, TTE-10. Conclusion: 74% of properly selected & evaluated cases underwent MIES, with three Mortality and 62 events of morbidity. 6% required conversion. The procedure detected inoperability in 16% cases. The nodal yield, status of margins, operative time, blood loss and hospital stay indicates that MIES is a very good option of treating esophageal cancer.

Abstract Id: YUGP5280
The Promise Of Image Guided Brachytherapy In Treatment Of Cervical Cancer: Does It Deliver?
Presenter- *Dr. Richa Tiwari
Co-author - , ,

Introduction: Cervical cancer is the third most common cancer in India and major cause of cancer mortality and morbidity. It is a potentially curable cancer hence, aggressive efforts are needed to reduce its burden and increase survival. Image guided brachytherapy (IGBT) is one such advancement which has shown improved local control (LC) rates and overall survival(OS) rates by allowing dose escalation to high risk target volume (HRCTV) while sparing organs at risk (OAR). Here we analyse its clinical impact in an Indian scenario. Patients and methods: 134 patients of histologically proven carcinoma cervix treated at our institute in last three years with definitive chemoradiation followed by IGBT (1st MRI based and subsequent CT based) were analysed. Kaplan Meier estimates were calculated for 12mn &18 mn pelvic LC (primary endpoint). Also G3-4 late toxicities were noted and analysed. Results: Median follow up is 18.6 mnths, FIGO stage wise distribution of patientswere as follows- I B2- 1.4%, IIA- 7.46%, IIB- 57.4 %, IIIA-6.7% %, IIIB-23.8% %, IVA-2.96 %. Histologically,94 % had squamous cell ca, adenocarcinoma- 4.4 %, others-1.4 %. Pelvic lymph nodal involvement was observed in 39 % of patients & para aortic in 7.4%. Mean EBRT dose was 46.2+/-2.5 Gy with 81% patients received at least for cycles of concurrent platinum based chemotheraphy. Mean D90 HRCTV dose was 78.55+/-8Gy(EQD210); mean rectum dose was 63.8+/-6Gy; mean bladder dose was 82.8+/-7Gy and mean sigmoid dose 62.54+/-7 Gy(EQD23). Actuarial LC at 18 mnth was 85.8% ( stage IB-100%, IIA-100%, IIB-87.3%,IIIA-77.8%,IIIB-76%,IIVA- 25%) and distal failure was noted in 2.98% patients. G3-4 late toxicities were observed in 2.9% rectum and 2.22% in bladder. Conclusion: Notable improvement in local control rates especially in locally advanced ca cervix is observed with inclusion of IGBT in standard treatment regime.

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Abstract Id: YUGP5285
Study On Effectiveness Of Yoga On Anxiety Depression And Stress Level Of Breast Cancer Patients Undergoing Chemotherapy In Selected Cancer Research Institute, Dehradun Uttarakhand.
Presenter- *Ms. Kamli Prakash*

Abstract Title: Study on effectiveness of Yoga on Anxiety Depression and Stress Level of breast cancer patients undergoing chemotherapy in selected Cancer Research Institute, Dehradun Uttarakhand. Mrs. Kamli Prakash, Associate Professor, Himalayan College of Nursing, Swami Rama Himalayan University, Dehradun Uttarakhand.

Background: Breast cancer has ranked number one cancer among Indian females. Women undergoing chemotherapy experience many side effects including alteration in their body image. The present study assessed effectiveness of yoga on anxiety, depression and stress of breast cancer patients undergoing chemotherapy. Materials and Methods: Quantitative Research approach and Randomized Clinical Controlled Trial with Time series design was adopted. Consecutive sampling technique was done to recruit 100 breast cancer patients fulfilling the eligibility criteria. Recruited patients were randomized to control (N=52) and experiment (N=48) group by concealed randomization. Informed written consent was taken from each participant. Baseline data was collected on cycle one by using Anxiety depression and stress scale. Participants in experimental group were taught Diaphragmatic breathing, systematic relaxation and alternate nostril breathing and were instructed to practice once daily at home. They were supervised in practicing these when they received second, third, fourth, fifth and sixth cycles of chemotherapy. Participants in control group received routine care and instructions. Data was again collected at second, third, fourth, fifth and sixth cycles of chemotherapy.

Results: Analysis revealed that at the baseline breast cancer patients in control and experimental group were homogenous in terms of their Sociodemographic and clinical variables and anxiety depression and stress scores. There was increase in anxiety mean in control group as compared with experiment group with significant difference at cycle two and cycle six (p 0.01, p0.02, p0.02 respectively). There was increase in depression mean in control group as compared with experiment group with significant difference at cycle one, two, three, four, five and six (p0.02, p 0.02, p 0.02, p0.001, p0.000 respectively). Similarly there was increase in stress mean in control group as compared with experiment group with significant difference at cycle three (p 0.01). Conclusion: On the basis of findings of the study it was concluded that yoga was effective in reducing the anxiety, depression and stress of breast cancer patients undergoing chemotherapy. Therefore it is recommended as complementary therapy for patients receiving treatment for cancer.

Abstract Id: YUGP5287
Novel Model Of Palliative Care Services â€“ A Brief Report
Presenter- *Dr. Anshika Arora*
Co-author - . .

Novel model of palliative care services â€“ a brief report Introduction Palliative care should be viewed as a philosophy and clinical approach to improve the quality of life of people and their care givers who live with life limiting health conditions. Keeping these basic values of palliative care as center the palliative care department was started at our institute. Cancer research institute (CRI), HIHT, Dehradun is a 250 bedded hospital dedicated to cancer care. Setting up palliative care and supportive care department at CRI Keeping continuation of care in mind the following were planned as palliative and supportive care services at CRI â€“ 1. Two doctors, ten nursing faculty underwent specific training in palliative care) are able to concentrate on the few patients who need more specific care. At CRI we have this novel model of palliative and supportive care for the past one year now. We recommend this model as it is efficient allows continuation of care and promotes the basic principles of palliative care.

Abstract Id: YUGP5289
Venous Resection Without Reconstruction (Vor) In Pancreaticoduodenectomy: Proposal Of Update To International Study Group For Pancreatic Surgery (Isgps) Classification And Redefining Unresectable Pancreatic Cancer
Presenter- *Dr. Vijayraj Patil*
Co-author - Vikram Chaudhari, Vikram Chaudhari.

Introduction: Treatment of Borderline resectable pancreatic cancer (BRPC) has widened from vein wall excision, segmental venous resection and reconstruction, and in highly selected cases to arterial resection. We in this paper add new dimension to this widening horizons of surgical treatment of BRPC. Material and Methods: Cases who underwent portal vein resection without reconstruction were collected from prospectively maintained database. Patients had undergone thorough study of venous anatomy preoperatively. After exploration, standard steps of pancreaticoduodenectomy were carried out till division of pancreatic neck. SMV/portal vein(PV) is exposed preserving collateral. Before dividing SMV/PV clamp test was done to check for viability of small bowel. Portalomesentric vein resection without reconstruction was carried out if small bowel didn’t show any venous congestion. Results: 500 pancreaticoduodenectomy done at our institute from 2013—2017. 35 underwent venous resection of which 5 underwent venous resection without reconstruction. Of 5 patients 2 patient had adenocarcinoma, 2 neuroendocrine tumor and one patient had solid pseudopapillary tumor of pancreas. Preoperative collateral was found in 4 patients, one patient intra op clamping was tolerated well though no radiologic collateral were visible. Post operatively none of patient had any significant morbidity. On follow up none of patients had any signs or symptoms of portal hypertension. One patient developed locoregional recurrence. Conclusion: Thoroughpreoperative knowledge of pattern of venous branching and collaterals around portomesentric axis aids in preserving significant collaterals intraoperatively thus avoiding reconstruction.

Abstract Id: YUGP5293
Robotic Pylorus Preserving Pancreatico-Duodenectomy
Presenter- *Dr. Manish Bhandare*
Co-author - Ashwin Desouza, Ashwin Desouza.

Objective: To present a systematic approach to Robotic Pylorus Preserving Pancreatico-duodenectomy. Methods: We present a case of a 40 year old lady, with no comorbidities who presented with abdominal pain and features of obstructive jaundice. CT Scan of the abdomen revealed peripancreatic mass with abrupt cut-off of the terminal CBD. On initial evaluation, bilirubin was 38, CA19-9 was 9.2 and there was no evidence of distant metastasis. After ERCP with SEMS, jaundice resolved and after 6 weeks of SEMS, we performed robotic pylorus preserving pancreatico-duodenectomy.
Abstract Id: YUGP5295
Re-Operative Pancreatoduodenectomy: Challenges & Outcomes
Presenter- Dr. Manish Bhardara
Co-author - Nikhil Mehta, Vikram Chaudhari, Mahesh Goel

Background: Tata Memorial Centre is a high volume centre for pancreatic tumours. We found a continually increasing referral of re-evaluation for surgery, in patients who were deemed inoperable or who developed inoperability. Aim: We aimed to evaluate reasons of initial in-operability, the feasibility of reoperative pancreatoduodenectomy (R-PD) and then short & long term outcomes after re-do surgery. Methods: Data was collected from a prospective database of GI & HPB service, Department of Surgical Oncology, Tata Memorial Centre, Mumbai from June 2008 to Dec 2016. Results: 40 patients with periampullary/pancreatic head tumors were referred to our centre after exploration elsewhere in the above mentioned time span. 30 were planned for re-explored either upfront (n=16) or after neoadjuvant therapy (n=14). 25 patients underwent successful R-PD. The median duration between the initial and re-exploration was 5 months. 20 were adenocarcinomas and 5 had other histology (neuroendocrine tumors/cystic neoplasms). Majority of the patients were deemed inoperable i/v/o suspected vascular involvement or large/bulky tumor found at the time of initial exploration (68%). Two patients required SMV/portal vein resection, that was reconstructed primarily by end to end anastomosis. R0 resection was achieved in 24 patients and 1 patient had R1 resection. Median blood loss was 1300 mL, the median hospital stay was 11 days. Postoperative major morbidity was 20%. There was one mortality in the postoperative period. At median follow up of 23 months, the estimated 1-, 2- and 5- yrs survival for those with adenocarcinoma who underwent resection was 83%, 71.2% and 29.9% respectively. Conclusion: Re-operative pancreatoduodenectomy is safe and should be performed in centres with adequate experience in view of good short term and long term outcomes. Most common reason for abandoning resection was suspected vascular involvement. Pancreatoduodenectomy should be performed in high volume centres. In light of increasing evidence on the importance of surgeon's experience in pancreatic surgery, there is a need for establishment of centre of excellences.

Abstract Id: YUGP5303
Preoperative Clinicopathological Predictors Of Retroperitoneal Lymph Node Metastasis In Patients With Endometrial Carcinoma
Presenter- Dr. Rashmi Rekha Bora
Co-author - Dr Pradyuman Singh, Dr Pradyuman Singh,

OBJECTIVES: Purpose of this study is to investigate and evaluate preoperative clinicopathological factors in predicting retroperitoneal lymph node metastasis in patients with endometrial carcinoma.

METHODS: Retrospective analysis of 56 patients with endometrial cancer who underwent surgery with retroperitoneal lymph node dissection between 1st October 2015 and 31st July 2017 was done. Clinical and laboratory data were obtained from medical records and statistically analyzed. To evaluate retroperitoneal lymph node metastasis age-adjusted, univariate and multivariate analyses were carried out for five preoperative clinicopathological factors including Body Mass Index, CA-125 levels, pathological grade on preoperative endometrial biopsy, myometrial invasion and cervical invasion on preoperative MRI. RESULTS: Out of the 56 patients, 9 (16.1%) had retroperitoneal lymph node metastasis on final histopathological evaluation. Preoperative tumor grade and obesity were not associated with lymph node metastasis. A high preoperative serum CA-125 level (>35 IU/mL), myometrial invasion more than 50% and cervical invasion on preoperative MRI were statistically significant factors for predicting lymph node metastasis on univariate and multivariate analyses. CONCLUSION: Preoperative high serum CA-125 level, deep myometrial invasion and cervical invasion are predictors for lymph node metastasis in endometrial carcinoma.

Although there exists a controversy about the therapeutic effects of lymphadenectomy, it is recommended that patients with positive lymph nodes should be treated with additional therapy. Thus it is very important to select patients who will benefit substantially from systematic lymph node dissection. Disclosure of Conflict of Interest: No Conflict of Interest

Abstract Id: YUGP5307
A Clinical Study Of Outcome Of Recurrent Carcinoma Ovary Treated With Nab Paclitaxel And Bevacizumab Combination: Multicentric Experience
Presenter- Dr. Manish Kumar
Co-author - , , ,

Introduction: Ovarian cancer management always poses a challenge with multiple recurrences. The outcome of platinum sensitive recurrence remains marginally better compared to platinum resistant and refractory disease and ultimately the platinum sensitive disease also develop platinum resistance with subsequent relapses. The overall 5 years survival still remains less than 40% for stage IIIc and less than 20% for stage IV disease. There are multiple agents which have role in relapse setting both as single agent and in combination with varying response rates. Nab Paclitaxel is one agent with ORR reaching 60%. Another agent Bevacizumab has been proven to have significantly improved the outcome when used in combination with chemotherapy in both platinum sensitive and resistant setting (Aurelia, Oceans, ICON trial). Bevacizumab as single agent has also been found to have a satisfactory ORR of 21%. These two agents are likely to have very encouraging response rates and outcome when used in combination. Incidentally there are only limited phase II data available with this combination regimen and no large published RCTs are available till date. In this study we tried to evaluate this combination regimen for our cases of recurrent carcinoma Ovary. Material and Methods: We treated a total of 21 patients of recurrent ovarian cancer at two different centers with a combination of Nab Paclitaxel (100 mg/m2 d1,d8 &d15) along with Bevacizumab (10 mg/m2 d1 & d15) in a 4 weekly schedule for a total of 6 cycles. We included both platinum resistant and platinum sensitive cases who had more than two relapses and exposed to platinum agents twice. Results: The median age was 52 years (47-68 years). The best response was CR in 4 patients (19.04%), 13 patients had PR (61.9%), 3 had stable disease (14.3%) and 1 lost to follow up (4.7%). The response was expectedly better in platinum sensitive group compared to platinum resistant group. The toxicity was manageable with one patient had significant proteinuria and one patient had unexplained grade III mucositis. No treatment related deaths were seen. Conclusion: The Combination of Nab Paclitaxel and Bevacizumab appears to be very efficacious in the setting of recurrent ovarian cancer. This finding was replicated in our study also which appears to be one of the very few studies with small number of patients. This warrants larger multi-centric trials to explore this combination regimen further and include it in approved guidelines.
Abstracts

Abstract Id: YUGP5315
Is Magnetic Resonance Imaging (MRI) Right Choice For Staging Carcinoma Tongue?
Presenter- Dr. ANKUR VERMA Co-author -

Introduction: The tongue is the one of most common oral cavity subsite for squamous cell carcinoma (SCC). The tongue has three-dimensional musculature, freely mobile and surrounded by other structures along with rich lymphatic supply, therefore major role of diagnostic imaging in SCC tongue is to establish the direction and extension of tumour invasion along with suspicious lymphadenopathy. Magnetic resonance imaging (MRI) has been proven superior to other imaging tools in depicting tumour dimensions and its surrounding structure however, there are no standard guidelines. Objective: The purpose of this prospective study is to evaluate preoperative MRI findings and compare/correlate with final histo-pathology (HPE) to determine the accuracy of the diagnostic method. Methods: The study included 50 patients who presented with malignant lesions of tongue. All patients included were subjected to a detailed clinical history, physical examination and MRI using a fixed protocol, following which appropriate staging (AJCC 7th edition) and treatment was performed. Preoperative MRI findings were then compared with final histopathology (HPE). SPSS software along with correlation and regression is used for analysis. Results: 50 patients (37 males and 13 females) were included in the study. The mean depth of invasion in MRI was 9.24 mm and in final HPE was 8.82 mm. For all patients, depth of invasion (DOI) in MRI (r = 0.903; p < 0.001) correlated well with pathological DOI. By using regression analysis, shrinkage factor obtained was 0.78. The T staging in MRI was also significantly associated with final HPE (AJCC 7th edition). Lymph node positivity in MRI was also significantly associated with final HPE report. 38 (76%) lesions were well-differentiated, lympho-vascular invasion were present in 14 (28%) and perineural invasion was present in 12 patients (24%). Conclusion: MRI provides satisfactory extent of loco-regional tumour spread, DOI and prediction of occult cervical lymph node metastasis. Tumour thickness and DOI are independent variables for staging and prognosis. Preoperative MRI is beneficial in SCC tongue in order to evaluate DOI particularly for superficial tumours that are invasive particularly in terms of depth.

Abstract Id: YUGP5325
Pediatric Hodgkin Lymphoma: The Kci Experience.
Presenter- Dr. Jyothi M Co-author - ANU JAIN, ANU JAIN,

...Background: Data from developing countries on outcomes of children with Hodgkin lymphoma is limited. Objective: To describe the epidemiology and determine the outcome of pediatric Hodgkin lymphoma. Methods: A retrospective analysis of case records of all children diagnosed with Hodgkin disease between 2007-2013 in the Department of Pediatric Oncology, KCI was undertaken. Results: Out of 3187 children diagnosed with malignancies between 2007-2013, a total of 183 children (5.75%) had Hodgkinâ€™s disease with an annual average of 26 per year. The median age at presentation was 9 years, range from 3 to 15 years. The male to female ratio was 4:1. 63% patients had B symptoms, 25% had bulky disease and 45% had spleen involvement. Majority presented in advanced stage (Stage III and IV) disease (70%). Extralodal disease most commonly involved the lung followed by liver and bone marrow. Nodular sclerosis (42.6%) was the most common histology, followed by mixed cellularity (28.7%). While 55% patients received ABVD, 45% patients received Hybrid COPP-ABV chemotherapy regimen. Most common toxicities associated with therapy included myelosuppression followed by chemotherapy induced nausea vomiting. 65% children received IFRT post chemotherapy and among these, thyroid dysfunction (15%) was the most common long term toxicity Conclusion: Median follow-up of the cohort was 42 months (range 2-130). Progression free survival and Overall survival rate at 5 years is 75% and 88% respectively. Key words: Chemotherapy and toxicities, Hodgkin lymphoma, pediatric, survival

Abstract Id: YUGP5331
Synchronous Primary Carcinoma Colon: A Case Report And Review Of Literature
Presenter- Dr. SANDEEP GUPTA Co-author - Aruna Kumari BS, Aruna Kumari BS,

Synchronous Primary Carcinoma Colon: a case report and review of literature Dr Sandeep Gupta* ,Dr Sourabh Mittal** Assistant Professor in Surgical Oncology, **Senior Resident Acharya Tulsi Regional Cancer Treatment & Research Centre,Bikaner Email: gplasandeepbk@gmail.com Introduction Synchronous primary carcinoma of the colon is a relative rare entity. The incidence ranges from 2-5% of total colonic cancers . Synchronous Primary is defined as more than one malignant lesion at the time of first diagnosis. Difficulties will be encountered in diagnosis and treatment. Preoperative full Colonoscopy and Palpation of entire colon is the best option during surgery to rule out synchronous primary. Here we report a case of synchronous colon carcinoma of a middle-aged male patient and present an associated mini review on current research of synchronous colorectal carcinoma. Case report A 55-year-old man presented with a five-month history of hematochezia and intermittent abdominal pain. The patient had no family history of cancer or hereditary intestinal disorders. Physical examination revealed a soft tenderness in the upper left quadrant of the abdomen without any mass palpated. Regular laboratory examinations demonstrated a hemoglobin level of 83 g/L and the occult blood test was positive as well. Tumor markers were in the normal range (CEA 1.5 ?g/L), abdominal contrast CT scan identified a mass lesion in ascending and descending colon with associated circumferential thickening and local infiltration. Preoperative biopsy confirmed both lesions as adenocarcinoma, the patient underwent subtotal colectomy ,10 cm of ileal pouch were removed completely with regional lymph nodes dissection. We constructed a J-type pouch with the residual ileum before ileorectal Anastomosis to partially replace the stool storage function of colon and rectal ampulla. Postoperative pathological examination confirmed synchronous malignant lesions in total colon. Tumor A was a protruding 4.5 cmÃ—1.5 cm mass in proximal ascending colon with moderate differentiation and (pT3N0M0). Tumor B was an ulcerative 3.5 cm×1.3 cm mass in descending colon with well differentiation and (pT3N0M0). There were no residual tumors and metastasis in incisal margins and regional lymph nodes respectively. Three days later, the patient began liquid diet and the ileal pouch successfully controlled the frequency of defecation 2-3 times per day after surgery. No severe complications such as anastomotic leakage occurred during hospital stay post-operatively. The TNM clinical grading of this patient was stage II, thus we performed 6 cycles of FOLFOX regimen as adjuvant therapy and the patient revealed good tolerance and compliance without tumor relapse. Discussion Synchronous colorectal carcinoma indicates more than one primary malignant lesions discovered in a single patient simultaneously. Once multiple colorectal cancers are detected in different time points, it is identified as metachronous colorectal carcinoma. Synchronous colorectal carcinoma accounts for a wide-range 1%-8% of all colorectal cancers by review on different studies . A systemic review reported an overall incidence of 3.5% of synchronous colorectal carcinoma versus all colorectal cancers by pooling data from 39 studies (3667/105686) .These results suggest synchronous cancers as a relative rare entity with overall incidence rate probably below 4%. Compared to solitary cancers, synchronous colorectal carcinoma presents a higher male to female ratio instead . An 884-case study reported a ratio of 1.6 in synchronous colorectal carcinoma in contrast to 1.2 of solitary cancer . The origination of sex difference is currently unknown, but sex hormones most likely contribute .With respect to age, there is no consensus on its correlation with...
synchronous colorectal carcinoma occurrence. An earlier literature review reported an average age of 63 years when patients presented with synchronous colorectal carcinoma based on large quantity of pooling data. Recent studies presented a discrepant mean-age 47, 72 and 79 years of synchronous cancer patients respectively. Location preference of synchronous carcinoma is still in controversy. As is reported that primary locations of synchronous colorectal carcinoma differed from solitary cancers with an ascending colon predominance (43% in synchronous carcinoma to 37% in solitary carcinoma) and less frequency of lesions located in sigmoid colon and rectum compares to that of solitary cancers (48% in synchronous carcinoma to 57% in solitary carcinoma). Patients with possible predisposing factors (inflammatory bowel diseases, familial adenomatous polyposis) are reported to have higher risk of synchronous colorectal carcinoma. A case series study of inflammatory bowel disease related colorectal cancer presented a surprising ratio of 20% cases diagnosed with synchronous colorectal carcinoma (22/108), which was much higher compared to sporadic incidence rate 3.5% of synchronous carcinoma. The reason behind this has been linked to inflammation-induced dysplasia, and adenomas are believed to be more closely involved in development of synchronous tumors especially the serrated sessile adenomas or polyps. Whether synchronous colorectal carcinoma possesses specific pathological features has not reached a consensus yet. A retrospective study concluded mucinous adenocarcinoma was slightly more common observed in synchronous colorectal carcinoma than solitary cancers by cases analysis. This result seems rational since mucinous adenocarcinoma is a pathological trait of hereditary nonpolyposis colorectal cancer, which is a common predisposing factor of synchronous cancers. The majority of mechanism studies of synchronous colorectal carcinoma blame it on microsatellite instability (MSI) of the genome. Synchronous colorectal carcinoma has a higher proportion of MSI-positive cancers than solitary cancers. There are two responsible mechanisms to generate microsatellite instability in synchronous cancers: 1. With respect to most inherited cases, the hereditary mutation on mismatch repair genes enables the correction process against errors on microsatellite repetition region during DNA replication, resulting in microsatellite instability; 2. In sporadic synchronous cancer patients, methylation of mismatch repair genes mainly results in MSI instead of hereditary factors. Particularly, BRAF related methylation on MLH1 promoters is a strongly indicator for sporadic cases. That is the reason why BRAF is a recommended gene to examine on synchronous colorectal carcinoma patient. Surgical decision is quite difficult to make since the complex clinical features of synchronous carcinoma and individual differences must be taken into account. Pre-operative examination is necessary for accurate surgical decision. Colonoscopy (including EUS) is an essential approach for synchronous colorectal carcinoma (22/108), which was much higher compared to sporadic incidence rate 3.5% of synchronous carcinoma. The reason behind this has been linked to inflammation-induced dysplasia, and adenomas are believed to be more closely involved in development of synchronous tumors especially the serrated sessile adenomas or polyps. Whether synchronous colorectal carcinoma possesses specific pathological features has not reached a consensus yet. A retrospective study concluded mucinous adenocarcinoma was slightly more common observed in synchronous colorectal carcinoma than solitary cancers by cases analysis. This result seems rational since mucinous adenocarcinoma is a pathological trait of hereditary nonpolyposis colorectal cancer, which is a common predisposing factor of synchronous cancers. The majority of mechanism studies of synchronous colorectal carcinoma blame it on microsatellite instability (MSI) of the genome. Synchronous colorectal carcinoma has a higher proportion of MSI-positive cancers than solitary cancers. There are two responsible mechanisms to generate microsatellite instability in synchronous cancers: 1. With respect to most inherited cases, the hereditary mutation on mismatch repair genes enables the correction process against errors on microsatellite repetition region during DNA replication, resulting in microsatellite instability; 2. In sporadic synchronous cancer patients, methylation of mismatch repair genes mainly results in MSI instead of hereditary factors. Particularly, BRAF related methylation on MLH1 promoters is a strongly indicator for sporadic cases. That is the reason why BRAF is a recommended gene to examine on synchronous colorectal carcinoma patient. Surgical decision is quite difficult to make since the complex clinical features of synchronous carcinoma and individual differences must be taken into account. Pre-operative examination is necessary for accurate surgical decision. Colonoscopy (including EUS) is an essential approach for the appraisal of tumors count as well as locations and taking a biopsy meanwhile.

CT scan is commonly used to make assisted assessment in case of the malignant stenosis and has an advantage on local infiltration evaluation over endoscopy. Even with these measures, there are still some lesions failed to identify preoperatively due to their tiny sizes. Conclusions Multiple synchronous lesions are not uncommon. Surgeons should be aware of the fact that per operative palpation of the entire colon is mandatory to diagnose the synchronous primary cancers. If doubt persists post operative colonoscopy is carried out to visualise the early or mucosal lesions of the entire colon. In summary, synchronous colorectal carcinoma is a unique subtype of colorectal cancer and shows great disparity against solitary tumors with all probable clinical and molecular implications confirmed by current studies. However, it is premature to make conclusions with those controversies unsolved and further researches are needed to finally judge.

Abstract Id: YUGP5333
Cripto-1 Expression And It’S Correlation With Outcomes In Oropharyngeal Squamous Cell Carcinomas Treated By Chemo-Radiation

Abstract Id: YUGP5343
Impact Of Depth Of Invasion On Lymph Node Metastasis In Carcinoma Buccal Mucosa
Presenter: Dr. S M Azeem Mohiyuddin
Co-author - ,

Introduction 35% of all malignancies in Kolar involve head and neck. 50% of them are Buccal Mucosa cancers. Many of these patients do not have lymph node metastasis on histopathology. However neck dissection is indicated in all primary tumors treated by surgery, except T1. Multiple studies correlate depth of invasion in carcinoma tongue with lymph node metastasis. However similar literature in buccal mucosa cancers is inadequate. We analyzed the depth of invasion and lymph node metastasis in T2 & T3 buccal mucosa cancers. Aims To document and correlate the depth of invasion and lymph node metastasis in surgical specimens of patients operated for T2 & T3 buccal mucosa cancers. Methodology 86 patients with carcinoma buccal mucosa staged T2 & T3 were included in this study. 45% of them were T2. All patients underwent composite neck dissection which included MRND. All T3 and few T2 tumors received adjuvant radiotherapy depending on histopathology report. Resected specimens were evaluated for depth of invasion and cervical lymph node metastasis by histopathology. T1 tumors were excluded as neck dissection was not done. T4 tumors were excluded as depth of invasion is very deep in them. Patients were segregated into GROUP A with depth of invasion <4mm and GROUP B >4mm. Depth of invasion was correlated with levels of metastatic lymph nodes. Patients were followed up for a minimum of 18months. Results On histopathology 33 patients were found to have cervical lymph node metastasis (9/41 with depth of invasion <4mm and 24/45 with depth of invasion >4mm). Among patients with lymph node metastasis 9
had T2 primary tumors and 24 had T3. 29 patients had metastasis in submandibular nodes. 3 patients had metastasis in both level I and II and 1 patient had metastasis in levels I, II and III. Patients with metastasis in multiple levels had T3 primary tumor and depth of invasion >4mm. After a mean follow up of 3 years, 68 patients are disease free. 8 patients had local recurrence and 5 had only regional recurrence. 2 of them were salvaged by RND. 1 patient had lung metastasis and 2 patients died of other causes. Conclusion Depth of invasion and its impact on lymph node metastasis in buccal mucosa cancers has not been reported adequately. In our study there was positive correlation between depth of invasion of >4mm, size of primary tumor and lymph node metastasis. 

Abstract Id: YUGP5349
Frequency Of Well Established Risk Factors In Indian Patients With Breast Cancer
Presenter- Dr. PREMA VENKATESH
Co-author - , ,

Frequency of well established risk factors in Indian patients with breast cancer Aim of the study: The past three decades have seen a rapid rise in the incidence of breast cancer. Well established risk factors of breast cancer like early age at menarche, late age at menopause, late age at first child birth, nulliparity, post menopausal obesity, and lack of exercise, hormone replacement therapy, family history of breast cancer, benign breast disease have been derived from population based cohort studies conducted in western population. Our aim is to find out how frequent these well established risk factors are present in rural Indian patients with breast cancer. Materials & methods: This is a retrospective study conducted in Raja Muthiah Medical College during the period April 2014 to July 2017. All newly detected and histologically confirmed breast cancer patients were included in the study. Male breast cancer, sarcoma, secondaries to the breast were excluded. Demographic data, history on risk factors, clinical examination findings were recorded. Breast density data was collected whenever available. Results were tabulated and analysed. Results and discussion: Total number of newly detected breast cancer patients included in the study was 150, 43 were premenopausal, 107 were post menopausal. Average age at presentation was 48 years. Most of the cases presented in the stage II & III (> 80 %). Early age at menarche defined as 35 years was present in 2 % of cases, age at first child birth > 30 years was present in 12 % of cases. Family history of breast cancer was present in 5 % of cases. Breast density data was available in about half of the patients in the study population, it was found that most of the breasts belonged to wolffian™s class II & III. Average BMI was 28.5. History of benign breast disease was present in 15 % of cases. Conclusion: The frequency of well established risk factors is low as compared to western population. Additional population based studies on Indian population are needed to explain the rising incidence of breast cancer in India.

Abstract Id: YUGP5351
Radiosurgery Availability & Pattern Of Practices In India - An Online Survey
Presenter- Dr. Pushpendra Hirapara
Co-author - , ,

Objectives:- We created a survey to assess radiosurgery(RS) education & patterns of practice among Indian radiation oncologists(RO). Materials & Methods:- The survey inquired about availability of RS. Questions were asked to RS practising RO regarding their current setup, volume, departmental protocol from decision making to treatment delivery. Separate questions regarding RS setup, need of RS & willingness for RS training were asked to those who are not practising RS. Questions were asked on past RS training, ideal duration & importance of credentials. Results:- We received 84 responses from all over India with a response rate (RR) of 8.4%. Out of 39.3% RS practising RO, decision making are sought in tumour board by 63.3%. All are practising intracranial SRS (ICRS), half practising extracranial SRS (ECRS) & few practising SRS for functional indications (21.7%) mainly on linear accelerator. Majority of (72.7%) respondents received dedicated RS training ? 3 months, as Observer (69.7%) & from Institutes in India (75.8%). Most of respondents (72.8%) opine that 6-12 months of training is enough. Most consultants practising RS for ? 5 years & ? 10 cases/ month. 54.5% respondents use frameless device for ICRS, 78.8% vac-lók & 57.6% thermoplastic masks for ECRS. Motion inclusive techniques (66.7%) & breath hold techniques (45.5%) are commonly used motion management tools for ECRS. VMAT is commonly used for ICRS (69.7%) & ECRS (81.6%). kvCBCT (84.8%) is commonly used for setup verification. 42.4% have 6D couch while commonly available MLC configurations are Add on MLC accessories (48.5%) & MicroMLC (48.5%). Out of 60.7% non RS practising RO, 76.4% respond that 75 Indian institutes™ offer RS training and majority are willing for training. 90.1% respondents feel need of RS in ?10% OPD cases. Time duration & fees of training are limiting factors for decision making. Cost of installation & policy maker™s unwillingness are common reasons behind unavailability of RS. 98% respondents agree for role of professional organisations in arrangement of RS training. Majority respondents agreed on necessity of credentialing of RS training. Conclusion:- RS is practiced by limited RO in India and few centres offer dedicated RS training. This survey information provides a glimpse of the RS availability & pattern of practices.

Abstract Id: YUGP5353
Endoscopic Extraperitoneal Radical Prostatectomy: Our Experience From 2315 Cases
Presenter- Dr. Vinodh Kumar Adithyaa Arthanareeswaran
Co-author - Kamal Sahni, Kamal Sahni,

OBJECTIVES: We report the outcome of 2315 endoscopic extraperitoneal radical prostatectomy (EERPE) cases performed in our institution, with emphasis on the evolution of the EERPE technique. METHODS: In total, 836 conventional and 1479 Robot-assisted EERPE procedures were performed in our institution from June 2010 to February 2017. EERPE was performed in all cases of localized prostate cancer with the same indications to open and transperitoneal laparoscopic radical prostatectomy. RESULTS: Average patient age was 64.3 years (range 41-83 years), and mean preoperative prostate specific antigen (PSA) level was 9.4 ng/mL (range 0.08-122 ng/mL). 28% patients had previously undergone abdominal or pelvic surgery, while 5.8% patients had prior prostatic treatment. Pelvic lymph node dissection took place in 1219 (50.8%) patients. Bilateral nerve sparing was performed in 1192 patients and unilateral in 270 patients; Mean operative time was 147.7 minutes (range 50-340 minutes). Conversion to open surgery was never deemed necessary. Fifteen patients received transfusion (0.7%). The mean catheterization time was 6.19 days (range 4-40 days). Overall, 71.7% and 94.7% of the patients were continent at 3 and 12 months, respectively. Totally, 1462 patients were treated with nerve-sparing procedure either interfascial or intrafascial. Younger patients tend to have better postoperative potency. Bilateral nerve-sparing EERPE in patients younger than 55 years results in potency rate of 32.4%, 75.3%, and 84.9% at 3, 6, and 12 months postoperatively. CONCLUSIONS: The functional and oncological outcome of EERPE is comparable to other approaches for radical prostatectomy. Continuous refinements contribute to the improving outcome of the procedure. Long-term results especially in terms of oncological efficacy are expected.

Abstract Id: YUGP5357
Role Of Frozen Section In Endometrial Cancer
Presenter- Dr. Ramani Gottumukkala
Co-author - Dr.Bright Singh. R S., Dr.Bright Singh. R S.,
OBJECTIVE: The purpose of this study was to correlate the histological diagnosis made during intraoperative frozen section examination of hysterectomies with atypical hyperplasia or carcinoma, with the definitive paraffin section pathology. STUDY DESIGN: Frozen section pathology results of patients with a preoperative biopsy showing atypical hyperplasia or endometrial carcinoma (67 patients) were compared retrospectively with paraffin section pathology findings. Those patients with curettement specimens showing atypical hyperplasia or curettement suspicious of endometrioid carcinoma had intraoperative frozen section to determine whether an invasive lesion was present and whether they required pelvic lymphadenectomy. The purpose of frozen section assessment in those patients who had a preoperative curettement specimen showing endometrial carcinoma was to identify poor prognostic pathological factors related to histological subtype, grade, depth of myometrial invasion and cervical involvement. RESULTS: The correlation between frozen sections and paraffin histology in patients with endometrial carcinoma was 86.5% (58/67), for histological sub-type and 72.7%(52/44), for grade of differentiation. Depth of myometrial invasion was accurately diagnosed in 89.6%(52/58). 4 patients and 72.7%(32/44), for grade of differentiation. Depth of myometrial invasion and cervical involvement. CONCLUSIONS: Our results in the final histopathological diagnosis. CONCLUSIONS: Our results support the use of FS analysis as a means to guide intra-operative decisions regarding lymphadenectomy. Determination of histologic subtype, depth of invasion and grade is reliable at our institution, and demonstrates high concordance rates between FS and PS. These factors should be used to guide intra-operative decision-making regarding the necessity of a lymphadenectomy in patients with endometrial cancer.

Abstract Id: YUGP5359
Factors Predicting Development Of Elevated Thyroglobulin And Negative Radio Iodine Scintigraphy (Tenis) Syndrome In Thyroid Carcinoma
Presenter- Dr. Samskruthi Murthy
Co-author - DR.BALA SANKAR, DR.BALA SANKAR,

Background Differentiated thyroid carcinomas are indolent tumours and can be treated effectively. In patients with elevated thyroglobulin and lesions refractory to radioactive iodine (RAI) therapy fewer therapeutic strategies are available. Even though molecular-target therapy has shown promising results for DTC with RAI-refractory recurrences, management of these cases continues to be challenging due to lack of evidence of its etiology. Hence we aimed to identify the factors predicting the development of TENIS syndrome in patients treated for Differentiated Thyroid Cancer Materials and Methods Retrospective review of patient records from 2008-2015. The details of surgery, clinicopathological characteristics of primary tumour, cumulative dose till development of TENIS, dose of empirical alation, Thyroglobulin and TSH suppression at onset of TENIS, PET scan positivity, changes in Thyroglobulin levels and follow up details were noted. Results Total of 52 patients were identified. Mean age was 45.7 yr (19- 73 yr), male: female ratio was 11.28 . The mean time to develop TENIS syndrome was 1.9 yr (0.1-5.7yr). 55.6 % of patients had nodal disease at presentation with mean nodal positivity of 9. PET CT detected structural disease in 61.1%. The mean cumulative dose of RIA administered until onset of TENIS was 3769.8 MBq. The empirical dose mean in TENIS was 4085 MBq and the fall in Tg was noted in 61.1% patients. Structural disease recurrence and persistently high thyroglobulin (57.1%) was noted in patients aged > 55 yr Discussion and Conclusion Age > 55 years was associated increased risk of developing TENIS. Mean duration of presentation was 1.9 years after the initial diagnosis of DTC. 61.1% of patients had a fall in Tg level with empirical therapy. Patients aged > 55yr may be potential candidates for molecular targeted therapy. Further studies are required to clarify appropriate indications for molecular-target therapy.

Abstract Id: YUGP5361
A Pilot Study Of Minimally Access Esophagectomy Vs Open Esophagectomy For Middle And Lower Third Esophageal Cancer
Presenter- Dr. Senthil Kumar
Co-author - Manjit Sarma, Manjit Sarma,

Background: The aim of this study was to report our results in minimally access esophagectomy(MAE) and comparing with open technique (Trans hiatal esophagectomy-THE) for esophageal cancer and analyze, the morbidity pattern and oncological safety. Methods: This was a non randomized of 23 patients from January 2014 to April 2017. Initial part of our study patients underwent open THE and we had switched over to MAE in later part of our study and comparing these 2 groups. Most of our patients presented with locally advanced stage were treated with preoperative chemoradiation followed by reevaluation after 4 - 6 weeks and underwent surgery. Operation related parameters, mortality and morbidity were evaluated and compared with both groups. Results: We had included 23 patients. 10 patients had underwent MAE, 13 patients underwent open THE. The mean operating time taken in MAE was 216 minutes and in case of open esophagectomy was 170 minutes. The mean intra operative blood loss for MAE was 162 mL and for open surgery was 439 mL. Post operatively hospital stay in MAE was 8 - 10 days and 14 - 17 days in case of open surgery. Post operatively 10% had pneumonia in case of MAE and around 15.4% had pneumonia in open surgery. About 10% had atrial fibrillation in MAE group and 7.7% open surgery. About 7.7% had myocardial infarction post operatively in open group. Incidentally about 23.1% (3 patients) expired post operatively in open group. Conclusions: Minimally access esophagectomy is a promising therapeutic modality with technically feasible, surgically safe, and oncologically adequate, with potentially faster postoperative recovery, reduced trauma, low intraoperative blood loss , less respiratory complications, shorter hospital stay recovery, and acceptable surgical outcomes compared with open THE.

Abstract Id: YUGP5367
Need For Decision Aid In Extent Of Thyroidectomy For Low Risk Differentiated Thyroid Cancer (Dtc)
Presenter- Dr Samskruthi Murthy
Co-author - Dr Saurabh Bansal, Dr Saurabh Bansal,

Aim: 2015 ATA recommends the decision for extent of thyroidectomy in 1-4 cms DTC is left to the patient . Patient decision-making is based on several factors. We studied the rationale of individual choice in our population Materials and methods: A survey with information aid was administered to three groups of healthy volunteers. Group 1 (N=30, public); group 2(N=30, nursing staff) and group 3 (N=30, doctors) the individuals were asked to answer the questions assuming they had about 1-4cm DTC Results: 90 individuals were enrolled. Hemi thyroidectomy was preferred in 16 subjects (17.8%) most were women (N=14, 87.5%) and commonest reason being to avoid drug supplementation. (N=10,62.5%). In this group, 7 patients (43.8%) were concerned with completion thyroidectomy. Total thyroidecy was preferred in 29 patients (32.2%) most were women (N=14, 87.5%) and commonest reason being avoidance of serial ultrasound follow up (N=21, 72.4 %). Majority of respondents were undecided N=45(50%). and had concerns about hormone replacement (N=30, 66.6%) and regarding resurgery and its complications (N=28, 62.2%). Conclusion: Majority of individuals do not have a preference for the extent of surgery with provided information aid. Development of patient information aids and decision aid with Institutional data regarding completion thyroidectomy, thyroid hormone supplementation and risk stratified follow up will help to counsel the undecided patient. Decision aid was developed based on this study and will be presented. References 1. Haugen BR, Alexander EB, Bible KC, Doherty GM, Mandel SJ, Nikicroft YE, Pacini F, Randolph GW, Sawka AM, Schulumberger M, Schuff KG, Sherman SI, Sosa JA, Sterward DL, Tuttle RM, Wartofsky L. 2015 American Thyroid Association management guidelines for
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At A South Indian Regional Cancer Centre. In Gestational Trophoblastic Neoplasia For A Period Of 5 Years. A Retrospective Analysis Of Management, Treatment Outcomes

Abstract Id: YUGP5369

A Retrospective Analysis Of Management, Treatment Outcomes In Gestational Trophoblastic Neoplasia For A Period Of 5 Years At A South Indian Regional Cancer Centre. Presenter- Dr. AARATHI ARDHA Co-author - Krishnakumar Thankappan, Krishnakumar Thankappan, ICC ABSTRACT 2017 TOPIC: Gestational trophoblastic neoplasia-a chemoesensitive tumour; a 5 year case series from a regional cancer centre. A retrospective analysis of management, treatment outcomes in gestational trophoblastic neoplasia for a period of 5 years at a South Indian regional cancer centre. AUTHORS: Dr.Aarathi , Dr Tasneem iliamwala BACKGROUND: Gestational trophoblastic disease (GTD) is a spectrum of both benign and malignant gestational tumors, including hydatidiform mole (complete and partial), invasive mole, choriocarcinoma, placental site trophoblastic tumor, and epithelioid trophoblastic tumor. The latter four entities are referred to as gestational trophoblastic neoplasia (GTN). The disease entities in GTD have wide variation in behavior, whereas GTN specifically refers to those with a greater propensity for tissue invasion and metastasis. As these conditions are aggressive with a propensity to metastasize widely, early diagnosis of GTD is essential for prompt and successful management while preserving fertility. Diagnosis of GTD is based on a combination of clinical features, serial quantitative human chorionic gonadotropin (hCG) titers, and imaging findings. Ultrasonography (US) has replaced all other radiographic means for establishing the diagnosis of hydatidiform mole. Aim: To analyse the management, treatment outcomes of the patients with Gestational Trophoblastic Neoplasia at a regional cancer centre over a 5 year period from January 2012 – December 2016. MATERIALS AND METHODS: We have done a retrospective analysis of 25 cases of gestational trophoblastic neoplasia registered at MNJ institute of oncology and regional cancer centre ,Hyderabad, Telangana over a period of 5 years from January 2012 – December 2016. Our study reviewed the age distribution ,incidence of various types of Gestational trophoblastic neoplasia, the treatment received, risk stratification, their pre and post treatment beta-hCG levels, incidence of pulmonary metastasis and the effect on fertility. RESULTS: The most common age group for presentation of GTN is 20-29 years constituting about 72%(18/25) of the study population, followed by 20%(5/25) who presented at an age <18 years. Among the types of GTN, 40% were diagnosed to have choriocarcinoma, 60% have molar pregnancy. 12 patients received treatment with EMACO regimen, 5 patients received METHOTREXATE with LEUCOVORIN rescue, METHOTREXATE+ACTINOMYCIN was given in 1 patient, EMACO was converted to PACLI+CARBO in 1 patient, METHOTREXATE+LEUCOVORIN was converted to EMACO regimen in 2 patients, METHOTREXATE+LEUCOVORIN was converted to single agent ACTINOMYCIN in 2 patients and no treatment could be given in 2 patients. Risk stratification showed 14 patients with high risk and 11 patients with low risk. Pulmonary metastasis is noted in 7 patients and in non-pulmonary metastasis, 1 patient has bone metastasis and 2 patients have brain metastasis. The lethality rate is 12%(3/25).

At a median follow up of 19.5 months, the overall survival is 88%. Of the 7 patients who had lung metastasis at presentation, 6 patients were cured completely indicating that presence of lung metastasis is not a bad prognostic indicator and that it can be resolved with chemotherapy. 20% of the study population(5/25) were able to conceive after the completion of treatment. The possibilityof fertility preservation could not be commented on in 3 patients. TREATMENT GIVEN NUMBER OF PATIENTS EMACO regimen(6 CYCLES) 12 METHOTREXATE+LEUCOVORIN RESCUE(5 CYCLES) 5 METHOTREXATE+ACTINOMYCIN 1 EMACO ->PACLI+CARBO 1 METHOTREXATE+LV->EMACO 2 METHOTREXATE+LV->ACTINOMYCIN D 2 NO TREATMENT COULD BE GIVEN 2 CONCLUSIONS: We conclude that in our retrospective analysis of 25 patients with GTN, at a median follow up of 19.5 months, the overall survival rate is 88% and fertility is preserved in 20% of the study population. The beta-hCG levels dropped to normal levels in 86.9% of the patients treated with chemotherapy. REFERENCES: 1. Human Chorionic Gonadotropin Regression Curves after Partial or Complete Molar Pregnancy in Flanders: Are They Different from Regression Curves from the Eighties? Sien Delattre a Sileny Han c Philippe Moerman d Jaak Billen e Frederic Goffin f Kathleen Scharpe b Ignace Vergote c. 2. Utility of ?hCG monitoring in the follow-up of medical management of miscarriage Scott G, Peterson1.2, Anneliese R. Perkins1 . Kristen S. Gibbons2 . Julia I. Bertolone1 and Kassam Mahomed2. 3. . Berkowitz RS, Im SS, Bernstein MR, Goldstein DP. Gestational trophoblastic disease: subsequent pregnancy outcome, including repeat molar pregnancy. J Reprod Med 1998; 43:81-6. 4. . Soper JT. Gestational trophoblastic disease. Obstet Gynecol 2006;108:176-87.

Abstract Id: YUGP5373

Correlation Of Hormone Receptor Status And Stage At Presentation With Age Of Onset In Breast Cancer Patients â€“ A Single Institution Experience

Presenter- Dr. Chinmayee Agrawal

Purpose: To correlate Hormone Receptor status and Stage with age in patients with carcinoma breast. Materials And Methods: This retrospective review was conducted on 200 patients diagnosed with breast cancer at Cancer Research Institute, SRHU, Dehradun from January 2015-January 2017. Electronic database of hospital was searched for the patient details and paper records were retrieved from medical record department. Patients were divided in two age groups- Below and Over 40 years age. They were also analyzed for Stage and Hormone Receptor status - Estrogen receptor(ER), Progesterone receptor(PR) and Her2Neu expression. Results: The incidence of Breast Cancer is more in older age group (76.5%) as compared to younger age group(23.5%). Of all the patients, who presented in younger age group 57.4% patients presented in Stage III and Stage IV disease with 44.6% patients with Triple negative status.34% patients in our study presented with N3 disease in younger age group as compared to 25.4% in more than 40 years age group. Conclusion: Breast cancer in younger women is more aggressive than in older women, and hence presents at a advanced stage with N3 lymph nodal status which is associated with a worse prognosis. There is also a significant proportion of younger women with triple negative tumors, which is indicative of aggressive form of tumor.

Abstract Id: YUGP5375

Outcome Of Surgical Resection In Locally Advanced Oral Cancer Extending To Infratemporal Fossa.

Presenter- Dr. S M AZEEM MOHYUDDIN

Co-author - DR SHANKAR LAL JAKHAR, DR SHANKAR LAL JAKHAR

Introduction 35% of malignancies in India involve head and neck and 50% of them are oral cancers & present with locally advanced disease. Extension to infratemporal fossa above the sigmoid notch of mandible was considered inoperable. Recently few studies have reported encouraging locoregional control of these extensive malignancies following compartment resection of infratemporal fossa. We are reporting the outcome in 42 patients with locally advanced oral cancer extending to infratemporal fossa undergoing compartment resection. Aims To document the locoregional control and morbidity in patients undergoing compartment resection for locally advanced oral cancer extending to infratemporal fossa Methodology 42 patients with locally advanced oral cancer (staged T4) extending to infratemporal fossa were included and had a mean follow up of 30 months. The patients were treated with surgical resection in combination with post operative radiotherapy. Results 81% of the patients were controlled in the local region and 90% in the regional lymph nodes. The morbidity was low. Conclusions The surgery is safe and effective in these patients compared to the alternative treatment modalities.
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During February 2013 and June 2016, data of 76 adequately treated post-operative OCSCC patients treated at our institution were analyzed: 36 patients received conventional fractionation (CF) as 5 fractions per week RT and 40 patients received the purely accelerated fraction (AF) as 6 fractions per week RT. Results: Mean age of the patients was 47 years with 87% males. 60% patients were smokers & 70% patients were tobacco chewers. Buccal mucosa and Tongue were the most common sites. Pathological tumor size and PNI were the most common indications for RT and the risk factors were evenly distributed in both these groups. The median interval between surgery and RT was 6.6 vs 7 weeks with 97% receiving doses as planned. Median RT completion time was 43 and 36 days, respectively. 58% patients in CF arm received concurrent chemotherapy. In almost 27% cases, RT was delayed more than 8 weeks due to various reasons. Toxicity rates in the two groups (CF vs AF) were as follows: mucositis grade III or higher 34 vs 81% patients, grade III or above skin reaction 20% in both and grade II dysphagia was observed in 21 vs 25% of patients. Ryle’s tube was placed in 23 vs 48% and IV fluids were given to 26 vs 58% patients. Median follow up was 20 months. Local and distant failures were less in AF group as compared to CF group (7.5 vs 13.8% and 0 vs 98.3%, respectively) Conclusion: AF RT for postoperative OCSCC is feasible with comparable morbidity. However, a prospective randomized study with larger number of patients will be needed to validate the improvement in control rates.

Abstract Id: YUGP5381

Epidemiological Characteristics Of Breast Cancer In North-West India
Presenter- Dr. Mukesh Singhal
Co-author - Anja Dietel, Anja Dietel,

Abstract: Breast cancer is the most common cause of cancer in women worldwide. The aim of this study is to describe the epidemiological characteristics of breast cancer in North-West India. Methods: A retrospective analysis of breast cancer cases diagnosed and treated at Regional cancer centre in North-West India between 2001 and 2011, was performed. Results: During 2001-2011, 5592 cases were diagnosed with breast cancer at Regional cancer centre at North-West India, 96% in women and 4% in men, giving female-male ratio of 24 and accounting for 26% of all cancer cases reported during this period. The average age at diagnosis was 51 years. The risk of developing breast cancer is strongly related to age with 11% of new breast cancer cases diagnosed in persons younger than 35 years, 80% in those aged 35-64 years and 9% in those aged 65 years and above. Among all detected cases, 8% were metastatic at diagnosis and 527 (15.5%) breast cancer cases, including 511 women died during the study period. Conclusions: Breast cancer was the leading cause of death from cancer in women. Early detection in order to improve breast cancer outcome and survival remains the cornerstone of breast cancer control. Key-words: breast cancer, epidemiology, India

Abstract Id: YUGP5389

Retrospective Analysis On Treating Oral Cavity Carcinomas With Accelerated Fractionation In Comparison To Conventional Fractionation: Report On Toxicity And Control Rates
Presenter - Dr. Satyajeet Rath
Co-author - Anja Dietel, Anja Dietel,

Abstract: Background: Adjuvant radiotherapy (RT) is the recommended treatment for adequately resected oral cavity squamous cell carcinomas (OCSCC) with high-risk features like T3 or higher disease, N2a or higher disease, close resection margins, and cases with Lymphovascular invasion (LVI) and perineural invasion (PNI). Aims: The purpose was to retrospectively analyze the RT toxicities and outcomes of the at a tertiary cancer center Methods and Materials:
Leptomeningeal Carcinomatosis From Adenocarcinoma

Presenter- Dr. Sumanth kumar Mallupattu
Co-author - , ,

INTRODUCTION-Head and neck cancers are a significant problem in India constituting approximately one-third of all cancer cases. It. Early diagnosis and complete treatment form cornerstone in cure of head and neck cancers treatment cost and its availability are major obstacles. OBJECTIVE-To study stage wise presentation of head and neck cancer patients registered in rural tertiary cancer care centre sevagram.Compliance for initiating the treatment in beneficiaries of RGJAY scheme.To identify factors associated with interruption of radiotherapy. MATERIALS AND METHODS-Hospital records of newly registered head and neck cancer patients for year2016 were searched and were included for analysis Those who were eligible for radical radiotherapy treatment under RGJAY scheme were further studied for compliance to initiate radiotherapy and then compliance to radiotherapy. RESULTS - Total number of patients registered were 270,more common among males77.0%. Carcinoma of oral cavity was commonest whereas carcinoma pharynx was least frequent diagnosis,smallest proportion of patient presented in early stage20.6%, 80.4% in advanced stage. Operative intervention,early stage at presentation,employed patients were more likely to initiate treatment which is statistically significant.Out of228 patients,only43.8% were started on radiotherapy employed patients were more likely to complete treatment whereas other factors like sex,stage at presentation,concurrent chemotherapy,previous operative intervention, neoadjuvant chemotherapy,treatment technique, fractionation, treatment machine used are statistically not significant.

Conclusion - Small proportion of patients presented in early stage20. 6%. Majority failed to start treatment after diagnosis even if it’s provided free of cost which suggests working on stigma and awareness to be focussed rural india.Operation is associated with more likelihood of initiating radiotherapy whereas early stage at presentation and employment that can be interpolated as level of education leads to higher chance of initiating and completing prescribed treatment.

Abstract Id: YUGP5395

Stage Wise Presentation In Head And Neck Cancer Patients Registered In Rural Tertiary Cancer Care Center For Year 2016 And Compliance To Radiotherapy In Rgjay Beneficiaries
Presenter- Dr. Pallavi Kalbande
Co-author - , ,

Background: Leptomeningeal carcinomatosis(LMC) is an unusual and very rare event in the clinical course of anorectal carcinoma and even in the setting of other malignancies. Visual disturbance is by itself an unusual presentation of LMC. We herein, report a case of locally advanced adenocarcinoma anorectum presenting with visual disturbances during the course of disease attributable to isolated LMC as initial manifestation of metastatic spread of disease. Case: A 28 year-old male with no known co-morbidities and with symptoms of constipation, bleeding P/R and abdominal distension was diagnosed as locally advanced moderately differentiated adenocarcinoma of anorectum. He underwent diversion colectomy followed by NACRT with 50 Gy/25f/5weeks with concurrent oral capecitabine 1000mg BD. One week after therapy, he developed sudden onset of blurring of vision in right eye. Ophthalmological exam revealed CRVO of right eye and coagulation profile was unremarkable. CEMRI brain showed focal meningeal carcinomatosis in the right frontal convexity. CSF cytology revealed atypical cells suspicious of malignancy. He received WBRT with 30 Gy/10f/2weeks with four cycles of weekly intra-thecal chemo-regimen consisting of methotrexate-12mg, hydrocortisone-100mg, cytarabine-60mg with 2nd and 3rd cycles given during radiotherapy. Two weeks later, he developed intestinal obstruction with poor general condition. He was put on conservative management but had left against medical advice. Discussion: Unfortunately, LMC still entail a grim prognosis with a median survival of 4-6 weeks if left untreated. The response to treatment is unpredictable and prognostication is deemed difficult. The histology of underlying primary cancer is the best predictor of response to treatment. For example, most lymphoma and breast cancers are usually relatively sensitive to RT and occasionally behave as indolent diseases in leptomeninges. Adenocarcinoma of anorectum, as in our case, seems to have a poor response to both chemotherapy and radiotherapy. There exists no standard criteria to evaluate the response to treatment. The conversion of CSF cytology from positive to negative and improvement/stabilization of the clinical status have been widely used in several clinical trials. Our case report is an example revealing the dismal prognosis of LMC. Conclusions: LMC remains a challenging scenario with management currently including intra- CSF chemotherapy, RT and systemic agents. Unfortunately, outcomes are disappointing with limited benefit in overall survival and symptomatic improvement. Future research and prospective clinical trials should aim at developing effective anticancer agents with improved delivery to the CNS and CSF. Physicians should also be more vigilant of the risk of this rare type of spread from rectal adenocarcinomas in order to establish rapid diagnosis and initiate early treatment.

Abstract Id: YUGP5399

Melanoma Of The Anal Canal - A Case Series
Presenter- Dr. Ahmed syed Murtaza
Co-author - , ,

PURPOSE: Anal melanoma is an uncommon and aggressive cancer. Different surgical modalities have been used in managing the disease with no clear evidence to favor one approach over another. METHODS: The medical records of patients with anal melanoma treated at the H. Lee Moffitt Cancer and Research Institute between 2011and 2017 were reviewed. Published anal melanoma studies, including more than ten patients with outcome data, also were reviewed CONCLUSIONS: Anorectal melanoma is a rare and challenging disease. The preoperative staging influences the treatment schedule. In the absence of strong survival benefit of abdominoperineal resection in managing the nonmetastatic form of the disease, it is reasonable to consider local excision as the initial treatment of choice. Adjuvant radiation therapy is well tolerated and is promising in improving locoregional control.

Abstract Id: YUGP5400

Adenocarcinoma Lung With Scalp Metastasis - A Rare Presentation: A Case Report And The Literature Search

Journal of Cancer Research and Therapeutics - Supplement 1 - 2017 - Volume 13
ADENOCARCINOMA LUNG WITH SCALP METASTASIS - A RARE PRESENTATION: A CASE REPORT AND THE LITERATURE SEARCH

Presenter - Dr. LIJEESH A L
Co-author -

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day old gentleman, nonsmoker, with history of tobacco chewing and alcohol consumption. He presented with complaints of cough, dyspnea, upper back pain, and multiple tender scalp swelling of 1 month duration. On examination he had an ECOG performance status of 2. Air entry was decreased in lower lobe of left lung. There were multiple, firm, nodular skin colored swellings in the left parietal and occipital areas of the scalp. CT THORAX showed a soft tissue lesion with spiculated margins in left lower lobe of lung with more than 90 degree contact with the aorta. A lytic lesion was seen in the transverse process of D7 vertebra. MRI SPINE showed multiple focal lesions in the body of C3, C5 and C7 vertebra. Bone expansion and bone destruction was seen in the transverse process of D7 vertebra along with other focal lesions in D6, D8, D10, D12, L1, L2 and L3. CT BRAIN showed no evidence of parenchymal metastasis. Multiple soft tissue swellings were seen in left occipital and left temporoparietal areas. A lytic area with minimal soft tissue component was seen in the anteroinferior aspect of squamous part of right occipital bone, adjacent to the right occipital condyle. CT guided FNAC from the lesion was suggestive of non small cell carcinoma lung, possibly adenocarcinoma. FNAC from the scalp lesion showed cells with similar morphology as from the lung lesion and so it was suggestive of metastasis from the primary lung cancer. The patient was treated with palliative radiation to the spine and scalp. In view of his poor performance status he was started on Zoledronic acid injection and empirical Gefitinib. He was given spinal brace and medicines for pain relief.

OTHER CASES OF CARCINOMA LUNG WITH SCALP METASTASIS IN LITERATURE

Special Article: A Case Report and Literature Search

1. BIOMED CENTRE RESEARCH NOTES APRIL 2011 LAURA PAJAZITI et al SKIN METASTASIS FROM LUNG CANCER - A CASE REPORT 45 year old Albanian male presented with multiple swellings in the scalp, neck, chest and abdomen. Excision biopsy from the lesions showed metastasis from small cell carcinoma. CT chest showed left lung lesion with brain and adrenal metastasis. 2. INDIAN DERMATOLOGY ONLINE JOURNAL 2015 JAN-FEB 6(1) LAXMIKANT RAMKUMARSINGH TOMAR et al SCALP SWELLING: AN UNUSUAL PRESENTATION OF SMALL CELL LUNG CARCINOMA 34 year old Indian male presented with painless swelling in the right temporoparietal region of scalp. CT chest showed right parihilar lesion with pleural effusion. FNAC from scalp lesion and biopsy from the lung lesion showed features of small cell carcinoma. 3. JOURNAL OF CANCER RESEARCH AND THERAPEUTICS 2013 JAN – MARCH 9(1) RACHAKON – DA KM, GEORGE MK et al SCALP METASTASIS: AN UNUSUAL PRESENTATION OF NON SMALL CELL LUNG CANCER PROGNOSIS OF CUTANEOUS METASTASIS IN CURRENT ERA 77 year old gentleman presented with multiple nodular lesions on the scalp, biopsy from which showed metastasis from adenocarcinoma. CT chest showed a right parihilar mass lesion. Bone scan showed metastasis in the midsternum. 4. JOURNAL OF CANCER RESEARCH AND THERAPEUTICS 2012 JULY-SEP 6(3) GUPTA PP, GUPTA KB et al SCALP METASTASIS: A PRESENTING FEATURE OF SQUAMOUS CELL CARCINOMA OF LUNG 45 year old gentleman presented with a solitary scalp swelling in the right temporal region. CT chest showed lesion in left lung with metastasis to right lung, liver and adrenals. Biopsy from scalp swelling, right cervical node and bronchoscopic biopsy from lung lesion showed features of squamous cell carcinoma. 5. INDIAN JOURNAL OF DERMATOLOGY VENEREOLOGY AND LEPROSY 3 MARCH 2015 VOLUME60 ISSUE2 NALAN AKGUL BABACAN et al A CASE OF MULTIFOCAL SKIN METASTASIS FROM LUNG CANCER PRESENTING WITH VASCULITIC TYPE CUTANEOUS NODULE 55 year old gentleman presented with nodular swellings on the face, neck, scalp, fingers and right lower limb. CT scan showed a left hilar mass with liver and bone metastasis. Punch biopsy from the scalp lesion and bronchoscopic biopsy of the lung lesion showed features of squamous cell carcinoma. NO SOURCE AUTHOR ARTICLE CASE REPORT 6 INDIAN JOURNAL OF DERMATOLOGY VENEREOLOGY AND LEPROSY 2003, VOLUME 69, ISSUE 4. DEVALIA H, RAO R et al A RECURRENT SWELLING OF THE SCALP 70 year old gentleman presented with a scalp swelling in the left parietal area. CT chest showed a left hilar mass. FNAC from the scalp lesion and bronchoscopic biopsy from the lung lesion showed features of squamous cell carcinoma. 7. THE PAN AFRICAN MEDICAL JOURNAL 29JULY 2016, VOLUME24 MOHAMED FEOTHI et al LUNG CANCER REVEALED BY MULTIPLE METASTASIS OF THE SCALP 69 year old gentleman presented with multiple scalp nodules. CT showed a lesion in the lower lobe of left lung, with multiple vertebral metastasis and a lesion in the vault of the skull. Biopsy from the scalp swelling showed features of squamous cell carcinoma.

8 BMJ CASE REPORTS 8 SEPTEMBER 2014 ROBERT BRIAN MCGRAITH et al CUTANEOUS METASTASIS IN NON SMALL CELL LUNG CANCER 61 year old gentleman presented with 2 painful scalp swellings. CT showed a right sided lung lesion with multiple bone metastasis. Biopsy from lung lesion, scalp and bone lesion showed features of squamous cell carcinoma. 9 INTERNATIONAL JOURNAL OF HEALTH AND ALLIED SCIENCES 2015, VOLUME4, ISSUE2 SHIKHA SOOD, SHIVANI BAKSHI et al CUTANEOUS METASTASIS: A RARE MANIFESTATION OF SQUAMOUS CELL CARCINOMA OF LUNG 62 year old gentleman presented with a nodular right sided scalp swelling. CT scans showed a right hilar mass and a right frontal lobe lesion with extracranial extension. Biopsy from lung and scalp lesions showed features of squamous cell carcinoma 10 NORTH AMERICAN JOURNAL OF MEDICAL SCIENCES MAY 2016; 8(5) YAZAN ABEEN et al CUTANEOUS METASTASIS AS A FIRST PRESENTATION FOR LUNG ADENOCARCINOMA 72 year old gentleman presented with a rapidly growing right parietal scalp lesion, CT scans showed multiple lesions in bilateral lungs. CT guided biopsy from the lung lesion and biopsy from the scalp lesion revealed poorly differentiated carcinoma possibly adenocarcinoma. No SOURCE AUTHOR ARTICLE CASE REPORT 11 ACTA DERMATO- VENEREOLOGICA 2006; 86(5) REICH A et al KERATOCANTHOMA LIKE CUTANEOUS METASTASIS OF LUNG CANCER: A LEARNING POINT 58 year old lady presented with a keratocanthoma like lesion on the scalp and enlarged supraclavicular lymph nodes. CT scan showed a right apical lung mass. Biopsy from the scalp and lung lesion revealed features of small cell carcinoma. 12 GRAND ROUNDS JOURNAL 2010, VOLUME 5 LI-CHER LOH et al SCALP METASTASIS FROM SQUAMOUS CELL CARCINOMA OF LUNG 53 year old gentleman presented with a solitary right sided scalp lesion. Bronchoscopy revealed a lesion at the carina. Biopsy from scalp lesion and lung showed features of squamous cell carcinoma. 13 ARCHIVE OF ONCOLOGY 2003, VOLUME 11, ISSUE 2 TAKAHIDE KODAMA et al SCALP METASTASIS FROM LUNG CANCER 80 year old lady presented with a scalp nodule in the right temporal area. CT showed a large mass in left upper lobe with metastasis to brain, bone, liver and adrenals. Biopsy from the scalp lesion showed features of squamous cell carcinoma.
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Versatility Of Skin Grafting In Head And Neck Reconstruction

Dr. Akhilesh Wodeyar

Skin grafting has proved invaluable technique for immediate repair and reconstruction of the operated area. The extension of radical cancer surgical principles in particular has created wounds that, in many instances, require skin-grafting techniques. It has been found desirable, in most instances, to apply the skin graft at the time of the primary operation, thus mitigating scar contracture deformity with its severe effects on function and form. The application of the general principle of skin grafting has extended itself to include dressing in radical operations about the maxilla, cheek, orbit, dura, alveolus, bucco-alveolar sulcus, gallowo-alveolar sulcus, floor of the mouth, tongue, palate, pharynx, larynx, and cervical esophagus. We have presented three such different cases in this paper where the primary defect was closed using skin graft. We have used it in a patient who underwent hemi-maxilectomy, closure of resection of maxilla due to chronic osteomyelitis and in a patient who underwent selective neck dissection and marginal mandibulectomy involving the skin. All three cases presented at different anatomical locations. The technique of free skin grafting in the repair of certain wounds involving the sinuses and orbit, the tongue, cheek, floor of the mouth, pharynx, larynx, and cervical esophagus has proved helpful in the rehabilitation of the patient undergoing massive resection at these sites. A composite operation including the excisional and immediate reconstructive technique pertaining to free skin grafting as a one-stage procedure has enhanced the functional and aesthetic aspects of the management of head-and-neck tumors.

Abstract Id: YUGP5410

Outcomes After 1000 Gasrectomies, Experience From A High Volume Tertiary Care Cancer Centre

Dr. Nikhil Mehta, SAURIN SHAH, SAURIN SHAH,

Background: Tata Memorial Centre is a high volume centre for gastric cancer surgery. We found a continually increasing numbers of resections performed for gastric cancers and other gastric tumors over the last decade. Aim-We aimed to evaluate peri-operative outcomes in different time periods for different oncological indications and short & long term outcomes after surgery. Methods-Data was collected from a prospective database of GI & HPB service, Department of Surgical Oncology, Tata Memorial Centre, Mumbai from Jan 2002 to Dec 2016. Results -1000 patients underwent resection for gastric malignancy in the above mentioned time span. Of the gastric resections, 880 were performed for gastric adenocarcinoma and 120 for other histologies (Gastric GIST, Lymphomas, & others). The median age of patients of gastric adenocarcinomas undergoing resection was 54 years with male/female ratio of 3:1. 62% tumors were distal and 36% were proximal/gastro-esophageal junction. The median lymph node yield was 17, however it was significantly higher (22), in the later time period as the hospital volume increased. The median hospital stay was 7 days and overall perioperative morbidity & mortality was 18.9% & 1.5% respectively. The 3 and 5 years overall survival was 52.3% and 41.2% Conclusion - Results from our study indicate that D2 lymph node dissection and the overall quality of surgery gets better with increasing hospital volumes. Standardization of surgical technique and centralization, with establishment of centre of excellence for treating gastric cancer might result in improved overall outcomes.

Abstract Id: YUGP5412

Off-Clamp Technique Partial Nephrectomy Feasibility And Impact On Renal Functional Outcome: A Single Institute Experience In South Indian Patients.

Dr. Sivakumar Mahalingam

Introduction and objective: Partial nephrectomy or nephron sparing surgery is the standard of care for the majority T1 renal tumors. Open, laparoscopic and robotic approaches are being used for...
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Performing partial nephrectomy with equal outcomes. Various partial nephrectomy technique have evolved to reduce the ischemic injury to the renal parenchyma with variable effects on renal function. Off clamp technique avoid the renal parenchymal ischemic injury and better preserve the long term renal function. Thus delaying or avoiding the development of chronic kidney disease. Material and Method: Patient who underwent partial nephrectomy from 2007 to 2016 were analysed retrospectively. Two group of patient included off-clamp technique and on-clamp technique(warm and cold ischemia) Demographic data, clinicopathological factors, pre-operative and post-operative GFR estimation by radioisotope renography, surgical safety margin, complications(Clavien Dindo classification), blood loss , blood transfusion rate were analysed. Results: Twenty four patients who had partial nephrectomy between 2007 and 2016 were taken for analysis. The mean age was 46 years, one was a pediatric patient with bilateral Wilms tumor aged 2 years and he underwent staged bilateral partial nephrectomy. Majority had clear cell histology 75%(18/24), papillary histology 12.5%(3/24), two Wilms tumor and one oncocyctoma. All had open partial nephrectomy except two had laparoscopic assisted procedure. Ten (42%) had on-clamp technique out of which one had warm ischemic and nine had cold ischemic clamping technique. The mean clamping time was 35 minutes. Fourteen(58%) underwent off-clamp technique. There is no difference in the tumor size, overall complications, blood loss, blood transfusion and hospital stay among the two group. All surgical margin were negative in both group. The percentage decrease in GFR(radioisotope renography) in the postoperative period(>3 months) was 0.7 % in the off-clamp group compared to 8 % in the on-clamp group. Conclusion: Off-clamp technique PN is a feasible and oncologically safe technique. It avoids the ischemic renal parenchymal injury after PN. The renal functional outcome was better with off clamp technique. The limitation is the less number of cohorts and retrospective nature of the study. Key word: Nephrectomy, Chronic kidney disease, Glomerular filtration rate, Radioisotope renography.

Abstract Id: YUGP5417
Neoadjuvant Chemotherapy In Locally Advanced Oral Cancers
Presenter- Dr. SUMANTH K R
Co-author - ,

Introduction : One third of all the malignancies in India involve head and neck region and half of them are oral cancers. There is high prevalence of oral cancers in Kolar and 80% of these patients present with locally advanced disease. Treatment of these cancers is challenging. Many of them are borderline inoperable at presentation. Their disease clearance with safe margins and outcomes are of concern. Therefore we tried neoadjuvant chemotherapy in 26 locally advanced oral cancers and compared them with similar patients undergoing upfront surgery. Aim: To evaluate the usefulness of neoadjuvant chemotherapy in locally advanced oral cancers. Methodology: 74 patients with T4 oral cancers were included in the study and randomized into 2 groups. ‘GROUP A’ received 2 cycles of NACT using paclitaxel and carboplatin combination. These patients were later subjected to composite resection with reconstruction and adjuvant treatment. ‘GROUP B’ was taken up for composite resection and reconstruction followed by adjuvant treatment. The outcome was assessed with regards to margins of resection, loco regional control and morbidity. Results: After a mean follow up of 1 year, 12 patients who received NACT, had partial response, 5 patients had progressive disease. There were clear margins of resection in 18 and resection was R1 in 4 . There were 5 local and 2 regional spread and 15 patients were disease free, 40 patients undergoing upfront surgery and adjuvant treatment had clear margins and 1 had local and regional recurrence. 36 patients are alive and disease free. The morbidity with regards to trismus, dysarthria, oral competence was similar in both groups. Conclusion: NACT helps to down stage the tumor in locally advanced oral cancers and facilitates resection with clear margins. It requires aggressive resections with wide margins. NACT is helpful in borderline inoperable cases and in checking progression of cancer till patient is operated.

Abstract Id: YUGP5414
Non Small Cell Lung Cancer Undergoing Lobectomy-A Case Series
Presenter- Dr. Ahmed syed Murtaza
Co-author - ,

All patients undergoing surgery for NSCLC at indoamerican cancer hospital were evaluated from period from 2011 to 2017. HPE characteristics,survival and other parameters were evaluated and compared to other studies.

Abstract Id: YUGP5415
Pediatric Ewingâ€™s Sarcoma/ Pnet : A Tertiary Center Experience
Presenter- Dr. Pooja Gujyal Chebbi
Co-author - ,

Background: The management of Ewingâ€™s sarcoma family of tumors (ESFT, Ewingâ€™s sarcoma/primitive neuroectodermal tumor) has been established as a multimodality treatment. Indian patients present at a more advanced stage and the compliance of treatment is suboptimal. Data on pediatric Ewingâ€™s sarcoma from developing countries is sparse. Therefore, we conducted the present study to analyze the epidemiological profile and outcome of multimodality treatment of ESFT in the pediatric age group at a tertiary nonprofit institute over a decade. Objective: To describe the epidemiology and determine outcome of pediatric Ewingâ€™s Sarcoma / PNET . Methods: A retrospective analysis of case records of all children diagnosed with Ewingâ€™s Sarcoma /PNET between 2007-2016 in the Department of Pediatric Oncology, KCI was undertaken. Results: Between 2007-2016, a total of 185 children were diagnosed with Ewingâ€™s Sarcoma /PNET with an annual average of 18 per year. The median age at presentation was 12 years, range from 8 months to 14 years. The male to female ratio was 1.2:1 (101 males and 84 females). 80 % had swelling as the presenting symptom. 61 patients (33%) showed a primary tumor in their extremities, 32 (17%) in the pelvis, 20(11%) in the ribs, 17 (9%) in the spine.38(20%) patients had disseminated disease at diagnosis. Metastatic disease most commonly involved the lung and bone .7 patients refused treatment ,of the patients who received treatment majority 114 (61%) received chemotherapy and radiotherapy ,18 (10%) patients received only symptomatic and supportive therapy .18 (10%) patients received only chemotherapy, 17(9%) patients received Palliative therapy (including chemotherapy and radiotherapy ). Majority (77 %) of the patients received IESS â€“ II Chemotherapy Protocol while 23 % received the IESS-III Protocol . Conclusion: Of the patients who received definitive treatment 36% patients are in remission while 64% patients had progressive disease Key words: Chemotherapy, Ewingâ€™s Sarcoma, pediatric, survival.

Abstract Id: YUGP5421
Free Supraclavicular Lymph Node Transfer For Post Mastectomy Upper Limb Lymphedema
Presenter- Dr. Prashant Puranik
Co-author - ,

Introduction Increasing incidence in breast cancer in India will result in more number of cases of post mastectomy lymphedema. Physiological surgeries including Free lymph node transfer are emerging as a promising treatment modalities. Materials and methods A 63 year old female patient presented with swelling of left upper limb for 18 years. She had undergone left mastectomy with axillary clearance with post-operative radiation and chemotherapy 26 years
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Abstract Id: YUGP5426
Complex Head And Neck Reconstruction In A Toddler With Free Flap
Presenter- *Dr. Prashant Puranik
Co-author - Swati batra, Swati batra,

Introduction Free flaps offer a unique advantage in reconstructing complex defects. Free flaps in adults are a routine now for various defects. Free flaps usage in paediatric reconstruction is increasing but still poses to be challenging, due to technical difficulties in dissection and anastomosis. Below the age of 5 years , surgical challenges are very significant. Material and methods 18 month old girl child presented with swelling over left cheek since 9 months. Child was operated 6 months back but swelling reappeared in one month & referred for further treatment. Histological diagnosis was sialoloblastoma of parotid gland. Child underwent left total parotidectomy with left posterior segmental mandibulotomy with composite resection of buccal mucosa and overlying skin. Free Anterolateral thigh flap reconstruction was done. Flap was inset was divided bipaddle based on transverse branch and main pedicle . Arterial anastomosis was done to facial artery and venous anastomosis to IJV. Patient had a hypotensive episode in post op and arterial thrombosis. Patient was re-explored on POD 0 and arterial anastomosis revised. In view of flap, which was not relived after all measures, transverse branch and main pedicle were anastomosed to lingual and ascending pharyngeal vessels. Subsequent post operative period uneventful. Discussion Small calibre of vessels in toddlers necessitate delicate dissection preferably under microscope. Anastomosis needs higher magnification and 11-0 ethion sutures. Spasm can be prevented by minimal handling of vessels, liberal use of vasooccluder fluid irrigation, keeping child warm. Children have a relatively fewer risk factors. Compared to other reconstructive modalities, overall number of surgeries and duration of care, and their related distress to the child and family are significantly less with free flaps. Conclusion Microvascular reconstruction feasible in toddlers. Spasm can be prevented by minimal handling of vessels, related distress to the child and family are significantly less with free flaps.

Abstract Id: YUGP5428
The Advanced Buccal Mucosa Cancer Involving Masticator Space (T4B): New Classification And Outcome Of Newer Surgical Technique (Compartment Resection).

Among these, 802 patients underwent EGFR and 345 patients underwent ALK mutation study done were included in the study. RESULTS: A total of 1147 patients underwent EGFR and ALK mutation studies. Among these, 802 patients underwent EGFR and 345 patients underwent ALK mutation studies respectively. Among the patients, frequency of EGFR and ALK mutations in patients of Lung carcinoma of Indian Origin

Presenter- *Dr. Sarath chandra Reddy
Co-author - ,

Frequency of EGFR and ALK mutations in patients of Lung carcinoma of Indian Origin Dr.Sarat Chandra Reddy K DNB, Dr. Sasiakala DNB,DMRT ,Dr.Praveen DNB,Dr.Anuradha DNB, Dr. Amrithanshu , Dr. Ramesh S Bilimaga MD,DMRD. Department of Radiation Oncology,HCG Hospitals,Bangalore. INTRODUCTION: Lung cancer accounts for 13 per cent of all new cancer cases and 19 per cent of cancer related deaths worldwide whereas in India, lung cancer constitutes 6.9 per cent of all new cancer cases and 9.3 per cent of all cancer related deaths. EGFR mutations are commonly present in Non-Small cell Lung Carcinoma and they have a predictive role in the therapy with TKIs in Lung carcinomas. MATERIALS AND METHODS: A total of 3112 patients were registered between august of 2010 and 2017. These patientsâ€™ data was reviewed and patients with EGFR and ALK mutation study done were included in the study. RESULTS: A total of 1147 patients underwent EGFR and ALK mutation studies. Among these, 802 patients underwent EGFR and 345 patients underwent ALK mutation studies respectively. Among the patients,
the mean age was 61.9 years and the incidence of EGFR and ALK mutation overall was 39.1% (313) and 8.1 % (28) respectively. With exon 19 being the commonest at 20% positivity, the distribution of other exon mutations among EGFR positive patients were exon 21(14%),exon 18 (4.7%), exon 20 (1.6%) and dual exon mutations (1.8%). CONCLUSION: Compared to the Western prevalence rate in the range of 14-24% of EGFR positivity and 3% of ALK positivity, this study demonstrated higher incidence of EGFR and ALK positivity. So, any effort to obtain a tissue sample for mutation study should be encouraged.

Abstract Id: YUGP5437
An Algorithmic Approach To The Maxillectomy Defect : A Single Institution Experience
Presenter - Dr. Karthik Munagala
Co-author - Virendra Bhandari, Virendra Bhandari,

BASIS: The postoperative maxillary defect bears functional and aesthetic consequences with potential morbidity. Rehabilitation options include obturation and surgical reconstruction. We aimed to review our experience and formulate a maxilloectomy defect-specific reconstructive algorithm. MATERIALS AND METHODS: We analyzed 54 patients over a period of 6 years (Jul 2010-Jul 2016), retrospectively categorized them as per defect class (ref Brown Classification) and reviewed functional outcomes of reconstruction. RESULTS: Of 54 patients, 14 were Class 1, of which two were reconstructed with temporalis myofascial flap(TMf). The remainder did not need reconstruction due to obviatoin of oronasal communication. Twenty nine patients were Class 2, of which 8 did not require reconstruction as above, 7 received skin graft/obturator(SGO), 11 radial forearm free flap( RFFF- suprafacial, osteocutaneous or sandwiched with iliac crest bone graft) and two TMF. Eight patients were Class 3, of which 4 were reconstructed with TMF, 3 with osteocutaneous free fibular flap(FFF) and one with SGO. Three patients were Class 4, one each receiving SGO, TMF and rectus abdominis free flap(RAFF). In all except two patients, the nasogastric tube and tracheostomy (where applicable) were removed by 5th and 7th postop day respectively. Two patients developed moderate trismus following radiation therapy. All patients had intelligible speech. Two patients had a flap failure (one RFFF and one TMF) and were obturated (free flap viability 93.3%). No free flap patient had oronasal fistula, nasal regurgitation or epiphora, and all expressed cosmetic satisfaction. CONCLUSION: Based on our results, the versatile RFFF was our choice in class 1/2, FFF in class 3 and RAFF in class 4 defects. Using these class-specific reconstructive techniques, we were able to achieve high aesthetic and functional satisfaction indices.

Abstract Id: YUGP5439
A Dosimetric Study On Intracavitary Radiotherapy By Co-60 Based Hdr Brachytherapy Unit Following The American Brachytherapy Society Guidelines
Presenter - Dr. Shweta Kaushik
Co-author - Dr. Shamit Chopra, Dr. Shamit Chopra,

Introduction: Owing to Co-60 high dose rate (HDR) brachytherapy unit advantages like good clinical results, long half life and economical benefits is gaining importance these days. It is important to evaluate and analyze the dosimetric parameters for the possible impact on the doses to target, organs at risk (OARs) and clinical outcomes. Materials and methods: Twenty patients with locally advance carcinoma cervix planned for HDR brachytherapy were included in this study after receiving 50 Gray (Gy) in 25 fractions (#) by external beam radiotherapy. After placing the three channel applicators in the uterine cavity under short general anesthesia, the patients were shifted for computer tomography (CT) scan. CT images were transferred to the planning system. Planning for 7 Gray (Gy) per fraction was done for Co-60 HDR brachytherapy unit following American Brachytherapy Society (ABS) guidelines. All the patients received three fractions, one fraction per week. Results: The mean doses received by EBRT and HDR brachytherapy to HRCTV in EQD2 was 84.82 (Standard Deviation (SD): 2.45). Similarly, the mean EQD2 to two cubic centimeter (D2cc) of bladder was 72.93 (SD: 2.96), D2cc of rectum was 65.62 (SD: 2.97), D2cc of sigmoid was 62.06 (SD: 2.91), D5cc of left femoral head was 39.94 (SD: 2.91) and D5cc of right femoral head was 40.10 (SD: 2.63). Conclusion: HDR Brachytherapy with Co-60 source is well tolerated and it can be routinely used for the treatment of carcinoma cervix.

Abstract Id: YUGP5441
Adequate Parotidectomy: A Concept Dictated By Disease Extent
Presenter - Dr. Pragati Mohindru
Co-author - Dr. Rishav Garg, Dr. Rishav Garg,

BASIS â€“ Adequate parotidectomy incorporates facial nerve identification tumor dissection and removal with a surrounding healthy rim of parotid parenchyma and is emerging as standard of care for management of parotid neoplasms. The aim of this study is to evaluate the outcomes of adequate parotidectomy for the management of benign and malignant parotid gland tumors. MATERIALS AND METHODS â€“ We retrospectively analyzed a series of 100 patients who underwent adequate parotidectomy by a single consulting surgeon at our unit between January 2011 to August 2017. We studied parameters including proportions, recurrence rates and facial nerve function for benign as well as malignant tumors. The follow up period ranged from 2 to 20 months with a mean of 16 months. Results â€“ Of the 100 analyzed patients, 72 underwent adequate parotidectomy incorporating superficial lobe and 28 underwent adequate parotidectomy incorporating superficial and deep lobes. There were no recurrences of benign tumors (n=82) irrespective of tumor extent. The incidence of temporary and permanent nerve paresis was 0%. Among the malignant tumors (n=18), the facial nerve was incorporated owing to disease extent in 6 patients and the suitable rehabilitation was carried out as part of the primary procedure. In the remainder (n=12) patients, the incidence of temporary and permanent facial nerve paresis was 0% and 8.3%. 13 patients received adjuvant RT. There were 2 local recurrences at the mean follow up period (LCR = 88.9%) Conclusion â€“ Adequate parotidectomy provides excellent outcomes in benign and malignant parotid tumors with equivalent local control, facial nerve function and better preservation of facial contour compared with other standard techniques.

Abstract Id: YUGP5445
OpenSpecimen - Collaborative Development Of Biobanking Informatics Platform
Presenter - Mr. Srikanth Adiga
Co-author - ,

Access to high-quality biospecimens with associated data annotations is crucial for research. While collecting and storing biospecimen are not new concepts in research, this domain has received attention recently as biospecimen data is seen as vital for personalized medicine. Recent advances in molecular biology and genetics have resulted in a concomitant increase in the demand for well-annotated, properly preserved specimens. Today biobanking is a highly dynamic activity which faces many challenges, including the need to deal with ever increasingly complex demands of managing data and integrations with existing databases. Therefore having a biobank database is now more than simply a “tick box” exercise. The available informatics solutions will not have an “out of the box” support or sufficient data elements set up appropriately. The informatics platform will need to support the complex sample management workflows and data collection needs which are of diverse nature and specific to each collaborator, disease, or even geographic location. OpenSpecimen
Abstract Id: YUGP5453

**Perioperative Concerns In Transoral Robotic Surgeries (TORS)- Our Initial Experience**

**Presenter- Mrs. Namrata Ranganath**

**Co-author -**

**Introduction:** Robotic surgery being minimally invasive is becoming popular due to decreased postoperative morbidity, shorter hospital stay, faster recovery and better cosmetic results when compared to open conventional techniques. Weinstein and O’NE€Malley first developed TORS. [1] In this case series of three patients who underwent TORS, we would like to share our experience in perioperative concerns for TORS. Case report: All patients described were scheduled for TORS underwent preanesthetic evaluation. Preoperative investigations done as per institutional protocol. General anaesthesia with nasotracheal intubation was planned for one case and laryngeal mask airway for the other two cases and were elective tracheostomised preoperatively. As per ASA standards monitors connected and General Anaesthesia was conducted as per institutional protocol.(2) After surgery, residual NM blockade was reversed and decision to extubate the trachea immediately or after a period of observation was taken depending upon operative course and possibility of airway edema. Patient was shifted to postoperative recovery room for further monitoring and management. Conclusion: TORS benefits the patient, operating surgeon and anesthesiologist and improves the overall outcome.

Abstract Id: YUGP5455

**Anaesthetic Concerns Of Robotic Assisted Transthoracic Thymectomy(Ratt)- Case Report**

**Presenter- Mrs. Namrata Ranganath Co-author - Dr. D. C. Doval, Dr. D. C. Doval,**

**Introduction:**Thymectomy for thymoma ,a common anterior mediastinal tumor is one of the most frequently done surgical procedure involving the mediastinum both for benign and malignant diseases. Approaches range from open to minimally invasive. Introduction of minimally invasive techniques has lead to increased acceptance of thymectomy due to reduced postoperative morbidity, faster recovery, shorter hospital stay, and better cosmetic results. The introduction of robotic assisted invasive procedures has been a further step up in the development and evolution of minimally invasive techniques. Anaesthetic implications of anterior mediastinal mass and associated complications with robot and OLV are the challenges to the anaesthetist. Case report: 51 year old male patient weighing 65kgs diagnosed with thymoma was posted for RATT. Patient had complaints of cough -15days and no history suggestive of pressure symptoms or myasthenia gravis. O/e : METS >4.vital and systemic examination were normal. On admission all routine investigations done were within normal limits along with which PFT;bronchoscopy, Chest x-ray and lateral neck x ray were normal . CT showed anterior mediastinal mass - 7.1x2.9x3.7 cm, NPO confirmed and anesthesia consent taken. Patient was shifted to OT,16 G venous cannula secured in right upper limb. Epidural catheter inserted at T6-T7 level. After induction of anaesthesia ,trachea intubated with 39F L sided DLT. Position confirmed with fibre optic bronchoscope. Patient connected to PCV. 5-7 ml/kg tidal volume was the target.Left radial artery cannulated for IBP and central line catheterization done in Right subclavian vein.Patient was placed in supine position with 30 degree tilt to the left. OLV initiated and neuromuscular blockade achieved through continuous infusion with NDMRS. Patient developed bradycardia(HR -45 bpm), after insufflation of CO2( pressures 10mmhg), inj atropine 0.6mg iv was given. Pressures reduced to 8mmhg. Heart rate increased. Patient was stabilized. Docking took 35min and thymus was dissected in 2 hours.After hemostasis was achieved, 28 F ICD was inserted through 5th intercostal space at the port site, lungs inflated and incisions closed. Blood loss- 300 ml. Patient shifted to SICU after changing DLT to Single lumen ET. Connected to SIMV , reversed after an hour when patient had attempts.Bupivacaine infusion(0.125% @ 5 ml/hr) was given through epidural catheter post operatively. Patient was extubated the next day morning and shifted out from SICU. Patient was comfortable and rest of the postoperative period was uneventful. Conclusion: Robotic thymectomy poses new challenges to anaesthesiologists Main concerns of anaesthetic management of RATT: Airway management Patient positioning Capnothorax Surgical site Anaesthetist should be vigilant throughout, monitor the airway pressures, ETCO2 and signs of cardiovascular collapse Special care should be given to protect vulnerable pressure points and avoid nerve injury. Most importantly , entire OT team should be ready for emergency undocking. Postoperative analgesia is important.

Abstract Id: YUGP5461

**Clinicopathological Analysis Of Malignant Mediastinal Masses In Children**

**Presenter- Dr. Prateek Kumar Panda**

**Co-author - Rachna Seth, Prateek Kumar Panda,**

Clinicopathological Analysis Of Malignant Mediastinal Masses In Children

**Introduction:** Mediastinal masses have always been a diagnostic as well as therapeutic dilemma for medical professionals. Most of the clinical studies on mediastinal masses are retrospective single institutional studies mainly based on case records [1, 2]. Moreover the study population in these studies included children and adults as well as benign and malignant mediastinal masses both[3]. The clinical profile of malignant mediastinal masses in children is different when compared to adults [3]. Most of these studies were performed in other parts of the world and may not be reflective of our Indian patient cohort [4, 5]. Information on prevalence of superior mediastinal syndrome and factors associated with its occurrence is scarce in literature. The current study was planned to determine the prevalence and profile of tumors presenting as malignant mediastinal masses in children. The outcome of these tumors following chemotherapy and determinants of SMS were also evaluated. Methods: The authors prospectively evaluated 58 children aged 0-12 years with malignant mediastinal masses with...
significant mediastinal widening on chest x-ray and/or CT scan or having clinical features of superior mediastinal syndrome from August 2013 through May 2015 for their clinical presentation, aetiology and treatment outcomes. Following history and physical examination, complete blood counts and peripheral smear alone or along with bone marrow examination was done for all patients. If this showed blast cells, a diagnosis of an acute haematological malignancy was made which was further characterized by flow cytometry of blood/bone marrow examination [10]. In other children, CT scan of the neck, chest or abdomen was done especially for solid tumours. Tissue diagnosis for the malignancy was established by the least invasive procedure (FNAC or biopsy of mediastinal mass, other lymph node/tumor mass) [11]. Children with malignant mediastinal masses were evaluated for evidence of superior mediastinal syndrome [11]. The factors associated with this syndrome were evaluated e.g. age and sex distribution, histopathological diagnosis, site and stage of tumor, duration of symptoms before presentation to health care system. Treatment outcome was determined in the form of remission, relapse or mortality as per standard guidelines. Data were collected on predesigned proforma, managed using MS Excel spreadsheet and analyzed using Stata software. Frequency (percentage and its 95% confidence interval) was computed for each tissue diagnosis, clinical feature and treatment outcome of mediastinal malignancy. For determining association of different factors with SMS, chi square test was used and odds ratio with 95% confidence interval were used. Results: During the study period, total of 86 children were screened. 28 children with benign mediastinal mass were excluded from the study. 58 children were enrolled in the study. In the study cohort, 77% (n=45) were boys and rest were girls. Average age of presentation with mediastinal malignancy was 6.63 years (SD 3.43 years). The most common presentation of mediastinal mass in our study was either nonspecific constitutional symptoms like fever, night sweats, weight loss or the symptoms due to local invasion or compression causing respiratory distress and cough. The most common etiology of mediastinal mass in our clinical study was Hodgkin lymphoma (27%, n=16) followed by T cell acute leukemia (24%, n=14), neurogenic tumor (13%, n=8) and non Hodgkin lymphoma (8%, n=5). B cell acute leukemia also constituted considerable proportion of the sample population, but most of them had mediastinal mass as an incidental finding. The study showed age at presentation and sex of the child had no definite statistically significant association with the incidence of SMS. Regarding etiology only T cell acute leukemia had very strong association with SMS (p=0.01). Solid tumors in advanced stage i.e. stage III and IV were more likely to have SMS (odds ratio 2.7, p=0.29). Site of the mass in mediastinum was not a determining factor for SMS. The children with SMS had a more acute presentation as compared to those without the same (p=0.03). Overall 76% (n=40) children with mediastinal mass had favorable outcome at mean duration of follow up of 6.2 month. In the study group, Hodgkin lymphoma and B cell leukemia had better prognosis with 87% and 66% favorable response respectively. T cell leukemia and metastatic neuroblastoma had worse prognosis with only 50% of these children having favorable outcome in both cases. The sub group with superior mediastinal syndrome had relatively poor prognosis with survival rate of 67% while those without SMS had survival rate of 83% (p=0.05, odds ratio 4.6). Discussion: Dyspnoea and cough were the most common presentation of mediastinal malignancy in our study apart from nonspecific constitutional symptoms. Previously Shrivastav et al and Aroor et al also showed similar findings in their studies [1, 2]. In our study 56% of children with malignant mediastinal masses had superior mediastinal syndrome, which is significantly higher than other studies. It could be due to the fact that these studies were comprised of heterogeneous population including both benign and malignant mediastinal masses [3]. In our study, malignant mediastinal masses were more common than benign mediastinal masses. Temes et al in their study also showed malignant mediastinal masses are more common than benign mediastinal masses in children unlike adults [3]. However, the predominance of malignant mediastinal masses in a setting with high prevalence of tuberculosis can be explained by referral bias, as the study was carried out at a tertiary center and malignant masses are more likely to be referred for evaluation. The most common etiology of mediastinal mass in our clinical study was Hodgkin lymphoma followed by T cell acute leukemia, Non Hodgkin lymphoma and neurogenic tumor. Temes et al in their study showed Hodgkin lymphoma to be the most common mediastinal mass in children [3]. Studies based on adults like Shrivastav et al on the other hand showed thymoma to be most common mediastinal malignancy [1]. T cell leukemia was the most common mediastinal mass presenting with the superior mediastinal syndrome in our study. Neurogenic tumor and Hodgkin lymphoma constituted a significant proportion among the rest. Arya et al in their retrospective study also found out T cell leukemia to be the most common cause of superior mediastinal syndrome in children [14]. Age wise break up of different etiologies of mediastinal mass showed T cell leukemia was mainly found in adolescent age group. Neurogenic tumors were more common in younger age groups. This age distribution is helpful in suspecting the cause of malignant mediastinal mass and timely relevant investigations.

As previously described by Fraga et al, in our study also most of the neurogenic tumors were found to be localized in posterior mediastinum [15]. On the other hand T cell leukemia and Hodgkin lymphoma mainly involved superior and anterior mediastinum. Age of presentation, sex of the child and anatomical site of mediastinal mass was found to have, no correlation in predicting superior mediastinal syndrome. Advanced stage solid tumors were more likely to develop the superior mediastinal syndrome compared to early stage tumors. The duration of symptoms at the time of presentation was found to be a good predictor for the risk of having the superior mediastinal syndrome. An acute presentation with short duration of symptoms increases the likelihood of having SMS. Aggressive tumors like T cell acute leukemia and non Hodgkin lymphoma have greater incidence of the superior mediastinal syndrome. Slow growing tumors like Hodgkin lymphoma are less likely to have SMS even in presence of large mediastinal mass. Previously Fraga et al showed a survival rate of 70% and Temes et al showed a survival rate of 74% among the children with mediastinal malignancy in their studies [3, 15]. In our study group, survival rate was 76%, which is comparable to previous studies. In the children with SMS a survival rate of 52% was found out in the study performed by Arya et al and in our study the corresponding survival rate was 67% [14].Hence, it can be safely concluded that with timely adequate chemotherapy a good prognosis can be expected in most of the children with mediastinal malignancy. On the contrary, the prognosis was relatively dismal for the subgroup with superior mediastinal syndrome. Conclusion: The results of the study showed Hodgkin lymphoma and T cell leukemia are most common causes of malignant mediastinal masses. Neurogenic tumors are the most common cause in infancy, T cell leukemia is the most common cause of the superior mediastinal syndrome. Fever, respiratory distress, cough and lymph node swelling are most common clinical presentations of malignant mediastinal masses in children. The superior mediastinal syndrome is found in about 56% of malignant mediastinal masses. T cell leukemia and NHL are associated with higher risk of the superior mediastinal syndrome while Hodgkin lymphoma and B cell leukemia have a lower risk of SMS. Advanced stage of solid tumors predisposes for SMS (although the association is not statistically significant). Presence of the superior mediastinal syndrome is a poor prognostic factor for mediastinal mass. Overall 76% of the children with mediastinal malignancy had favorable outcome.

Abstract Id: YUGPS465

To Study The Clinical Behavior And Treatment Outcome In Patients Of Extranodal Non-HodgkinÂ’S Lymphoma

Presenter:*Dr. Chaturbhuj Agrawal
Co-author: Rajiv Kaushal, Rajiv Kaushal,
Abstracts

Title: To study the clinical behavior and treatment outcome in patients of extranodal non-Hodgkin’s lymphoma Aims and Objectives of the Study: Aim of this study is to study the clinic pathological feature, distribution and treatment outcomes of different types of extranodal non Hodgkin’s lymphoma patients with special consideration to their diverse clinical presentations. Primary objective is to study the diverse clinical presentation and distribution of different types of extranodal non Hodgkin’s lymphoma and secondary objectives are to determine response rates, pattern of relapses, progression free survival and overall survival. Material & Methods: Study Area: Department of Medical Oncology, Rajiv Gandhi Cancer Institute, New Delhi. Study population: A total of 61 biopsy and IHC proven patients with primary extranodal non Hodgkin’s lymphoma were enrolled while patients with concomitant nodal involvement and those with plasmacytomas or any other malignancy were excluded. Data collection technique and tools: All enrolled patients were studied with respect to their clinical presentations, Ann Arbor staging, serum LDH levels, IPI at diagnosis and treatment outcomes. Clinical features, pathological features, response to treatment and their treatment outcome and follow up data were recorded. Data analysis: Results are expressed as mean standard deviation for continuous variables and in numbers and corresponding percentage for categorical variables. Categorical data is compared using Chi-square or Fisher’s exact test for a two-sided p-value, whereas for ordinal data, the nonparametric tests are applied. The actuarial survival analysis is performed according to the method described by Kaplan and Meier. Cox regression analysis is used to correct for the confounding effect of differences in prognostic factors. The multivariate analysis of the variables predicting response is performed by using a logistic regression. The multivariate analysis for survival is performed by using the stepwise proportional hazards model after testing the proportionality assumptions for the co-variates. P value less than 0.05 is considered as statistical significance. All analyses performed with the statistical software SPSS version 22 (SPSS, Inc., Chicago, Ill., USA). Results: The median age of the patients is 54 years with 61 % patients being males. There were 8 deaths while 8 patients were lost to follow up at the time of evaluation. 21% patients had multifocal disease at presentation while systemic B symptoms were present only in 30 % cases. Most common site of involvement is GI tract (36%) followed by Bone (28%), Liver (13%), CNS (10%) and nose/nasopharynx (10%). Other uncommon sites of involvement included breast, kidney, testes, pancreas, skin, eyelids, uterus and submandibular gland. In GI Lymphoma, gastric lymphoma (26%) being most common followed by intestinal involvement (10%). Most common clinical presentation in case of GI lymphomas is abdominal pain and vomiting, in case of bony lymphomas with localized pain and swelling while focal neurological deficit is most common presentation in case of primary CNS lymphomas. DLBCL is the most common histological pattern (82%) observed in our study. 62% patients received R CHOP based chemotherapy while remaining patients received different regimens depending upon the site of involvement and histological type (DeAngelis protocol for primary CNS lymphoma (10%), R DA EPOCH (10%), Hyper CVAD (5%), CODOXM/IVAC for Burkittâ€™s lymphoma). 57% patients achieved CR with first line induction chemotherapy, 33% patients achieved PR, and 3 % achieved stable disease while 2% progressed. Median follow up period of our study is 24.2 months (range, 1.03-69.9). As estimated by Kaplan Meier curves, an overall 5 year disease free survival as estimated is 69.98% while 5 Year overall survival calculated is 80.05%. There were 14 relapses which were more common with multifocal disease, higher IPI, failure to achieve CR with first line chemotherapy and those with primary CNS lymphoma. 43% patients had early relapse while 57% patients had late relapse. Conclusions: 1) Primary extranodal lymphoma more commonly presents with site specific symptoms and with lesser B symptoms. 2) Gastrointestinal tract, mainly stomach and bone are the two most common extranodal sites. 3) DLBCL is the most common histology encountered in most of the studies in both nodal as well as extranodal location. 4) Multifocal disease at presentation imparts higher IPI and poor prognosis with higher chances of relapse despite achieving CR with first line treatment. 5) Response to chemotherapy is excellent with majority of patients achieving CR with first line chemotherapy however relapses are more frequent in those with higher IPI at presentation, CNS disease at presentation and in those who fail to achieve CR with first line chemotherapy.

Abstract Id: YUGP5471

Feasibility Of Immunotherapy In Metastatic Melanoma: First Data Set From A Tertiary Care Cancer Center Of India Of India
Presenter - Dr. Akhil Kapoor
Co-author - Vidya Bhargavi Rangappa, Vidya Bhargavi Rangappa

Background: Immunotherapy has been established as the standard of care in metastatic melanoma. However, there is limited experience and no published data in India owing to the rarity of the diagnosis and unavailability of the drugs. Pharmacogenic differences can augment the responses and toxicity in varied population and hence, we conducted a feasibility study in real world Indian setting. Patients and Methods: All consecutive patients who received immunotherapeutic drugs for metastatic malignant melanoma melanoma till June, 2017 were included in this prospective data base. Standard staging investigations, PDL1 staining (SP263 clone), and BRAF mutation status was carried out. The patients were given standard doses of nivolumab and Ipilimumab; Response (RECIST 1.1), toxicity (CTCAE version 4.03) assessment along with documentation of survival statistics was carried out. Results: Eight patients received nivolumab for metastatic melanoma. One patient received ipilimumab and nivolumab combination. The median age of the patients was 63 (43-78) years. Six (67%) patients had >3 sites of visceral disease. Five (55%) patients were treatment naive, while 3 (33%) patients had progressed on paclitaxel based therapy and 1 (11%) on low dose subcutaneous interferon based therapy. Of these, PDL1 was negative in all patients, however 2 had shown focal positivity. BRAF was positive in 2 (22%) patients. On response assessment, 1 (11%) patient was in complete metabolic response (CMR), 2 (22%) patients had partial response, 3 (33%) had stable disease, 1 (11%) had progressive disease while 1 (11%) patient had pseudo-progression. Response assessment was not available in 1 (11%) patient. The toxicities included myalgia in 5 (55%) patients, hypothyroidism in 2 (22%) patients, fatigue in 4 (44%) patients; pneumonitis with hepatitis occurred in 1 (11%) patient. However, in a background of rapidly progressive disease with liver and lung involvement, the immune toxicity versus disease was a diagnostic challenge. The median follow up duration was 7 months (range 2-11). The median progression free survival was 8 months (95% CI: 6-10) while median overall survival was not reached. Conclusions: Immunotherapy has changed the landscape of metastatic malignant melanoma and our limited experience prove its feasibility in Indian scenario. However cost, different metric for response assessment and management of toxicities are challenging.

Abstract Id: YUGP5473

Value Of Pet-Ct In Evaluation Of Para-Aortic Nodal Disease And Its Outcome In Locally Advanced Cervical Cancer.
Presenter - Dr. Ajay Sasidharan
Co-author - Dr. Umesh Mahantshetty, Dr. Ajay Sasidharan

Objective: Assessment of para-aortic (PA) nodal disease and tailoring the treatment has shown some benefit in clinical outcome. FDG PET-CT as a standard imaging and its impact on outcome in cervical cancer is not conclusive. With an aim to evaluate role of FDG PET-CT in PA nodal disease at diagnosis, response to treatment and post treatment surveillance in locally advanced cervical cancer, we undertook a prospective study and present here the results of the final analysis. Material and methods: Patients with FIGO stage IIb & IIb cervical
cancer underwent FDG PET-CT at pre-treatment evaluation and post-treatment at 6, 12, 18 and 24 months follow up. Patients received standard radio-chemotherapy including brachytherapy. Those with positive PA nodes in CT imaging were treated with extended field radiation therapy (EFRT) and remaining with pelvic radiotherapy. Outcome of patients were evaluated using Kaplan-Meier method. Results: Between September 2005 and November 2008, 100 patients with FIGO stage IIB and IIIB cervical cancer were enrolled. Pre-treatment PET-CT identified distant metastasis in 4 patients and hence excluded from the analysis. Nineteen patients (19.8%) received EFRT since they had positive PA nodes on CT imaging. Six patients (8.3%) had CT negative PET positive PA nodes. Median follow up was 74 months (5 – 102 months). At 6 months post treatment PET evaluation (done in 89 patients only since 7 patients had progressive disease by 6 months), 66 patients showed complete response (CR), 9 had partial response (PR) while 14 had progressive disease / distant metastasis (PD). At last follow-up, relapse was seen in 35 patients; local = 5, pelvic node = 1, PA node = 1, distant = 8; combined = 20. The 5 year disease free survival of patients with PA node negative (on CT & PET), CT negative PET positive PA nodes and PA node positive (on CT & PET) were 71%, 60% and 33% respectively (p=0.002). The 5 year overall survival of patients with CR, PR and PD was 84.8 %, 26.7 % and 17.1 % respectively (p<0.001). Conclusion: FDG PET-CT prior to initiation of treatment identifies additional PA nodal disease. Patients with PA nodal disease by PET only seems to have a relatively better outcome. Patients with CR in PET after definitive treatment has a better outcome. There is no added advantage/benefit of PET-CT in post treatment surveillance.

Abstract Id: YUGP5477

Diminishing Role Of Surgery In Small Liver Lesions: Are Ablation Techniques Equivalent To Surgery?

Presenter - Dr. Prashanth Chowdry
Co-author - Only E-Poster, Only E-Poster,

Introduction: Surgery forms the mainstay of treatment for most primary liver tumours and metastatic lesions when resectable. With advancement in surgical and anaesthetic techniques, the morbidity associated with hepatectomies have been lowered. Local or thermal techniques have come into vogue and have been shown to have acceptable outcomes. The authors of this study have analyzed the patients who have undergone ablation of liver lesions and assessed their outcomes. Aim: To evaluate the efficacy of less invasive techniques namely Radiofrequency ablation and Microwave ablation in treating primary and secondary liver tumours. Materials and methods: This study was done in HCG Hospital, Bangalore between December 2015 and July 2017. Patients with primary hepatic tumours and metastatic liver lesions measuring less than 5cm in diameter who underwent Radiofrequency ablation (RFA) or Microwave ablation (MWA) were evaluated and findings noted. Only one patient with tumour >5cm was included in view of recurrence after surgery and preclusion of re-surgery due to lack of consent for the same. Results: A total of 26 patients underwent RFA or MWA of liver lesions during the study period. Of the 26 patients, 20 were male and 6 were female. The patients were between the ages of 36 and 84 years of age with the mean age being 60.76 years. The indication for ablation was Hepatocellular carcinoma in 14 patients, Colorectal metastases in 2 patients and other causes such as metastases from Gastric GIST, Neuroendocrine tumours, Adenocarcinoma of pancreas, stomach or GE Junction in 10 patients. Most lesions were under 5cm in diameter and 100% ablation was achieved in all but one patient. All patients had pain as their only complaint post procedure. There has been no incidence of any major complication. None of the patients who have undergone complete ablation have had evidence of local recurrence on follow-up. Conclusion: Management of liver lesions by ablation techniques, wherever applicable, is the way forward as it is associated with lesser morbidity and shorter hospital stay and has better acceptance among patients when compared to surgical resection. Keywords: ablation techniques; hepatocellular carcinoma; liver neoplasms

Abstract Id: YUGP5479

Heart Rate Variability Analysis Based On Gender And Age In Lung Cancer

Presenter - Ms. Reema Shukla
Co-author - Dr Yogender Aggarwal,

The objective of the study is to help clinicians to analyze the deterioration rate of performance status (PS) of lung cancer patients using Heart Rate Variability (HRV) time-domain, frequency domain and non-linear method based on gender and age and explore their relation to study the autonomic dysfunction in lung cancer patients. The Electrocardiogram (ECG) of 104 consecutive lung cancer patients (subjects) and 30 healthy controls was recorded for five minutes. The RR intervals were extracted from ECG using Acknowledge 4.0 Software which was fed to Kubios HRV 2.0, Finland software. R Statistical Software v.3.3.2, 64 bit was utilized for statistical Analysis. Subject Males had higher values of time domain measures of Mean RR, Standard Deviation of Normal to Normal RR Intervals (SDNN), Standard Deviation of Heart Rate (SDHR), Root Mean Square of successive differences of RR Intervals (RMSSD), HRV Triangular Index (TI), Adjacent RR Intervals separated by 50 ms (NN50), Percentage of NN50 (pNN50), Non-linear measures of Poincare Plot descriptors (SD1, SD2), SD1/SD2, Sample Entropy (SampEn), Recurrence Rate (REC) and Correlation Dimension (D2) in descending pattern from ECG0 1 to ECG0 4 PS Scale than their subject females. Control males had lower values of time domain, frequency domain and non-linear measures than control females. High frequency (HF) was higher in subject females than subject males but lower values of Low Frequency (LF) and LF/HF. The relationship between age and all HRV measures could not be established because there was no uniformity in pattern. The HRV measures are affected by gender but not by age in lung cancer subjects. It has lowered values in control males than control females.

Abstract Id: YUGP5481

The Initial Retrocolic Endoscopic Tunnel Approach (Ireta) For Performing A Laparoscopic Complete Mesocolic Excision (Cme) For Right Colon Cancers

Presenter - Dr. Suviraj John
Co-author - Dr. Vedant Kabra, Dr. Vedant Kabra,

Introduction- The Complete Mesocolic Excision (CME) represents an oncological standard for the surgical management of colonic adenocarcinomas. Aims & Objectives- We demonstrate the Initial Retrocolic Endoscopic Tunnel Approach (IRETA) as a technique for performing laparoscopic CME for right colon cancer. Oncological surgical end-points were studied. Materials & Methods- Standard pre-operative work-up and optimisation were implemented. Modified lithotomy position and a four-port strategy was adopted. A modified medial-to-lateral approach by a retrocolic first mobilisation was taken to lift the tumour bearing colon and medial lympho-vascular entity above the superior mesenteric vasculature to enable a laparoscopic high vascular ligation (HVL) of the ileo-colic, right-colic and relevant middle-colic vasculatures. Subsequent fascial disconections were made to extract the specimen through a lower-midline laparotomy and facilitate an extra-corporeal anastomosis. Follow-up data was collected. Results- Seven patients (age 53.5 +/- 15 years) were operated by the IRETA technique. The operating time was 160 +/- 13 minutes, and blood loss 54 +/- 18 ml. An R0 resection was effected in all patients, total specimen, proximal and distal margin lengths were 41 +/- 9 cms, 18 +/- 9 cms and 17 +/- 5 cms respectively. An average of 20+8 lymph-nodes were resected, with 9 +/- 29% positivity. Patients were usually fed on the second post-operative day and fit for discharge by the third. On follow-up (77.5 +/- 14 months) all patients...
Abstract Id: YUGP5482

Native Venous Thrombo Embolism (Vte) Preventive Practice In Oncology: The Delhi Oncology Forum Pilot Survey
Presenter- Dr. Suviraj John
Co-author –

Introduction- Little is known about current Venous thrombo embolism (VTE) preventive practice amongst oncologists and allied physicians in India. Aims & Objectives- To observe current VTE preventive practice amongst oncologists and allied physicians in the national capital region. Materials & Methods- Members of the Delhi Oncology Forum were mailed a 25-Point Questionnaire by electronic-mail to assess their current practice and views regarding VTE prevention in oncology. Results- A total of 16 clinicians responded (37.5% medical oncologists, 31.3% radiation oncologists and 12.5% surgical oncologists). 93% felt that VTE was a significant clinical problem in their clinical practice with most seeing < 10 VTE cases/month. 87% felt that it was as common in India as in the West, with 80% having faced a mortality with VTE in cancer. Pelvic, brain and pancreatic cancer and immobile critically-ill cancer patients were the most common associated scenarios. 53.3% selectively assessed high-risk cancer patients for VTE, while 33.3% assessed all patients for VTE risk. 75% of the clinicians had institutional/departmental protocols for VTE prevention. 93.8% followed international guidelines (ACCP, ASCO, ESMO) while only 25% and 18.8% were aware of Indian and Asian advisories/guidelines respectively. 75% clinicians preferred LMWH and 50% preferred IPC devices in their oncology practice. One third felt that a bleeding event would not prevent them from furthering chemo-prophylaxis in their VTE prevention. 78.6% believed that accreditation processes as the NABH accreditation could help VTE reduction. Conclusion- VTE preventive practice in the sampled Indian clinician population is evolving.

Abstract Id: YUGP5483

ÄŒÈÉMixed Type -Mucinous And Infiltrating Ductal Carcinoma ÄŒ Grade IIä¢€ Left Breast Cancer Male- A Rare Case Report With Review Of Literature
Presenter- Dr. Pugazharsan M
Co-author - K.L.Gupta, K.L.Gupta,

Introduction: Carcinoma of the male breast is rare. Incidence of carcinoma male breast is less than 1%. Mucinous carcinoma is a less common histological variant of breast cancer. Cases of mucinous carcinomas in male breast are extremely rare. We are presenting case of mixed type of carcinoma breast male treated in our hospital. Case report: 60 year old male came with c/o swelling over the left side nipple areolar region for past 1 month which progressively increased in size. Examination findings shows A mobile non tender swelling of size 4 x 3 cm in the left nipple areolar complex with skin fixity with palpable left axillary lymph node. FNAC revealed carcinoma breast. Patient treated with Modified radical mastectomy and patient on adjuvant chemo and radiotherapy. CONCLUSION: Incidence of Carcinoma of the male breast is very rare as mentioned above. mixed mucinous carcinoma i.e. mucinous carcinoma with infiltrating ductal carcinoma component even rare. This uncommon tumour entity has dismal prognosis and treatment depends largely on the tumour type, size, lymph node involvement and hormonal status.

Abstract Id: YUGP5485

Acute And Late Reactions In The Patients Of Breast Cancer Treated With Different Techniques Of Radiation Therapy
Presenter- Dr. Tanvi Singh

Co-author - Both, Both,

Objective: This study aims to compare the acute and late toxicities seen in the breast cancer patients treated with three dimensional conformal radiotherapy (3DCRT) and intensity modulated radiotherapy (IMRT) techniques. Methods and Materials: Sixty patients diagnosed with carcinoma breast were stimulated on CT scan machine along with the proper immobilization devices. Planning for 50 Gray (Gy) in 25 fractions (#) was done for 30 patients by 3DCRT and 30 patients by IMRT technique. Both kind of plans were delivered to the patients for whom they were created. On completion of 25 fractions, all the 60 patients received boost dose of 16Gy/8f by electron beam. Two groups, one having 3DCRT and another having IMRT patients were documented for analysis of the toxicities. The acute toxicities during the course of radiotherapy and late toxicities on regular follow up of 1, 3, 6, 9 and 12 months were noted. Results: Acute grade II / III skin reactions in 66.7% and 43.3%, dry desquamation in 30.0% and 33.3% and moist desquamation in 3.3% and 23.3% patients was noted in IMRT and 3DCRT respectively. Asymptomatic radiation induced pneumonitis was noted in 96.7% and 73.3% while symptomatic pneumonitis was found in 3.3% and 26.7% patients treated with IMRT and 3DCRT respectively. Contralateral breast oedema and secondary dysfunction was not observed in any patient. Patients in both the groups reported with almost similar kind of late toxicities on one year follow up. Conclusion: IMRT technique significantly decreases the acute toxicities as compare to that by 3DCRT technique, although similar kind of late toxicities were reported by the patients in both the groups.

Abstract Id: YUGP5491

Association Of Tobacco Use With Cancer â€” Evidence From The Indian Studies: A Systematic Review
Presenter- Mr. JANG BAHADUR PRASAD
Co-author - fromgeeta@gmail.com, fromgeeta@gmail.com,

Background: Several studies on cancers associated with tobacco suggested that smokeless and smoking tobacco increases the risk of oral, lung, oropharynx, esophagus, larynx cancers etc. No systematic review has been reported for evidence of consistent studies in India. Therefore, this study undertook a meta-analysis to quantify the overall risk of different cancer sites associated with various forms of tobacco use to investigate the risk variation in each site by different forms of tobacco in a systematic manner. Methods: Analyses were carried out on 22 published studies with reported sample of cases and control among exposed and non-exposed with different forms of tobacco. The pooled odds ratios for each cancer by forms of tobacco were calculated using random effects model. Results: A significant association was found for oropharynx (OR=5.26; 95% CI: 2.28-12.14), hypopharynx (OR=3.36; 95% CI: 1.95-5.79), esophagus (OR=2.67; 95% CI: 2.06-3.47), larynx (OR=5.47; 95% CI: 4.01-7.46), lung (OR=5.07; 95% CI: 2.40-10.71) and oral (OR=1.95; 95% CI: 1.51-2.53) cancers among smoker, while among chewer, esophagus (OR=3.46; 95% CI: 2.83-4.22) and oral (OR=6.59; 95% CI: 5.18-8.39) cancer. Among bidi smoker, esophagus (OR=3.63; 95% CI: 2.41-5.45), lung (OR=5.92; 95% CI: 2.67-13.10) and oral (OR=2.85; 95% CI: 1.52-5.36) were significant, whereas lung (OR=2.15; 95% CI: 1.22-3.78) cancer was significantly associated with cigarettes smoking. There was considerable heterogeneity in the pooled odds ratios among all the cancer sites associated with forms of smoking and chewing tobacco. Conclusion: This study clearly indicates that smoking tobacco increases the risk of oropharynx, esophagus, hypopharynx, oral, larynx and lung cancer while chewing tobacco increases the risk of oral and esophagus cancer. The detailed information on quantum of associated additional risk may be incorporated into tobacco prevention and termination efforts particularly among widely prevalent regions in India.
Abstract Id: YUGP5493
Management Of Muscle Invasive Medically And Surgically Inoperable Carcinoma Urinary Bladder In A Resource Constraint Setting At A Tertiary Care Center By Bladder Preservation Protocol
Presenter- Dr. Ashok Kumar
Co-author - Dr. KL Gupta, Dr. KL Gupta,

Abstract: Background: Urinary bladder cancer is a major cause of morbidity and mortality worldwide. As per the data from the US cancer registry it was diagnosed in nearly 71000 patients and led to 14000 deaths in 2013. The Indian data in this regard is lacking with few case reports and epidemiological data only. The paucity of treatment data in this regard led us to undertake this prospective study at our radiation oncology center. Carcinoma urinary bladder is a heterogeneous disease with variable natural history. Male preponderance and association with cigarette smoking appears to be the foremost in natural history of the disease. Our data analyzed the management of muscle invasive medically and surgically inoperable carcinoma urinary bladder in a resource constraint setting at a tertiary care center by bladder preservation protocol. Aims and objectives: This prospective study which is still ongoing aims to evaluate the treatment outcome in muscle invasive medically and surgically inoperable carcinoma urinary bladder in a resource constraint setting at a tertiary care center by bladder preservation protocol. All patients were discussed in multidisciplinary tumor board meetings and all patients were planned to be treated with Telecobalt 60 machine up to a dose of 60 66 Gy along with concurrent chemotherapy with Inj Cisplatin or Inj Carboplatin for 06 cycles. Interim assessment was done at 40 Gy with urine for malignant cells, Cystoscopy and CECT abdomen and pelvis. Results: a total of 16 patients were taken up for treatment with Bladder preservation protocol. All patients were evaluated with standard evaluation protocol. All patients were followed up for a period of two years. Out of 16 patients treated, 13 patients are still alive without any progression of disease and are disease free with standard evaluation on follow up. One patient died due to unrelated cause 05 months after the completion of treatment, however his evaluation before death revealed that he was disease free. One patient died of unknown cause even before the start of treatment. One patient progressed with lung and abdominal metastases five months after the completion of treatment. Conclusion: Bladder preservation protocol using tri-modality therapy is a suitable alternative to radical cystectomy in medically and surgically inoperable carcinoma urinary bladder. These patients should be highly compliant for regular follow ups and acute and long term toxicity should be evaluated in detail at each visit. Bladder preservation protocol gives a ray of hope in such settings and should be done with caution. In our ongoing study we treated all these patients in our resource constraint settings with good results and high survival rates. Our integrated team of radiation oncologists, medical oncologists and urologists closely follow up these patients in order to optimize outcomes.

Abstract Id: YUGP5495
Dosimetric Comparison Of Cranio-Spinal Irradiation With 3dCrt Vs Vmat
Presenter- Dr. Geeta Narayanan
Co-author - Dr. Manika Batra Baxi, Dr. Manika Batra Baxi,

PURPOSE: Cranio-spinal irradiation (CSI) poses a challenging planning process due to the complex target volume. Typically the target volume includes entire spinal cord and whole brain. As these patients have potentially improved survival rates, the concern of reducing late side effects has become very important. Second malignancies are a major cause of morbidity and mortality for childhood cancer survivors, hence it is essential to adapt The ALARA (“As Low As Reasonably Achievable”) principle in our practice. Traditionally three dimensional conformal radiotherapy (3D-CRT) has been in practice over the years. In this 3D-CRT planning modality, the reduction is done to organs at risk (OARs) is not optimally achievable due to the technique. Hence as an attempt is made through different planning modality, namely volumetric modulated arc therapy (VMAT), for the treatment of CSI to reduce the dose of organs at risk (OAR) while maintaining appropriate coverage to the target. In this planning study we compared the dose parameters between volumetric modulated arc therapy (VMAT) and 3D-CRT plans. Materials and Methods: We at our centre have a multimodality linear accelerator having IGRT, IMRT and VMAT alongwith the treatment planning system (Eclipse v11.0) (Varian Medical Systems, USA). Six patients with cases of Medulloblastoma and Ependymoma were selected for the study. Aquaplast thermoplastic masks were used for head immobilization, Vacloc was used for whole body immobilization. Patients were stimulated in prone position. CTV includes whole brain and the spinal canal till S2-S3 and thecal sac. Further 5mm margin for CTV Brain and 10 mm margin for CTV spinal cord was given for PTV. Organs at risk, heart, thyroid, kidneys, lungs, esophagus, eye, lens, and optic nerves were delineated. All the patients were planned for traditional 3DCRT plans (two lateral cranio-cervical opposed ?elds adjoined two posterior spinal ?elds). The prescription dose for treatment was 36 Gy in 20 fractions. All patients were treated in 3D-CRT technique. For dosimetric comparative study, VMAT plans were generated for these cases using 3 isocenters and modulated arcs for the same prescribed dose. The first isocenter was localized in the brain to have one partial arc (2207-1407). The choice of partial arc was to avoid entrance of beam through eyes. The second isocenter was placed at D3-D6 and third isocenter was placed at L1-L3 spinal cord. For spinal fields full arcs with avoidance sector (2507-2907, 707-1107) were used to avoid shoulders and hands. Qualitative and quantitative dose evaluations were carried for all the volumes for the both techniques. Results: The average Homogeneity Index for 3DCRT and VMAT plans was 11.2 and 8.5, and Conformity Index was 2.2 and 1.1 respectively. The Mean heart dose was reduced to 5.5 Gy in VMAT plans compared to 16.9 Gy in 3DCRT. The Mean dose for thyroid and esophagus was also reduced to 7 Gy and 11.6 Gy in VMAT compared to 27.3 Gy and 29.3 Gy in 3DCRT plans. Mean lung dose in VMAT plans was found slightly increased to 5.3 Gy from 4.9 Gy in 3DCRT plans.

The mean doses of kidneys, optic nerve and eye in 3DCRT plans was 5.2 Gy, 34.4 Gy and 20 Gy, whereas in VMAT it was 5.0 Gy, 17.7 Gy and 10.2 Gy respectively. Conclusion: Compared to traditional 3D-CRT technique for the treatment of CSI, VMAT plans showed better Conformity Index (CI) and Homogeneity Index (HI). Substantial dose reduction observed in the form of lower mean dose to OARs. VMAT allows the treatment in supine position also; resulting in greater patient compliance. As the overall treatment time is reduced in VMAT the chances of second malignancies could potentially be reduced further. Use of field matching/junction shift is avoidable in VMAT, resulting in reduction in cold and hot spots. Conflict of Interest: NIL

Abstract Id: YUGP5497
Incidence Of Second Primary Malignant Neoplasm In Head & Neck: A Study From Cancer Centre In Central India
Presenter- Dr. Sarthak Moharir
Co-author - ,

Background: Advancement in diagnostic and therapeutic modalities lead to increased cancer survivors who have 20% higher risk of developing second primary malignancy (SPM). It is important to identify presence of SPM and associated risk factors. Aim: To look for the incidence, epidemiological factors, treatment-related factors, and common risk factors responsible for the development of the SPM in head and neck in Malwa region in central India. Materials and Methods: Records of 7709 patients who visited the Department of Oncology between May 2010 and August 2016 were analyzed and looked for the presence of SPM based on Warren and Gates criteria. Relevant epidemiological and treatment related data was recorded.
Abstracts

Diagnosis of SPM was considered only when the second cancer was of non squamous histology or involving a different sub-site or when the second cancer was also of squamous histology and developed in the same region but with a time interval of more than five years without any evidence of recurrence or metastasis. We excluded those patients in whom the second tumor was suspected to be a metastasis. Results: Head and neck malignancies had the highest incidence amongst all cancers: Of 7709 patients, 2145 patients had head and neck malignancies. Out of these, 19 patients developed second primary malignancy (Incidence:0.885). Head and neck region was also the most common site of development of SPM (33.93% of all SPM). H&N primary was most common in the 71-80 years age group(57.14%) followed by 51-60 years age group(45.5%). Incidence of SPM in the same was 42.85% and 45.45% respectively. 14 patients out of 19 had a primary HNSCC. SPM of head and neck with a primary lung cancer occurred in two patients, primary esophagus in two patients and in one with a primary lymphoma. All patients received some combined modality of treatment with Surgery, Chemo-radiation or RT alone. Conclusions: Patients head and neck cancer have a higher risk of developing SPM, mainly explained by field cancerization, especially in oral cavity. Treatment related factors and other factors also play a role in its development. The possibility of SPM should be considered and excluded during pretreatment evaluation and during follow-up of treated cancer patients.

Abstract Id: YUGP5499
Concurrent Temozolomide And Radiotherapy In Pediatric Brainstem Glioma: Tumor Volume And Survival, A Case Series
Presenter- Dr Sarthak Moharir
Co-author - Vinitha R. Pai, Vinitha R. Pai,

BACKGROUND: The prognosis for children with diffuse brainstem gliomas is dismal due to its critical location and its transient response to radiotherapy and refractoriness to Chemotherapy. The primary aim is to assess the outcome of our pediatric patients treated uniformly in this institution and establish the relation of size of the primary tumor with survival after treatment with concurrent chemotherapy with temozolomide and external radiotherapy. AIM & OBJECTIVES: We studied the incidence and treatment outcome in pediatric patients with brainstem glioma depending on their tumor volume presenting in our institution in last 7 years. MATERIALS AND METHODS: Between January 2010 and July 2017, 14 cases of brainstem gliomas were identified out of a total of 5917 registered cases. Brain tumors comprised 2.95% of all cancers and brainstem gliomas were 8% of all brain tumors. MRI in most patients showed diffuse lesions of the brainstem. In brainstem gliomas, HPE confirmation is not mandatory and hence was planned for concurrent chemotheraphy with temozolomide 75 mg/m2. The CT and MRI images are fused using telephonic interviews. Results: A total of five hundred and fifteen patients were diagnosed to have rectal cancer between December 2012 and November 2014 were analysed. Only patients who were treated with curative intent were included in the study. Data was collected from hospital records and telephonic interviews. Results: A total of five hundred and fifteen patients were diagnosed to have rectal cancer between December 2012 and November 2014. Two hundred and thirteen(47.9%) were diagnosed to have locally advanced rectal cancer. The mean age of patients was 48 years. TNM staging analysis revealed 46(21.5%), 55(25.8%), 88(41.3%) patients were staged 1, 2 and 3. Twenty-four(11.2%) patients had complete pathological response. One hundred and fifty patients(70.4%) did not have features of intestinal obstruction and receive NACRT upfront and 63 (29.6%) required pre-therapy diversion. METHODOLOGY: This is a retrospective analysis of a prospective data-base. Inclusion criteria- Patients diagnosed with non-metastatic locally advanced adenocarcinoma of the rectum in a single colorectal unit of a tertiary care teaching hospital between December 2012 and November 2014 were analysed. Only patients who were treated with curative intent were included in the study. Data was collected from hospital records and telephonic interviews. Results: A total of five hundred and fifteen patients were diagnosed to have rectal cancer between December 2012 and November 2014. Two hundred and thirteen(47.9%) were diagnosed to have locally advanced rectal cancer. The mean age of patients was 48 years. TNM staging analysis revealed 46(21.5%), 55(25.8%), 88(41.3%) patients were staged 1, 2 and 3. Twenty-four(11.2%) patients had complete pathological response. One hundred and fifty patients(70.4%) did not have features of intestinal obstruction and receive NACRT upfront and 63 (29.6%) required pre-therapy diversion colostomy. Thirty nine patients (62% ) completed therapy diversion colostomy who complete therapy (NACRT with obstructed locally advanced rectal cancer(OLARC) needing pre-therapy diversion colostomy who complete therapy (NACRT followed by Surgery and adjuvant therapy). To compare the clinical, histological and long term survival results of OLARC with non-obstructed locally advanced rectal cancer patients who did not need pre-therapy diversion. BACKGROUND: The management of locally advanced rectal cancer is multi-modal and has been revolutionised with the use of neoadjuvant chemo-radiotherapy (NACRT). In India, a significant number of these present with features of intestinal obstruction. They are diverted prior to initiation of chemo-radiation therapy. The oncological outcomes in this cohort of patients are likely to be different and there is a dearth of literature discussing the long-term survival of patients with obstructed non metastatic locally advanced rectal cancer. To our knowledge this is the first paper to discuss the survival outcomes of obstructed non-metastatic locally advanced rectal cancer. Objectives - To assess the total number of patients with obstructed locally advanced rectal cancer(OLARC) needing pre-therapy diversion colostomy who complete therapy (NACRT with obstructed locally advanced rectal cancer(OLARC) needing pre-therapy diversion. METHODOLOGY: This is a retrospective analysis of a prospective data-base. Inclusion criteria– Patients diagnosed with non-metastatic locally advanced adenocarcinoma of the rectum in a single colorectal unit of a tertiary care teaching hospital between December 2012 and November 2014 were analysed. Only patients who were treated with curative intent were included in the study. Data was collected from hospital records and telephonic interviews. Results: A total of five hundred and fifteen patients were diagnosed to have rectal cancer between December 2012 and November 2014. Two hundred and thirteen(47.9%) were diagnosed to have locally advanced rectal cancer. The mean age of patients was 48 years. TNM staging analysis revealed 46(21.5%), 55(25.8%), 88(41.3%) patients were staged 1, 2 and 3. Twenty-four(11.2%) patients had complete pathological response. One hundred and fifty patients(70.4%) did not have features of intestinal obstruction and receive NACRT upfront and 63 (29.6%) required pre-therapy diversion colostomy. Thirty nine patients (62% ) completed therapy in the obstructed group, whereas 127(84.7%) completes therapy in the non-obstructed group (0<0.05). The overall 3 year survival(OS) of the obstructed and non-obstructed groups were 61% vs 41% (p<.001) and the Disease free survival(DFS) was 54% and 35% (p<0.01) respectively. Conclusions: In the era of multi-modal therapy, patients with obstructed locally advanced, non-metastatic rectal cancer have worse oncological outcomes with respect to overall and disease free survival.

Abstract Id: YUGP5517
Role Of Thrombopoietin Postoperative Thrombocytosis In Gastrointestinal Cancer Patients & Its Correlation With Procalcitonin
Presenter- Dr. Amar Ranjan Singh
Co-author - DR PRANAY TANWAR, DR S J BHARTI

Introduction: Thrombopoietin (TPO) is a protein that is encoded by the TPO gene. It regulates the production of platelets. It is believed that plasma level of TPO is regulated by its binding to platelets and megakaryocytes. Material & Method: A prospective study was conducted comprising of 72 cases (32 female, 40 male) of gastrointestinal cancer, which were undergone surgery in the year 2016. It included cancer of esophagus, stomach, colon and ano-rectum. Three serial whole blood samples were taken from single patient, one preoperatively, 2nd & 3rd postoperatively on day 3 & day 5. Serum samples were stored at-80C. Samples were tested for TPO and PCT by ELISA Technique. Statistical analysis was done. Result: Day 3 after surgery, patients (n = 72) showed a significant thrombocytopenia followed by a reactive thrombocytosis on Day 5. Platelet recovery was preceded by a significant rise in TPO (from 162.4 +/- 118.8 pg/ml at baseline to 355.3 +/- 304.4 pg/ml at 72 h, P

Abstract Id: YUGP5521
Oncological Outcomes Of Obstructed Locally Advanced Rectal Cancer In The Era Of Multi-Modal Cancer Therapy.
Presenter- Dr Joshua Franklyn
Co-author - Dr. Gigi Varghese, Dr. Mark ranjan Jesudason,

Background: The management of locally advanced rectal cancer is multi-modal and has been revolutionised with the use of neoadjuvant chemo-radiotherapy (NACRT). In India, a significant number of these present with features of intestinal obstruction. They are diverted prior to initiation of chemo-radiation therapy. The oncological outcomes in this cohort of patients are likely to be different and there is a dearth of literature discussing the long-term survival of patients with obstructed non metastatic locally advanced rectal cancer. To our knowledge this is the first paper to discuss the survival outcomes of obstructed non-metastatic locally advanced rectal cancer. Objectives - To assess the total number of patients with obstructed locally advanced rectal cancer(OLARC) needing pre-therapy diversion colostomy who complete therapy (NACRT with obstructed locally advanced rectal cancer(OLARC) needing pre-therapy diversion. METHODOLOGY: This is a retrospective analysis of a prospective data-base. Inclusion criteria– Patients diagnosed with non-metastatic locally advanced adenocarcinoma of the rectum in a single colorectal unit of a tertiary care teaching hospital between December 2012 and November 2014 were analysed. Only patients who were treated with curative intent were included in the study. Data was collected from hospital records and telephonic interviews. Results: A total of five hundred and fifteen patients were diagnosed to have rectal cancer between December 2012 and November 2014. Two hundred and thirteen(47.9%) were diagnosed to have locally advanced rectal cancer. The mean age of patients was 48 years. TNM staging analysis revealed 46(21.5%), 55(25.8%), 88(41.3%) patients were staged 1, 2 and 3. Twenty-four(11.2%) patients had complete pathological response. One hundred and fifty patients(70.4%) did not have features of intestinal obstruction and receive NACRT upfront and 63 (29.6%) required pre-therapy diversion colostomy. Thirty nine patients (62% ) completed therapy in the obstructed group, whereas 127(84.7%) completes therapy in the non-obstructed group (0<0.05). The overall 3 year survival(OS) of the obstructed and non-obstructed groups were 61% vs 41% (p<.001) and the Disease free survival(DFS) was 54% and 35% (p<0.01) respectively. Conclusions: In the era of multi-modal therapy, patients with obstructed locally advanced, non-metastatic rectal cancer have worse oncological outcomes with respect to overall and disease free survival.

Abstract Id: YUGP5521
Potential Anticancer, Ct-Dna Cleavage And Pharmacokinetic Study Of Substituted Novel 2-(1-Furan-2-Yl)-4-(5-Phenyl-4H-1, 2, 4-Triazol-3-Yl) Quinoline And Its Analogues
Presenter- Mr. Anantacharya Rajpurohit
Co-author -
Abstracts

A series of novel furan quinoline and 1, 2, 4-triazole (FQT) coupled hybrids were designed and synthesized to evaluate for their anticancer, DNA cleavage and in silico Absorption, distribution, metabolism, excretion and toxicity studies. The anticancer activity was carried out by MTI assay on two different human cancer cell lines (melanoma cell line A375 and breast cancer cell line MDA-MB 231). The electrophoretic DNA cleavage studies on ?-DNA (Eco-Ri/HindIII double digest) using agarose gel electrophoresis. The results showed that majority of the synthesized compounds exhibited moderate to potent activity against both the human cancer cell lines. Among them, compounds 7a, 7b, 7c and 7k exhibited excellent anticancer activity with IC50 values ranging from 2.9, 4.0, 7.8 and 5.1 mg/ml against A375 and 6.2, 9.5, 11.3 and 7.3 µg/ml against MDA-MB 231 respectively. The CT-DNA cleavage study indicated that molecules 7(a-o) did cleave the DNA completely with no trace of fragments at 100 µg concentration. The in silico cheminformatic studies indicated that many compounds were predicted to have very low toxicity risk and obeyed Lipinski’s rule of five. Structure activity relationship revealed that the presence of halogen group/atoms at para position of phenyl ring remarkably enhanced the anticancer activity among the synthesized compounds.

Abstract Id: YUGP5523
Study The Effects Of Interventions Through Health Belief Model On Preventive Behavior Of Osteoporosis In Women Referred To Health Centers In Taft 2015
Presenter - Dr. Iraj Zareban
Co-author - Mahnaz Shahrajkour, Joshua Franklyn,

Background: The role of health promotion interventions is discussed in public health and its effect on the prevention and control of many diseases. Studies have shown that women’s health in most areas of the country under serious threat. HBM, as a comprehensive model of chronic diseases. The aim of this study was to determine the effect of education on health belief model on preventive behaviors of osteoporosis in women referred to health centers in the city of Taft. Materials and methods: In this quasi-experimental interventional study, 200 women referred to health centers Taft city were studied 100 in the intervention group and 100 in the control group, Sampling a way that the work in the form of a randomized two rural clinics and two urban clinic were selected A clinic from each region were randomly assigned to the intervention group and the control group were And then at each of the clinics of randomly (draw) 50 persons, including criteria for selection were And finally were enrolled 200 patients. Data collection was conducted through questionnaires. The validity of the content and validity and reliability was determined by Cronbach’s alpha test and pre-test. The collected data were analyzed with software spss16 And (p< 0.05) was considered statistically significant. Results: The findings of this study in the intervention group after the intervention, mean scores have increased health belief model. Conclusion: The results of this study show that educational interventions based on HBM on knowledge and behaviors for prevention of osteoporosis in women. Keywords: Health Education, Health Belief Model, women, osteoporosis

Abstract Id: YUGP5531
Impact Of Volume Changes In Repeat Computed Tomography On The Dosimetric Parameters In Plan For Head-And-Neck Cancer Patients.
Presenter - Dr. Saurabh Karnawat
Co-author - Dr. Virendra Bhandari, Om Prakash Gurjar, Dr. K.L. Gupta

ABSTRACT Introduction: Changes during radiotherapy in head-and-neck (H&N) cases are mainly in volume of the tumour and surrounding organs. This can lead to a change in anatomical appearance of the area being radiated and it can lead to an incorrect dose delivery
to the disease and organs at risk (OAR). The aim of this study is to determine the changes in doses and volumes in H&N cancer patients undergoing radiotherapy with the help of repeat computed tomography (re-CT) scans. Materials and methods: In 30 patients with primary H&N cancer, re-CT scan was done after 3 weeks of treatment when it was indicated clinically. The hybrid plans were created by importing the original plan on re-CT along with same no of monitoring units, new plans were also generated for the newly contoured PTV and OAR and doses to these were noted and analyzed. Results: The mean variation in terms of volumes between CT and Re-CT for gross tumour volume (GTV), clinical target volume (CTV), and planning target volume (PTV) were 43.93 cc, 81.76 cc and 149.04 cc respectively. Mean conformity index and homogeneity index were 0.65 and 1.02, respectively for actual plan and 0.5 and 1.14, respectively for hybrid plan. Mean D95 of PTV for actual plan was 98.3% (standard deviation (SD): 2.28) and for hybrid plan was 93.11% (SD: 3.79). In comparison to actual plan the increase in mean doses in hybrid plans were found to be 1.26 Gy (Dmax), 3.9 Gy (Dmax), 3.33 Gy (Dmean) and 5.62 Gy (Dmean), for spine, brain stem, left parotid and right parotid respectively. Conclusion: Re-planning on re-CT images improves volume of the target covered with decreased alretly in dose delivered and further reduction in dose to OAR.

Abstract Id: YUGP5537
Utility Of Nact In Head And Neck Cancer: An Institutional Experience
Presenter - Dr. SAHELI SAHA
Co-author - Dr. Ritika Harjani Hinduja, Dr. Jagruti Koladiya, Dr U. Suryanarayana K.

Introduction: Multimodality approach has been the standard care in locally advanced head and neck cancer. Increase in interest in neoadjuvant chemotherapy has been noted in the past decade with the aim to improve outcome. But evidence on the role of anterior chemotherapy in locally advanced head and neck cancer remains conflicting and efficacy continues to be debatable. Aims: To understand the feasibility and utility of neoadjuvant chemotherapy in locally advanced head and neck cancer. Methods and materials: 695 cases files of head and neck cancer patients treated between January 2014 and September 2014 were retrospectively reviewed. 202 among those patients had received neoadjuvant chemotherapy. Demographic details, indications of anterior chemotherapy, details of drugs used, number of cycles of chemotherapy planned and received, treatment after anterior chemotherapy, adherence to therapy were noted. Results: 70.3% of the patients were of oral cavity malignancy and the rest 29.7% patients had non-nasopharyngeal, non-oral cavity cancer. Among the patients with oral cavity cancer, 42.95% were finally treated with curative intent, while the intent of treatment was palliative in 21.12% and 33.09% left follow up. 68.33% of the patients with non-nasopharyngeal, non-oral cavity cancer received curative treatment, 16.69% received palliative treatment and 13.33% left follow up. Conclusion: Toxicity to anterior chemotherapy, complicated by poor performance status, often results in treatment drop-outs and a significant number of patients do not proceed to complete the planned therapy. This frequently compels physicians to opt for a less intense chemotherapy regimen. This negates the potential benefit that could have been achieved with use of neoadjuvant chemotherapy.

Abstract Id: YUGP5545
Time To Antibiotic Administration In Children With Febrile Neutropenia: A Quality Of Care Initiative
Presenter - Dr. Namrata Todurkar
Co-author - Dr. Amita Trehan, Dr. Deepak Bansal,

Time to Antibiotic Administration in Children with Febrile Neutropenia: A Quality of Care Initiative Introduction: Antibiotic administration within one hour of presentation in febrile neutropenia (FN) is a
standard of care in the treatment of FN. Aim: To estimate the time to antibiotic administration (TTA) in children with FN and evaluate causes for delay. Materials and methods: A prospective analysis of patients presenting with FN. Primary outcome was the proportion of patients who received antibiotic within one hour of triage. Predictor variables included level of assessing physician, place, time and day of the week. A root cause analysis was done for delayed TTA. Results: Total of 211 children with FN were evaluated for TTA. (mean age : 6 years). The primary outcome of TTA, (760minutes) was achieved in 66% patients. The odds of delayed TTA were reduced by 60% when subjects were evaluated in the night and by 46% when seen by a junior person (p=ns). Odds of delayed TTA were 1.72 times higher in patients who had no focus of infection, 1.37 times greater when assessed in the day care and 1.06 times higher when assessed over weekend (p=ns). Waiting for blood results (30%), delay in preparing antibiotics (21%) and delay in allotting bed (30%) were significant causes for delay. Conclusion: Two third of our patients achieved the target TTA of <60 minutes. Patients seen during the daytime, seen by a senior physician, and on weekends had a delay in TTA. Children with a focus for fever received antibiotics early. Logistics for admission and awaiting counts were chief causes for delay.

Abstract Id: YUGP5551
To Evaluate The Role Of Ki-67 Index As A Predictor Of Response To Neoadjuvant Chemotherapy In Breast Cancer.
Presenter- Dr. Parveen Jain
Co-author - Dr. DC Doval, Dr Ullas Batra, Dr. Pankaj Goyal

Title of study: “To evaluate the role of Ki-67 index as a predictor of response to neoadjuvant chemotherapy in breast cancer.” Authors: Jain Parveen, Doval DC, Batra Ullas, Goyal Pankaj, Agrawal CB, Saini Rajiv, Venkat Pradeep Study Design and place of study: This prospective observational study was conducted in the Department of Medical Oncology, Rajiv Gandhi Cancer Institute and Research Center, New Delhi from February 2014 to March 2016. Material and methods: A total of 134 patients with stage II/III breast cancer who underwent neoadjuvant chemotherapy, with a goal of down staging the tumor, followed by surgery (either modified radical mastectomy or breast conservation surgery) at our center were enrolled and analyzed. Before starting the treatment, clinical factors (age, menopausal status, PS, tumor size and stage), tumor related factors (Grade of tumor, ER, PR and HER-2 status; Ki-67 index), treatment related factors (number of chemotherapy cycles, treatment with trastuzumab in HER-2 positive subset) were recorded. Response evaluation was done clinically (with clinical palpation, MRI/PE-TCT) after completion of neoadjuvant chemotherapy and pathologically (pathological complete response or no pCR) on the surgical specimen. We calculated Ki-67 cut-off of 35% to label it as high by area under ROC curve analysis for prediction of pCR. Results: Clinical complete response was observed in 35/134 (26.1%) of patients while pCR was observed in 32/134 (23.9%) of patients. On univariate analysis, higher grade (III), high Ki-67 index (> 35%) and number of chemotherapy cycles (>3) were associated with better clinical complete response rates. On multivariate analysis, only number of chemotherapy cycles (>3) and high Ki-67 index (>35%) were independent predictive factors after adjusting confounding variables. We also studied the predictive factors of pathological complete response. On univariate analysis, higher grade (III), ER negativity, PR negativity, HER-2 positivity, number of chemotherapy cycles (>3), triple negativity and high Ki-67 index (>35%) were associated with significantly higher pCR rates. On multivariate analysis, high Ki-67 index (>35%) and HER-2 positivity were the only independent predictive factors of pathological complete response after adjusting for the confounding variables. Conclusions: We conclude that high Ki-67 index is a useful predictor of response to neoadjuvant chemotherapy and pCR. We also suggest to use Ki-67 cut-off of 35% to label it as high (based on area under ROC curve analysis in our study). Patients with LABC with high Ki-67 (>35%) should be considered for neoadjuvant chemotherapy.

Abstract Id: YUGP5553
An Innovative Planning Technique For Craniospinal Irradiation In Medulloblastoma: Dosimetric And Clinical Analysis
Presenter - Dr. Pooja Handa
Co-author - Dr. Om Prakash Gurjar, Dr. Virendra Bhandari, Dr. Priyusha Bagdare

Background: Craniospinal irradiation (CSI) is an essential part of the management of medulloblastoma and it poses various challenges in planning and delivery of the treatment, because of large treatment volume which encompasses cranium and full length of spinal cord. Usually feather technique is used in CSI, where two different isocentric plans are designed and delivered by shifting the junction after every five fractions to manage hot/cold spot. This study has been carried out to analyze dosimetricaly as well as clinically. Materials and Method: Ten children and six adult patients diagnosed with medulloblastoma were simulated on computed tomography (CT) machine in prone position with appropriate immobilization devices. All the patients were planned for 36 Gray (Gy) in 20 fractions (#) @ 1.8 Gy/##. Plan for children was designed with two bilateral field of 6 megavoltage (MV) energy for cranium and one posterior field of 6MV for C1-S2 vertebra. Two plans for adult patients were generated, first plan was designed with two bilateral fields for cranium and two posterior-oblique fields for cervical and dorsal spinal cord (upto D8- D9), all the fields were of 6 MV. The second plan was with a posterior field of 15 MV covering rest of the dorsal, lumbar and sacrum (up to lower border of S2) spine. Dosimetric evaluation of all the plans was performed and treatment was delivered by linear accelerator. Acute toxicities were recorded and analyzed. Result: 95% of planning target volume was covered with more than 95% of prescribed dose with hot spot <108% and good homogeneity index. All the patients reported with radiation induced acute toxicities (e.g. headache, vomiting, and weakness) during radiotherapy. Conclusion: This unconventional approach for CSI has acceptable dosimetric and convincing acute clinical outcomes, therefore, it can be used for improved homogenous dose distribution.

Abstract Id: YUGP5563
Clinico-Epidemiological Features And Treatment Compliance In Patients With Gastric Malignancy: Report From A Tertiary Cancer Centre In India
Presenter - Dr. Sandip Ganguly
Co-author - Bivas Biswas, Joydeep Ghosh, Mohandas Mallath

Background: Gastric cancer is a highly aggressive malignancy and it requires early diagnosis and multimodality approach. Compliance to treatment is very important for timely completion of therapy and outcome. Data of clinic-epidemiological features is scare from India where treatment compliance is a major issue. Methods: This is a single institutional data review of all gastric malignancies between June'2011 and December'2017. Clinico-pathological characteristics, treatment details and follow-up were recorded from online database. Results: A total of 397 patients with gastric malignancies were registered with median age of 58 years (range: 20-86); male: female ratio - 280:117. Type of malignancies were adenocarcinoma in 374 (94%), gastrointestinal stromal tumor in 9 (2%), neuroendocrine tumor in 8 (2%) and other histologies in 6 patients. ECOG Performance status (n=338) was 0 in 13 (4%), 1 in 168 (50%), 2 in 91 (27%), 3 in 54 (16%) and 4 in 12 (4%) patients. Median symptom duration (n=201) was 3 months (range: 1-12). Commonest symptoms were pain abdomen (42%), weight loss (29%), dysphagia (24%) and generalized weakness (19%); 21% patients (n=56/261) presented with gastric outlet obstruction at presentation. Nine percent (n=22/253) patients had limitis plastica on endoscopic evaluation. Metastatic disease at presentation was found in 231 (58%) of patients and site of metastasis was peritoneum (61%), liver (48%), lung (13%), bone (8%) and ovar (7%). Amongst those with metastatic disease, 153 (66%) patients not received any treatment due to – single visit (n=88), not fit for any
Abstracts

A Pilot Study Of Comparison Of Findings From Rotational Thermography And X-Ray Mammography For Use In Breast Screening

Presenter- Dr. Kalpana R
Co-author - Dr. Swarnalakshmi, Ms. Aarthee M,

Background Clinical studies conducted on known cancer population were used for standardizing the interpretation of thermography images based on data from over 144 cases. Another study conducted to compare the findings from thermography and USG revealed that the sensitivity and specificity of thermography in breast screening as 92.8 % and 67.3 % respectively. Thermography is a representative of physiological changes in the body tissue and is expected to reveal information much prior to structural changes as seen in ultrasound and/or X- ray mammography. Aim A pilot study to compare the findings from Mammography & Thermography by double blinding the investigator (examiner) and the participant over the modalities used for breast imaging. Every patient enrolled in the study were explained about both the procedures (Mammo and Thermo) and their consent were taken for undergoing both the examinations. Study Objective The primary objective was to evaluate the significance of the new thermal imaging device, MAMRIT for use in breast screening by measuring the sensitivity in symptomatic patient population. While the secondary objective was to evaluate the thermal characteristics of the breast tissue to differentiate abnormal thermal images. Materials & Methods A total of 60 samples were collected in this study. MAMRIT was the breast imaging device used. Method of interpretation of thermography was based on the following criteria: Thermography temperature criteria (Risk score) (i) T > 30.8 = High severe (ii) 30.8 > T > 29.5 = Moderate severe (iii) T < 28.65 = low severe Thermal frames of interest were marked based on the above temperature criteria. Both reporters were blinded about the other modality findings. Results Both thermography & mammography data were modified the way as required for statistical analysis be done. The sensitivity is found to be 93.62% and the specificity was not calculated since known patients were selected for the study. Further, by using the said method of interpretation for thermography, it is found to be better for screening. It is found that significance of using thermography for screening population works 100% i.e. Out of 18 who were marked as less severe based on their surface temperature distribution on the breast, all are found to be in the BIRADS I to II category. Signs of early detection were noted in 29.2% of women who were marked as BIRADS I to II by mammography and another 17.6% & 11.8% of women who were marked as BIRADS I to II and II to III respectively by thermography. It is also noted that 70.6% of BIRADS III to V were marked as highly severe by thermography. Conclusion Since there is no incidence of missing any findings for which BIRADS I to II is marked by X ray mammography, and also because all the thermal findings of less severe are mapped to BIRADS I to II, it is proven to be a very good and user friendly screening modality for breast imaging without radiation exposure, breast compression and with no compromise on dense breast tissue.

Abstract Id: YUGP5575

Can We Have An Answer For Incurable, Non Healing, Painful Wounds Of Cancer Patients ?

Presenter- Dr. Bhuvneshwar Garg
Co-author - Dr Bhuvneshwar Garg,

CAN WE HAVE AN ANSWER FOR INCURABLE, NON HEALING, PAINFUL WOUNDS OF CANCER PATIENTS ? Author: Dr Bhuvneshwar Garg, MBBS MS (Gen. Surgery), D.Mas (EITS, Strasbourg, France), fellowASi, FIAGES, FMASI, Consultant Surgeon & Founder: Manglam Health Foundation, Bhopal India 462016, contact 9425009303, email: drbgarg@gmail.com Grey areas in the world of modern medicare, always demands an insight or alertness. If noticed and addressed properly, it can lead to huge innovations for mankind and surely it’s a perfect theme for the cancer congress today. It can add largely to our country’s prestigious “MAKE IN INDIA” program. Wound healing or skin cover after surgery or radiotherapy is one such big grey area for the world cancer care persons and gives them nightmares for inoperable skin cancer lesions or skin inductions after radiotherapy or after colorectal surgeries, where discharging stomas lead to severe painful skin excoriation. It makes the remaining days of life more troublesome, painful and encumbered, for the dying patient. Their only query now is, can something be done, can you do something doctor, I was better without this or it could be better if I would have died! Presenting our results of real world care of few such incurable cases where super specialty medical world has left these terminally ill cancer patients to their fate since nothing else was possible after incomplete excision of extensive skin lesions or post irradiation skin problems or leaking colostomy & ileostomy wounds. In all such cases, besides the primary disease, local wound sufferings are also equally troublesome and gets aggravated further due to antibiotics, analgesics and painful daily wound care. All these cases (n=16), were sent to us by treating super specialist doctors or relatives for “can we do something” and we accepted all of them, irrespective of their condition, as a challenge. After basic wound care protocol, pus swab in discharging excoriated wounds & debridement in cases of skin lesions defects to get cytology were performed. No patient was hospitalized, none was needed any antibiotics or analgesics for local wound care except our innovative dressings. In all the 3 cases where super speciality medical world has left these terminally ill cancer patients to their fate since nothing else was possible after incomplete excision of extensive skin lesions or post irradiation skin problems or leaking colostomy & ileostomy wounds. In all such cases, besides the primary disease, local wound sufferings are also equally troublesome and gets aggravated further due to antibiotics, analgesics and painful daily wound care. All these cases (n=16), were sent to us by treating super specialist doctors or relatives for “can we do something” and we accepted all of them, irrespective of their condition, as a challenge. 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Abstract Id: YUGP5581
Laparoscopy Tatme(Transanal Total Mesorectal Excision)
Presenter - Dr. Satish Pawar
Co-author - Dr. Yugandhar Reddy, Dr.K.V.V.N Raju, Dr.T.Subramanyeshwar Rao

Procedure-this is an edited video showing hybrid procedure(trans abdominal and trananal laparoscopic TME for rectal cancer 5cm from anal verge with colo-anal anastomosis

Abstract Id: YUGP5583
Cautious 22 - Factors Affecting Breast Carcinoma In Northern India
Presenter - Dr. SHRUTI AGARWAL
Co-author - Dr. S N Prasad ,

INTRODUCTION: Breast cancer is the most frequently diagnosed cancer in women. There is considerable geographic, ethnic, and racial variability in breast cancer incidence. Ethnicity and national origin rank highly as predictors of risk for breast cancer with up to a 10-fold variation throughout the world. MATERIALS AND METHODS: 2060 carcinoma Breast patients registered in J K Cancer Institute, K Uphur between January 2008 to July 2014 were retrospectively studied and various factors affecting the disease and its management were analysed. The various factors were then grouped into 3 categories namely Patient, Tumor & Management characteristics. RESULTS: We found in our study a) Breast carcinoma seems to be increasing in younger women(0 to 45 years ) of about 43% b) There is 62%diction to tobacco. c) Immunohistochemistry reveals: ER+ve PR+ve 68% ER+ve PR-ve 6% ER-ve PR+ve 3% Her2neu+ve 24% TNBC 20% d) About 16% of patients had history of pre-malignant conditions. e) Only 9% of patients have been operated by an oncosurgeon. The rest were operated by General surgeon out of which 68% had residual disease at the time of re-evaluation. CONCLUSIONS: Breast cancer was found to be more common among post menopausal women of Lower middle SE status, aged b/w 41-60 years with parity more than 2. Most of the patients showed a characteristic of addiction to tobacco chewing which may warrant a larger sample size study to evaluate it as one of the risk factors. 16% of patients also showed a history of premalignant lesions like fibroadenosis , fibrocystic disease, duct ectasia Tumor was mostly lateralized to the left breast & the most common HP was IDC. 23.3% showed triple negative hormonal status which is considered to be a poor prognostic factor. From our study we also conclude that the quality of surgery being done can be a significant factor in the management of Breast Cancer.

Abstract Id: YUGP5585
Malignant Myelomatous Pleural Effusion With Dissiminated Plasma Cell Myeloma- A Case Report
Presenter - Dr. Kiran P K
Co-author - Dr Girish V Badarke, Dr Musheb, Dr Radheshyam Naik

Multiple myeloma is a malignant proliferation of plasma cells, predominantly involving the bone marrow and skeletal system. Besides primarily involving the bone marrow, has a tendency to involve other organs thus presenting with different clinical manifestations. Pleural effusion is a relatively uncommon finding in myeloma patients, with a frequency of only 6%, and is usually caused by nephrotic syndrome, pulmonary embolism, congestive heart failure secondary to amyloidosis, and infection. Myelomatous pleural effusion is extremely rare, occurring in less than 1% of cases, and seldom is a presenting feature. Pleural effusion in plasma cell myeloma (PCM) usually indicates a poor prognosis for myeloma with mean survival less than 4 months (2). Here we report an extremely rare case presenting with pain abdomen in which a diagnosis of PCM was established after a thorough investigation. Computed tomography (CT) scan of the chest and abdomen revealed extensive involvement of pleura, mediastinum,pans, perihepatic region, retro peritoneum, bone, and soft tissue with bilateral pleural effusion. Pleural fluid cytology revealed numerous atypical plasma cells . The rarity of this pulmonary manifestation of plasma cell myeloma with myelomatous pleural effusion prompted this case report.

Abstract Id: YUGP5587
Isolated Central Nervous System Blast Crisis In A Case Of Cml On Dasatinib – A Case Report
Presenter - Dr. Kiran P K
Co-author - Dr Girish V Badarke, Dr Musheb, Dr Radheshyam Naik

Chronic myeloid leukemia is a myeloproliferative disorder that has three distinguished phases: chronic, accelerated, and blastic. Examedulmonary blast crisis of Chronic Myeloid Leukaemia (CML) involving CNS is rare and usually accompanies systemic relapse. Isolated CNS blast relapse is an extremely uncommon.A 35-year-old male was diagnosed with chronic myeloid leukemia in blast crisis 7 months back at our hospital and was started on Azactyline for 4 cycles followed by Dasatinib 100mg daily. Patient achieved haematological and cytogenetic remission at 6 months.He presented with headache,CNS examination and fundoscopy was normal. Cerebrospinal fluid (CSF) analysis revealed lymphocytic pleocytosis and a positive cytospin for myeloid blasts. MRI brain suggested chronic lacunar infarct vs demyelination, hemosiderin deposits in falx cerebi with subtle enhancement ? meningitis.Patient maintained cytogenetic remission at current presentation. A diagnosis of isolated CNS blast crises with meningitis was made and three doses of intrathecal chemotherapy were administered. But patient developed cognitive impairment. Craniospinal irradiation was given after which patient showed improvement.we report a rare case of isolated central nervous system blast crisis who is on dasatinib.

Abstract Id: YUGP5589
Role Of Fdg Pet/Ct In Response Assessment Of Ewing’S Sarcoma Family Of Tumors
Presenter - Dr. AJAY GOPAL VYAS
Co-author - DR AMRITA TIWARY ,

PURPOSE: To determine the role of FDG PET/CT in response assessment of Ewing’s Sarcoma Family of Tumors (ESFT). METHODS: 37 patients (30 males,7 females, age range 3-45 years, median 20 years) of histopathologically proven ESFT were subjected to serial FDG PET/CT. Response was assessed by PERCIST criteria after completion of treatment (surgery for resectable tumors & chemotherapy / radiotherapy for advanced tumors). Data was interpreted using qualitative (compared to liver & mediastinal blood pool) & semi-quantitative (Standardized Uptake Value- SUVmax) methods. PET/CT represents a non invasive means of estimating histologic tumor grade & can be used to detect response prior to anatomical imaging. Resolution of metabolic activity was used as a marker of response. Correlative imaging, clinical follow up 1 year and/or biopsy results whenever available were used as the reference standard. RESULTS: Out of 37, there were 29 cases of skeletal Ewings sarcoma (ES), 4 cases of Extraskeletal Ewings (ESE), 2 cases of Askin’s tumor & 2 of PNET. There were 17 (45.9%) cases of stage II. 1 (2%) of stage III & 19 (51.3%) of stage IV. Typically a mixed sclerotic- lytic lesion with associated soft tissue component and variable heterogeneouse FGD uptake is seen in most of the cases. SUVmax of primary lesion ranges from 2.5 to 19.3 with mean of 6.1. Out of 26 patients there was complete metabolic response in 9 (34.6%), partial metabolic response in 7 (26.9%), stable disease in 1 (3%) & progressive disease in 9 (34.6%) cases respectively. CONCLUSION: FDG PET/CT may be helpful tool for staging & restaging of ESFT as well as for localization of distant metastases. In addition to this it may be a valuable tool in response assessment of
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all the types of Ewing sarcoma family of tumors by using qualitative & semi-quantitative (SUVmax) methods. This suggest the need of a large prospective study with serial evaluations & pathological correlations. Conflict of Interest : None Keywords: Ewings sarcoma, Ewing sarcoma family of tumors, FDG PET/CT in Ewings Sarcoma.

Abstract Id: YUGP5591
Assessment Of Response Of Selective Tyrosine Kinase Inhibitor Treatment By F-18 Fdg Pet/Ct In Gastro Intestinal Stromal Tumors (Gist)
Presenter - Dr. AMRITA TIWARY
Co-author - Dr Ajay Gopal Vyas , .

Assessment of response of selective tyrosine kinase inhibitor treatment by F-18 FDG PET/CT in gastro intestinal stromal Tumors (GIST) Dr Amrita Tiwary@, Dr Ajay Gopal Vyas@ Specialist, Nuclear Medicine, Janakpuri Superspeciality Hospital, New Delhi # Consultant & Head, Nuclear Medicine & PET CT, HCG Oncology, New Delhi Aim: The role of F-18 FDG PET/CT in response assessment of adjuvant treatment with selective tyrosine kinase inhibitor for metastatic and recurrent gastro intestinal stromal tumors (GIST) after localised resection of primary tumor. Material & Methods: Prospective analysis of 62 patients (39 males, 23 females) of GIST with metastatic and recurrent disease after localised resection of primary tumor was done, which was confirmed surgically /histopathologically. Patient age ranged between 28-76 years with mean age of 52 years. Patients underwent F-18 FDG PET/CT scans before & six months after the selective tyrosine kinase inhibitor treatment (400mg /day or more orally) and response was assessed as per PERCIST criteria. Data was interpreted using qualitative (compared to liver & mediastinal blood pool) & semi-quantitative (Standardized Uptake Value- SUV max) methods. Resolution of metabolic activity was used as a marker of response to therapy. Results were further confirmed by clinical follow up, biopsy (were ever possible) or conventional imaging findings. Results: 22 (35.4%) lesions originated from stomach, 20 (32.2%) from small intestine, 09 (14.5%) from large intestine, 06 (9.6%) from rectum and 05 (8.0 %) from peritoneum respectively. GIST were almost equally prevalent in stomach & small intestine, unlike in other studies where stomach is the most common site. Mean SUV in the GIST lesions was 6.3 with a range of 4.4 to 12.7 . Out of 62 patients for response assessment there was complete metabolic response (CMR) in 15 (24.1%), partial metabolic response (PMR) in 30 (48.3 %), stable metabolic disease in 12 (19.3 %) & progressive disease (PD) in 05 (8.0 %) cases respectively. Retropertitoneal lymph nodes was the most common site of metastases (48%) followed by liver (21%) and peritoneal deposits (98%) respectively. 08/15 patients who attained CMR had abdominal / retropertitoneal lymph nodal metastases. Disease progression was observed in liver in 03/05 patients, peritoneal / omental deposits in 01/05 & pulmonary metastasis in 01/05 patients respectively. Responders showed decrease in metabolic activity SUV max of the lesions earlier than change in size. Conclusion: F-18 FDG PET/CT scan is a valuable tool in response assessment of GIST. PERCIST criteria may be helpful to assess the degree of response accurately. Further prospective studies would be required to establish the evaluation criteria. Conflict of Interest: None

Abstract Id: YUGP5593
Pineal Parenchymal Tumor Of Intermediate Differentiation: A Study From Tertiary Cancer Centre In India
Presenter - Dr. Bharti Devnani
Co-author - Harsh KP, Subhash Gupta, Ajeet Kumar Gandhi

Pineal parenchymal tumour of intermediate differentiation: A study from tertiary cancer centre in India. Introduction Pineal parenchymal tumours are rare, accounting for <0.3% of all primary central nervous system tumours. Pineal parenchymal tumour of intermediate differentiation (PPTID) is even scarcer with limited published data. PPTID is a new addition to the WHO classification (2000) and considered to be of intermediate grade in the spectrum of Pineocytoma and Pineoblastoma. There are few published data available and optimal management is yet to be determined. We herein report our institutional experience of treating PPTID over a decade. Materials and Methods We conducted a retrospective record review of patients who were diagnosed with PPTID and treated with surgery followed by radiation therapy at our institute from 2006-2017. Clinical data, including performance status, pathological results, imaging, initial treatment, resection status, details of radiation and chemotherapy, initial response to treatment, recurrence pattern and survival data were collected. Results Nine patients with PPTID were identified. Median age at presentation was 26 years (range 16-55), Male: female ratio was 7:2. Headache was the most common presenting symptom (77%) followed by visual disturbances and gait abnormality. All patients had pre-operative magnetic resonance imaging of brain and spine and a spinal fluid cytology (either pre or post operatively). Two patients had spinal metastasis at the baseline and one patient developed it subsequently after treatment. Surgical resection was gross total in 1 (11 %), near-total in 2 (22%), subtotal in 1(11 %), and limited to biopsy in 5 (56%) patients. Ventriculo-peritoneal shunt was placed in 5 out of 9 patients. Median MIB1 labelling index was 5% (range 2-10). All patients were treated with external beam radiotherapy post-operatively. The dose prescribed was 54-56 Gray in 28-30 fractions over 5.5-6 weeks to the focal area. Adjuvant chemotherapy was not administered routinely. Cranio-spinal irradiation (36 Gray) with boost (20 Gray) to primary site was given in 2 patients diagnosed with spinal drop metastasis from the beginning of treatment and subsequently systemic chemotherapy with carboplatin, etoposide and vincristine along with intra-thecal methotrexate. After a median follow-up of 16 months (range, 1-118 months), 2 patient had recurrence of the disease. 1 year disease free survival (DFS) rate was 85.7% and estimated 4 year DFS rate was 57.1%. Conclusion Adjuvant radiotherapy is an important component in the management of PPTID. Localised radiation therapy is adequate in the absence of spinal disease considering the long natural course of the disease and the late adverse effects of intensive treatment. Spine screening should be done in all patients and in case of spinal dissemination may be treated aggressively with cranio-spinal irradiation and adjuvant chemotherapy.

Abstract Id: YUGP5597
Metabolic Response Assessment Of Alk Inhibitor Crizotinib By F18 Fdg Pet-Ct In Alk Positive Metastatic Adenocarcinoma Lung
Presenter - Dr. AJAY GOPAL VYAS
Co-author - Dr AMRITA TIWARY, DR HARI GOYAL, DR DEEPA GOEL

Abstract Purpose The aim of the study was metabolic response assessment of ALK inhibitor crizotinib by F18 FDG PET/CT in metastatic ALK positive adenocarcinoma lung patients. Introduction The introduction of targeted drugs has a significant impact on the approach to assessing tumour response. These drugs often induce a rapid cytostatic effect associated with a less pronounced and slower tumoural volume reduction, thereby impairing the correlation between the absence of tumour shrinkage and the patient’s unlikelihood of benefit. ALK inhibitor crizotinib is one such targeted therapy in ALK positive metastatic adenocarcinoma lung patients. Methods This study was performed on 22 patients with ALK positive metastatic adenocarcinoma lung to look for the response of ALK inhibitor crizotinib as first line therapy by F18 FDG PET-CT. PET CT was done at baseline for staging work up and after 4 weeks of therapy. Tumor response was classified according to the PERCIST 1.0 criteria. A lesion-based response analysis was performed, including all measurable lesions identified on the baseline PET/CT. ALK inhibitor treatment (crizotinib 400 mg iday) was given for 4 weeks and then assessed by mid cycle PET CT. Tumor response was classified according to the PERCIST
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Suppression Of In Vitro And In Vivo Growth Of Metastatic Melanoma Cells Upon Inhibition Of Bmp Signalling Pathway
Presenter- * Mr. Bhuvanesh Sukhlal Kalal
Co-author - Vinitha Ramanath Pai, Dinesh Upadhya,

Suppression of in vitro and in vivo growth of metastatic melanoma cells upon inhibition of BMP signalling pathway Bhuvanesh Sukhlal Kalal,1.2, Vinitha Ramanath Pai3, Dinesh Upadhyay4 1 Bhuvanesh Sukhlal Kalal, MSc; Department of Biochemistry, Yenepoya Medical College, Yenepoya University, Mangaluru India, and 2Yenepoya Research Centre, Yenepoya University, Mangaluru, India. E-mail id: bhuvanesh611@gmail.com 3Department of Biochemistry, Yenepoya Medical College, Yenepoya University, Mangaluru, India 4Department of Anatomy, Kasturba Medical College, Manipal University, Manipal, India BACKGROUND: Studies have shown that bone morphogenetic protein (BMP) signaling pathways are deregulated in melanoma. Activation of BMP pathway is known to cause growth, migration and invasion of melanoma cells. AIM: The aim of this study was to evaluate the effect of inhibition of BMP signaling pathway using a cell permeable small molecule inhibitor LDN193189 on the growth of melanoma cells under in vitro and in vivo conditions. MATERIALS AND METHODS: The MTT [3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl tetrazolium bromide] assay was done to test cytotoxicity of LDN-193189 (a potent inhibitor of BMP pathway) on human melanoma cell line, A375 and mouse melanoma cell line, B16F10. For in vivo study, 6–8 week old female C57BL/6 mice were inoculated subcutaneously with 1 x 105 B16F10 cells. Visible tumors were developed within next 5-10 days. The tumor size was measured using a vernier caliper on alternate days. The tumor volume was calculated by the formula: volume (mm3) = (0.52) X (length) X (width) X (height) (in mm). When the tumor reached a size of 100mm3, mice were randomly divided into two groups of 5 mice each. One group was injected with normal saline (control group) while another group was intraperitoneally injected with LDN-193189 at a dose of 3 mg/kg body weight twice daily for five consecutive days. Tumor size was measured on alternate days in both groups. Animal health was monitored and autopsy was performed after termination when either the tumor in control group reached 3000mm3 or 30 days post tumor implantation. RESULTS AND CONCLUSION: MTT assay revealed that, LDN-193189 inhibited the proliferation of A375 and B16F10 melanoma cells in a dose dependent manner with the IC50 value of 1.7 and 1.8 µM respectively. The animal experiment showed that in comparison to control group tumors, twice daily injection of the LDN-193189 at 3mg/kg body weight caused a significant reduction in tumor size, indicating that inhibition of BMP signaling pathway blocks melanoma growth.

Abstract Id: YUGP5609
Correction Of Retinoblastoma - A Ray Of Vision
Presenter- Dr. Vipul Aggarwal
Co-author - Vipul Aggarwal,

Introduction - Retinoblastoma is a form of cancer arising in children in their early years. The disease can occur any time from when a child is still in the womb up to the age of about five years. It affects about one in 20,000 children and accounts for about 3% of all cancers for children under the age of fifteen. With retinoblastoma, a tumor develops in the immature retinal cells of the eye, which are the cells responsible for detecting color and light. Without functioning retinal cells, children with this disease can have moderate to severe visual disability if they survive. There are two forms of the disease, hereditary and non-hereditary. In the hereditary form, the retinoblastoma (Rb) gene is missing from chromosome 13 leading to the absence of a functional gene or its protein product. This leads to the presence of multiple tumors in both eyes and is referred to as bilateral retinoblastoma. In the non-hereditary form, only one eye is affected with one tumor and is referred to as unilateral retinoblastoma. The non-hereditary form is considered to be a sporadic mutation of the Rb gene while the hereditary or familial form of the disease is a mutation passed on from one or both parents. Retinoblastoma tumors can be presented in a number of different ways. The most common manifestation of the disease is for patients to have a white pupil reflex rather than the normal black one, which is referred to as leukocoria. Another common manifestation of retinoblastoma is a crossed eye or strabismus. Other presentations of the disease include a red eye, inflammation, poor vision, or abnormal irises or pupils. In all these cases, the retinoblastoma gene is mutated and unable to perform its role within the cell. Materials and Methods - There are different methods for diagnosis of Retinoblastoma. Following were used during the study. Ultrasound uses sound waves to create images of tissues inside the body, such as the inner parts of the eye. For this test, a small ultrasound probe is placed up against the eyelid or eyeball. The probe gives off sound waves and detects the echoes that bounce off the tissues inside and around the eye. Ultrasound is one of the most common imaging tests for confirming the diagnosis of retinoblastoma. It is painless and does not expose the child to radiation, but the child may need to be given medicine to help keep them calm or even asleep so the we can get a good look at the eye. This test can be very useful when tumors in the eye are so large they prevent us from seeing inside the whole eye. Optical coherence tomography (OCT) is a similar type of test that uses light waves instead of sound waves to create very detailed images of the back of the eye. Magnetic resonance imaging (MRI) scan MRI scans are often used for retinoblastomas because they provide very detailed images of the eye and surrounding structures without using radiation. This test is especially good at looking at the brain and spinal cord. Most children with retinoblastoma will have at least one MRI scan. For children with bilateral retinoblastomas (tumors in both eyes). MRI scans use radio waves and strong magnets to create images instead of x-rays. A contrast material called gadolinium may be injected into a vein before the scan to show details better. Results - Will be discussed during conference in poster presentation.

Abstract Id: YUGP5613
Odontogenic Keratocyst Of Left Mandible
Presenter- Dr. Sireesha M V A
Co-author - Dr. Tejaswini B.N.,

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Background: Clinically significant leak rates after low anterior resection (LAR) are reportedly 8-10% resulting in permanent stoma and inferior outcomes. Aiming to decrease intraluminal pressures so that tension on the anastomotic line is reduced, we propose placement of a transanal tube (TAT) after LAR, until healing is achieved. Materials and Methods: Single-centre prospective observational study of 114 patients over 4 years, 54 of whom underwent intra-operative TAT placement, with its tip kept 3-5 cms proximal to the anastomotic line. All patients who underwent diversion stoma were excluded. Anastomotic leak was observed by feculent discharge from drain/ wound, rectovaginal/rectovesical fistula, pelvic collection on imaging or contrast extravasation when given through TAT. Two groups TAT and non-TAT control groups were compared using chi-square test. P value <.05 was considered significant. Results: 54 patients underwent TAT placement compared to 60 controls. Age, comorbidities, neoadjuvant treatment, anastomotic technique and distance from anal verge were similar in both groups. Overall leak rate was 9.8%(11/114). Leak rates were significantly lower in the TAT group(3.7% vs 15%, p<0.05). In the non-TAT group, 66.7%(6/9) patients required exploration and stoma. There was no mortality in either group. Conclusion: This study indicates placement of a transanal tube may lead to reduced leak rates after low anterior resection. This sets the stage for a prospective randomised trial to derive more concrete results.

Abstract Id: YUGP5621
Race Between Cancer And Life - Deuteron Depleted Water (Ddw)
Presenter - *Ms. Satyashwini Sivaramakrishnan
Co-author - Satyashwini Sivaramakrishnan, Ananya Verma, C. Mohapatra

Race between Cancer and Life - Deuterium Depleted Water (DDW) S. Satyashwini*, Ananya Verma, C. Mohapatra, V.K. Kihlaney Heavy Water Board, Department of Atomic Energy, Mumbai, India, satyashwini@mum.hwb.gov.in *Corresponding author Email: satyashwini@mum.hwb.gov.in Deuteron is a stable isotope of hydrogen. Natural water contains nearly 150 ppm Deuteron. Water containing less than natural abundance of deuterium, is known as Deuteron Depleted Water (DDW). Recent literature survey indicates that DDW of 25 ppm to 120 ppm has many positive health applications like anti-cancer/tumor, anti-diabetic, nonspecific immune defense of the body, anti-ageing, and Radio-protective effects. International papers reveal that insulin resistance has been treated with DDW. These are available in international markets to the common public on prescription by authorized persons. Reports of few clinical trials involving human beings have also been published. DDW is being used abroad for more than a decade for treatment of cancer (adjuvant therapy) fight against side effects of chemotherapy and radiotherapy, fighting ageing for skin treatment, removing the DNA errors and getting rid of hereditary diseases like diabetes, heart diseases, thalassemia, etc. Some of the experts feel that continuous consumption of DDW for 3 months daily as per the prescribed dose increases survival rates of cancer patients and rejuvenates healthy people by eradicating DNA error. Dr. Gabor Somlyai, a molecular biologist from Hungary, has been studying biological effect of Deuterium depletion since 1990. He had published all his findings on the subject in the form of a book named “Let’s defeat cancer – the biological effect of Deuterium depletion”. There are many experiments that have been carried out and human clinical trials are still carried out in parts in Hungary with DDW of different concentrations varying between 20 ppm to 120 ppm. The most important discovery is that healthy cells quickly adapt to the lower deuterium concentration, whereas tumor cells are unable to do so. As mentioned in the literature, presence of natural concentration of deuterium is vital for cell proliferation and that the cell division is triggered by the change of the D/H ratio (the ratio of D/H temporarily increases during the process of cell division). Basically hydrogen gets pumped out from the cell during cell division, therefore, deuterium concentration increases within...
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Sentinel Lymph Node Biopsy In Early Stage Endometrial Cancer – Can We Avoid Routine Lymphadenectomy?

Presenter - *Dr. Vineet Goel*
Co-author - Vikas Singh, Amish Chaudhary, Andleeb Abrari

Sentinel Lymph Node Biopsy In Early Stage Endometrial Cancer – Can We Avoid Routine Lymphadenectomy? Vineet Goel, MS, DNB (Resident, Surgical Oncology, Max Hospital, New Delhi) Vikas Singh, MS, DNB (Resident, Surgical Oncology) Amish Chaudhary, MS, DNB (Surgical Oncology) Andleeb Abrari, MD (Department of Pathology) Pankaj Dougall, MD (Department of Nuclear Medicine) Harit Chatrvedi, MS, MCh (Surgical Oncology) BACKGROUND Lymph node involvement is the most important prognostic factor in the treatment of endometrial cancer.Comprehensive lymphadenectomy (pelvic and paraaortic lymphadenectomy (CND)) as a part of staging surgery is debatable. It may cause severe surgical complications affecting the quality of life while on the other hand it allows for accurate disease staging and decides adjuvant therapy with debatable therapeutic benefit. The risk of pelvic nodal metastasis in early stage I cancer is only 3 to 6%. Sentinel lymph node biopsy (SLNB) might be a possible middle ground between CND versus no nodal evaluation for these patients. In this study, we intend to find out the feasibility of SLNB in early stage endometrial carcinoma. METHODS: This is a prospective observational study in proven endometrial carcinoma patients (n=32) diagnosed in our hospital. All patients received cervical injection of methylene blue (2ml) and radiotracer dye (Tc-99 nano colloidal albumin dye) (1ml) at 3 o’clock and 9 o’clock position in ectocervix along with subserosal injection of 1.5ml radiotracer and 2ml methylene blue in 3 locations in fundus. SLN were identified by direct visualisation and gamma probe and labelled. CND (upto origin of IMA) was done in patients. Dye related adverse events were monitored. RESULTS In 32 patients study, the median age was 58 years (25-72) and mean BMI was 27 kg/m2. The median SLN count was 5 (0-12) and median lymph node count was 31 (10-56). Overall and bilateral detection rate was 96.8% (31/32) and 78% (25/32) respectively. No SLN identified in one patient (3%). On pathology, 25 patients were node negative (78%) and 6 patients had node positive disease (19%). These 6 patients had atleast one positive sentinel node. Sensitivity and Negative Predictive Value were 100% and 100%. Para-aortic SLN were detected in 14 patients (44%), none of the patients had isolated paraaortic lymph nodes. There was no allergic reaction to the dyes used in our study. CONCLUSION SLNB appears to be a feasible tool to decide about CND in low risk endometrial carcinoma with a high overall detection rate (96.8%), sensitivity of 100% and false negative rate of zero. Use of dual dye method is associated with high detection rate rather than alone. CONFLICT OF INTEREST None of the authors has any financial and personal relationships with other people or organizations that could inappropriately influence their work. This includes employment relationships, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. Ethical Clearance link https://drive.google.com/file/d/0Bx167xmRfdwxHJKmJ2Y7tzF6bXc/view?usp=sharing

Abstract Id: YUGP5629

Locoregional Flaps After Radical Vulvectomy

Presenter - Dr. Esha Pai
Co-author - Dr. Ullas, Dr. Anand Krishna, Dr. Shivanand Swamy

Background: Modern surgical management of malignancies of the vulva includes evaluation of the most appropriate operation for the (i)primary lesion, (ii)regional lymph nodes and (iii)choice of reconstruction. Primary goals of reconstruction are tension-free skin closure, maintenance of vaginal and urethral introitus, restoration of the anovaginal partition, along with simultaneous closure of associated defects, such as mons pubis or inguinal defects, if necessary. The purpose of this study was to evaluate the outcomes of vulval reconstruction using fascio-musculo-cutaneous flaps in patients who underwent surgery for vulval malignancies. Materials and Methods: We analysed patients who underwent vulval resections and reconstruction between January 2015 and May 2016, at our centre. We studied the possibility to achieve complete wound closure, even in presence of complex defects, and the associated peri-operative complications. Results: Six patients underwent vulval resections, all of whom underwent reconstruction- 5 lotus-petal flaps, and 1 bilateral tensor fascia lata(TFL) flap. Complete wound closure was achieved in all cases. The overall post-operative morbidity was 33.3% with 2 patients developing marginal flap necrosis, one of whom required a second procedure involving minor flap revision. There was no pain, mobility issues, nor mortality in the postoperative follow-up period. Conclusion: Locoregional flaps that could appropriately be included in feasibility in our setting with acceptable morbidity. An individualized approach is advisable for optimal results, depending on the type of surgery, extent of resection, functional outcomes, and cosmesis. Long term follow-up is required to assess quality of life.
Introductions: Cancer of the head and neck region are the sixth most common cancers worldwide, with high mortality ratios among all malignancies. Head and neck cancer is the most physically and emotionally devastating cancers and often leaves the patient disfigured. The Indian subcontinent accounts for one third of the world’s burden due to habits. The most important prognostic factor in patients with oral cavity squamous cell carcinoma is the presence or absence of cervical metastases. The occurrence of nodal metastasis has a profound effect on the treatment, prognosis and survival of patients with head and neck cancer. The risk of occult metastasis is related to the method by which the lymph nodes are evaluated. Clinical examination of cervical lymph nodes has many false negative and false positive results. It has been estimated to exist in 20-40% of all cases. Its low sensitivity and specificity paved the way toward further studies in search of other accurate diagnostic means for detecting neck nodes. Lymphatic metastasis is a frequent event that influences prognosis, a decision to treat the cervical lymph nodes has to be made in almost all patients, even if metastasis is not apparent clinically. It is therefore important to assess regional nodal involvement as reliably as possible. Management of the neck in patients with oral SCC is controversial. Some clinicians and surgeons advocate elective treatment of the neck while others don’t. The risk of occult metastasis that is higher than 20% is the most important indication for elective neck treatment. It is possible to reduce the risk of undiagnosed metastasis with accurate imaging techniques and thus probably reduce the number of elective neck treatments. CT has been used to determine neck metastasis in carcinoma of head and neck since 1981. It is capable of imaging the neck in any plane. Resolution and depiction of tissues in deeper planes is superior in CT which can show the primary tumor with its local extensions and documentation is possible. Disadvantages of CT are its cost, radiation and it can’t be repeated every time. It is an invasive technique due to injection of contrast. MATERIALS AND METHODS: 10 patients with oral squamous cell carcinoma who underwent neck dissections were included. All the patients underwent examination of neck pre operatively by palpation and Computed Tomography with contrast for node detection. The findings were correlated with the results of histopathologic examination of the neck specimen. The results were obtained after statistical analysis. CONCLUSION: Computed tomography cannot be used to reliably determine the presence of metastasis. Only CT as radiologic investigation, suggestive of metastasis should not be relied on for treatment planning in squamous cell carcinoma of the head and neck.
Abstract Id: YUGP5649

Atypical Meningioma With Bone And Soft Tissue Metastasis – A Case Report
Presenter - Dr. Archana P
Co-author - Dr C Sanjeevakumari ,

BACKGROUND : Extracranial metastasis from meningioma is a rare finding with incidence ranging from 0.1 – 1%. Most frequently reported sites include lung, spine and liver. Metastasis to other bones are rare and mets to soft tissue are very rarely reported. CASE PRESENTATION : A 58year old female presented with history of paraparesis and clavicular swelling. The patient was operated for atypical meningioma in the brain about 8 years ago. Biopsy from the clavicular swelling showed round to oval cells with hyperchromatic nucleus and focal areas of cells with spindled nucleus and occasional atypical mitotic figures. IHC showed EMA positive, GFAP,TF1,CK negative and Ki-67 of 8% suggesting atypical meningioma. PET-CT revealed metastasis in the clavicle and ribs with a large soft tissue component, and to thoracic spine with spinal cord infiltration. CONCLUSION : Although a rare finding, metastasis to bone and soft tissue should be kept in consideration in a known case of meningioma and proper histological evaluation is necessary for confirmation. Multidisciplinary approach is necessary to evaluate the treatment options.

Abstract Id: YUGP5651

Primary Adenosquamous Carcinoma Of The Prostate : A Rare Entity
Presenter - *Dr. Amey Panchal
Co-author - Dr. Veena R. ,

Abstract title : Abstract for Poster presentation at Indian Cancer Congress 2017 Full Name : Dr.Amey C. Panchal Academic Qualification: Pathology Resident Institution Name: HCG,Bangalore Address: 1559, janani, telephone exchange road, Kumarswamy layout stage one, in front of sagar hospital, Bangalore – 560078. Mail id: amey_panchal11@yahoo.in Abstract title : Primary Adenosquamous carcinoma of the prostate : A rare entity Co-authors : Dr.Veena R. Abstract Body : Introduction : Adenosquamous carcinoma of the prostate is one of the rarest variants of prostate cancers About 27 cases of adenosquamous carcinomas; 0.0005% of prostate carcinomas has been included in the SEER data. These squamous neoplasms do not express prostate specific antigen or prostatic acid phosphotase. Adenosquamous carcinoma of the prostate metastasize rapidly and has a poor prognosis with an average survival of about one year. Thus an early and specific diagnosis of adenosquamous carcinoma of prostate is important. Case : A 64 year old male presented with complaints of pain while passing stools and on evaluation showed serum PSA level of 12.19ng/ml. The histopathology report reported a diagnosis of a poorly differentiated adenosquamous carcinoma of prostate. PET CT revealed prostatomegaly with diffuse prostatic parenchymal hypermetabolism – suggestive of right posterolateral posteroprostatic extension with infiltration of bilateral seminal vesicles and suspicious bladder base infiltration. Immunohistochemistry : The cores showing squamoid nests were highlighted by p63 and p40 with focal expression of AMACR Some of the small cells expressed AMACR. Both the squamous and small cells were negative for CK7, CK20, chromogranin and synaptophysin. Some of the cores showing pleomorphic squamoid cells and infiltrating acinar structures were positive for AMACR and p40. The normal glandular structures expressed PSA.

Abstract Id: YUGP5665

Inflammatory Myofibroblastic Tumour Of Testis In A Patient With Colon Carcinoma: Case Report
Presenter - *Dr. CHANDRAMOULI R

Co-author - DR. ABHISHEK RAGHAV K S, DR. JAGADESAN PANDJATCHARAM, DR. CHANDRAMOULI R

Introduction Inflammatory myofibroblastic tumours are extremely rare and they are categorized under fibroinflammatory disorders. The diagnosis of inflammatory myofibroblastic tumour is one of exclusion. It is characterized by a proliferation of myofibroblastic spindle cells in an inflammatory milieu and has low malignant potential. We describe a case of a 72-year-old man with a history of colon carcinoma and diagnosed with inflammatory myofibroblastic tumour of testis. Case presentation A 72-year-old man presented with a left-sided scrotal mass. He was previously diagnosed with colon cancer and underwent right hemicolectomy with end to end anastomosis and planned for adjuvant chemotherapy. Pathological examination of the tissue from scrotal swelling revealed paratesticular inflammatory myofibroblastic tumour and immunohistochemistry showed reactivity of the spindle cells for SMA and vimentin. Computed tomography of pelvis revealed 11.6cm x 9.4cm x 11.4cm sized soft tissue density lesion with extensive infiltration of the surrounding tissues and with erosion of pubic rami. Patient was planned for palliative radiotherapy to pelvis in view of severe pain. Very few cases of inflammatory myofibroblastic tumour arising from testis were reported. In this report, we have described the clinical and pathological characteristics of this rare tumor. We have also discussed the various treatment options offered.

Key Words Carcinoma colon, inflammatory myofibroblasts, SMA

Abstract Id: YUGP5667

Cetuximab Usage In Head And Neck– A Survey Through Oncologists
Presenter - *Mr. Ramez Ahmed
Co-author - Dilip Pawar, Sameer Chaudhari,

Background Cetuximab, a chimeric monoclonal antibody, is widely used in the treatment of head and neck cancer (HNC). The said survey was conducted to understand the use of cetuximab against HNC in clinical practice. Method A questionnaire was developed to conduct survey amongst oncologists across India in 2016 to understand the use of cetuximab in this indication. Response from 37 oncologists was recorded and analysed. Result Most doctors (48.6%) treat 8 or more patients suffering from cisplatin eligible locally advanced squamous cell carcinoma of head and neck (LASCCHN) in a month while the rest see less than 8. 45.9% of doctors don’t use cetuximab in these patients while 45.9% treat only 1 to 4 patients with cetuximab in a month Most doctors (56.8%) treat 1 to 4 patients suffering from cisplatin ineligible LASCCHN in a month. 61.1 % of the doctors treat 1 to 4 patients with cetuximab while 33.3% don’t use cetuximab for such patients 29.7% doctors treat 8 or more patients with recurrent or metastatic HNC in a month. 29.7% treat 1 to 4 while 27% see 5 to 7 patients. Majority of the doctors (58.3%) treat only 1 to 4 such patients in a month with cetuximab and 30.6% do not use cetuximab for these patients. For HNC 59.5 % doctors do not carry out EGFR testing. 58.8% doctors felt that it does not help in the selection of treatment. In HNC, 86.1% doctors use once daily as the most common regimen of radiotherapy (RT) when they treat patients with cetuximab. 90.6 % of the doctors do not change the radiation fractionation when it is given along with cetuximab. 66.7% doctors suggest that rash is an efficacy marker for LASCCHN patients treated with cetuximab + RT. 88.9% doctors observe higher rates of treated with cetuximab compared to patients treated with cisplatin +RT or RT alone.43.2 % doctors opine that hypersensitivity is a contraindication for cetuximab. 73% doctors use cetuximab in older patients (age>65) who are ineligible for platinum based therapy and have seen similar efficacy as compared to younger patients.75.7% doctors do not use cetuximab for other indications on an off label basis, while some (18.9%) use cetuximab in lung cancer as well. Conclusion Use of cetuximab is limited in HNC, possibly due to cost of therapy, rash and other adverse reactions.
Abstract Id: YUGP5669

A Survey Of Cetuximab Usage In Metastatic Colorectal Cancer Through Oncologists

Presenter- *Mr. Ramez Ahmed

Co-author - Dilip Pawar, Sameer Chaudhari,

Background: Cetuximab, a chimeric monoclonal antibody, widely used in the treatment metastatic colorectal cancer (mCRC). We carried out a survey to understand the use of cetuximab against mCRC in clinical practice. Method: A questionnaire was developed to conduct survey amongst oncologists across India in 2016 to understand the use of cetuximab in this indication. Response from 37 oncologists was recorded and analysed. Result: When it comes to K-Ras wild type, EGFR expressing mCRC patients 29.7% doctors treat 8 or more patients in a month and 29.7% see 1 to 4 patients. 58.3% doctors use cetuximab in 1 to 4 patients in a month while 30.6% do not use cetuximab in these patients. 51.4% doctors treat 1 to 4 patients in a month suffering from K-Ras wild type, EGFR expressing mCRC refractory to irinotecan based chemotherapy (CT) while 32.4% see 1 to 7 patients. 73.6% of doctors use cetuximab in 1 to 4 such patients in a month while 21.6% do not use cetuximab in these patients. 58.3% doctors treat only 1 to 4 patients and 33.3% treat no patients in a month suffering from K-Ras wild type, EGFR expressing mCRC refractory to oxaliplatin and irinotecan based CT or intolerant to irinotecan. 52.8% doctors use cetuximab in 1 to 4 patients and 47.2% don't use cetuximab for treatment of such patients. Most doctors (64.7%) test for RAS mutation in 8 or more mCRC patients out of 10 before determining the first line treatment. Most use (65.7%) expanded RAS test analysis (including exon 3 and 4 of the KRAS gene and in exon 2 – 4 in NRAS gene) 39.8% doctors do not perform EGFR testing for mCRC patients and 38.9% carry out EGFR testing in 8 or more patients out of 10. 61.1% doctors suggest that EGFR testing helps in deciding appropriate treatment. 73% doctors use cetuximab in older patients (age>65) who are ineligible for platinum based therapy and have seen similar efficacy as compared to younger patients. 75.7% doctors do not use cetuximab for other indications on an off label basis, while some (18.9%) use cetuximab in lung cancer as well. Conclusion: Based on the current survey it was observed that use of cetuximab is limited in mCRC patients due to cost and adverse reactions.

Abstract Id: YUGP5673

Survey On Use Of Monoclonal Antibodies In The Treatment Of Locally Advanced Squamous Cell Carcinoma Of Head And Neck.

Presenter- *Dr. Dilip Pawar

Co-author - Sameer Chaudhari, Ramez Ahmed,

Background: Epidermal growth factor receptor (EGFR) has proven to be a natural target in EGFR over-expressing tumors. Anti-EGFR monoclonal antibody (Mab) has immense role in treatment of such tumors. We carried out a survey to understand the use of Mabs in locally advanced squamous cell carcinoma of head and neck (LASCHNN) patients in clinical practice. Method: A questionnaire was developed to undertake survey among oncologists across India in 2016. Response from 37 doctors was recorded and analysed. Result: 51.4% of doctors see around 5 to 10 newly diagnosed LASCHNN patients in a month. 78.4% neither conduct EGFR testing nor HPV testing at the time of diagnosis. However, 64.9% doctors conduct EGFR testing in oropharynx patients. In their practice 32.4% doctors suggest that only 10-25% patients are resectable. 27% suggest that 20-50% are resectable, while 24.3% suggest that less than 10% are resectable. Most doctors (59.5%) suggested that more than 75% patients who are unresectable are eligible for platinum chemotherapy and 21.6% opine that 50-75% who are unresectable are platinum eligible. In platinum eligible unresectable LASCHNN patients, 29.7% doctors use cisplatin weekly + RT in 75% or more patients while 18.9% use in 50-75% patients. 35.1% doctors use cisplatin weekly +RT + nimotuzumab in less than 10% patients while 29.7% use in 20-60% patients. 35.1% doctors use cetuximab + RT in less than 10% patients. 75.7% doctors do not employ any other form of therapy. 37.8% doctors suggested use of nimotuzumab in combination with standard therapies if cost is not constraint while 10.8% suggested use of cetuximab in combination of standard therapies. 27% use once daily as the radiation regimen in their practice, 24.3% said they use 60-70 Gy daily for 30 days, while 18.9% go as per the radiation oncologist's decision. In platinum ineligible patients 37.8% use only RT in less than 10% of patients, 10.8% use paclitaxel + RT in less than 10% of patients, 35.1% doctors use cetuximab + RT on less than 10% of patients while 18.9% use cetuximab + RT in 10-25% patients. 27% doctors use nimotuzumab +RT in 25-50% patients while 21.6% use in less than 10% patients. 37.8% doctors suggest use of nimotuzumab in combination with standard therapies while 10.8% suggest use of cetuximab in combination with standard therapies in patients where cost is not a constrain. 29.7% doctors opine that 10-25% of their patients can afford MAb's, 27% suggest that less than 10% of their patients can afford MAb's while 21.6% doctors think that 25-50% of their patients can afford MAb's. 51.4% doctors believe that rash is a marker of efficacy when it comes to treatment with cetuximab. Conclusion: Even though anti-EGFR MAb's are effective in the treatment of LASCHNN when combined with standard therapy, its use is limited to patients who can afford it. Affordable anti-EGFR MAb is warranted.

Abstract Id: YUGP5675

Prevalence And Pattern Of Tobacco Use Among Female Patients Of Head And Neck Squamous Cell Carcinoma.

Presenter- *Dr. RICHA CHAUHAN

Co-author - Vinita Trivedi, Rita Rani, Usha Singh

Abstract: Background: Tobacco has been proven to be the main risk factor for head and neck squamous cell carcinoma. However, the use of tobacco is not very common among the female population of Bihar. So, this study was done with an aim to know the prevalence and pattern of tobacco use among female patients of head and neck cancer. Materials and Method: This is a retrospective study of 500 head and neck squamous cell carcinoma patients coming to Mahavi Cancer Sansthan, Patna from July to December, 2016. The subsites include were oral cavity, pharynx and larynx. Observations and Results: A retrospective analysis of 500 patients of head and neck cancer showed only 53 (11%) female patients. The most common age group was 51 to 60 years, with 32% of the patients followed by the age group 41 to 50 and 61 to 70. However, the highest prevalence of tobacco use was seen in the age group 61 to 70 years, in which about 86% of the patients had a history of tobacco use. Among these 53 patients, 32(60%) were tobacco users. Smoking was the most common form of tobacco use. The most common site was oral cavity, followed by oropharynx, larynx, hypopharynx and nasopharynx. A site wise subgroup analysis of these patients showed that 75% of female patients with nasopharyngeal, 70% with oral cavity, 60% with oropharyngeal, 50% with hypopharyngeal and 25% with laryngeal cancer had a history of tobacco use in any form. Conclusion: Non-users of tobacco constitute a substantial number of female head and neck cancer patients. Further, large epidemiological studies are required to gain insights into the etiology of these subsets of head and neck cancer patients. No Addiction Smokeless Smoking Both Oral cavity 6 (30%) 9 (45%) 2(10%) 3 (15%) Oropharynx 6 (40%) 1 (6.67%) 6 (40%) 2 (13.33%) Larynx 6(75%) 1 (12.5%) 2 (25%) 1(12.5%) Hypopharynx 2 (50%) 0 2 (50%) 0 Nasopharynx 1 (25%) 2 (50%) 1(25%) 0

Abstract Id: YUGP5677

Toluidine Blue As An Intraoperative Staining Method For Better Delineation Of Tumor Margins In Oral Malignancies.

Presenter- *Dr. Sreekanth Reddy

Co-author - Dr M S Ganesh, Dr Keerthi B R, Dr Arjun Agarwal
Abstracts

Introduction:- India has a high incidence of head and neck cancers compared to many developed nations. Surgical resection of the primary tumor with adequate margins play a major role as a part of curative treatment. Inadequate or close margins can result into increased chances of local recurrence. Inspite of various advances we still lack of a cheap and efficient modality in delineating tumor margins intra operatively. Aim:- To use toludine blue as an intraoperative staining agent for better tumor delineation and to achieve adequate tumor negative margins. Methods:- 42 patients of proven oral squamous cell carcinomas participated in the study. 1% Toludine blue solution has been used for staging procedure and oral gaging technique is used for staging of the oral cavity lesions as per the standard recommendations. Staging pattern has been observed and noted and the tumor tissue is excised after giving adequate 1 cm margin from gross tumor area. Measurements are compared from the gross tumor area and the stained area. Results:- Toludine blue staining in the study has showed a sensitivity of 83% and specificity of 96%. Adequate margins could not be achieved in 7 cases if margins were taken from the stained area. All these 7 cases had malignant induration around the ulcerated area where the stain has not been taken up. Conclusion:- Toludine blue stain will be taken up only by ulcerated malignant tissue which allows the penetration of stain and retaining it after wash. Malignant induration doesn’t take up the stain. Hence toludine blue cannot be used as an intraoperative staining agent for better tumor delineation to achieve adequate tumor margins.

Abstract Id: YUGP5682
Primary Ovarian Leiomyosarcoma: A Case Report
Presenter - Dr. PRIYANKA YOGA PURINI
Co-author - Dr. ANISH K, Dr. PAPA DASARI,

Introduction Primary leiomyosarcoma of the ovary is extremely rare tumour, with less than 50 cases reported in the literature and characterized with poor prognosis and aggressive behaviour. It mainly occurs in postmenopausal women. Surgery is the mainstay modality of treatment. Substantial data is lacking to describe the role of radiotherapy and chemotherapy. This paper presents the case of a reproductive age woman who is diagnosed with primary leiomyosarcoma of the right ovary and who received a surgical approach. Case presentation We present an unusual case of a 36-year-old nulliparous woman who presented with complaints of lower abdominal pain and abdominal distension. On preoperative examination, eighteen weeks gravid uterus mass felt with solid and cystic component, well-defined borders and freely mobile, on per vaginal examination 10x8 cm mass felt in right fornix, no transmitted mobility, groove sign positive. On per rectal examination, there was no PO blind nodule. USG abdomen showed irregular mass of right adnexa of size 9.9cm x 7.8cm with hyper and hypoechoic regions. Chest x-ray revealed no abnormalities. Patient was taken for laparotomy with preoperative diagnosis of complex ovarian cyst and underwent right ovariectomy with omental biopsy. Intraoperatively, 8x10 cm sized right adnexal mass, with irregular surface, solid in consistency was detected and proceeded with right ovariectomy and omental biopsy. Left fallopian tube, ovary, uterus were normal and there were no peritoneal deposits. Pathological findings established the diagnosis of primary ovarian leiomyosarcoma with omentum free of tumour. In this report, we have described the clinical and pathological characteristics of this rare tumour. Conclusion: Primary leiomyosarcoma of ovary is rare tumour with unfavourable prognosis. Additional studies are required to optimize the treatment of this tumor. Keywords Leiomyosarcoma, Ovarian tumour, Soft tissue sarcoma.

Abstract Id: YUGP5686
Idea Of Good Death Among The Terminally II In A Hospice In Telangana.
Presenter - Dr. Sneha M
Co-author - Dr Gayatri Palat,

The journey across the comfort zone for us physicians is “breaking bad news” and then the patient engages in what is called “mutual pretense” state with both family and caring professionals. In this study we asked the terminally ill about what Good death meant for them by posing four questions related to organ donation as legacy leaving, relationship with doctor, place of death and conversation about death with physician. Results aim to translate as practice guidelines for us physicians who are often walking on egg shells on these matters. Extension of the study is being proposed in 12 states across India.

Abstract Id: YUGP5688
Cisplatin Induced Acute Myeloid Leukemia In A Patient With Carcinoma Cervix Post Chemo-Irradiation: A First Case Report.
Presenter - *Dr. Niranjan Vijayaraghavan
Co-author - Dr. Gunaseelan K, Dr. Arun Kumar, Dr. Debdattha Basu

Therapy-related myelodysplastic syndrome and acute myeloid leukemia (t-MDS/t-AML) are a well-recognized clinical syndrome occurring as a late complication following cytoxic therapy. Several case reports are available for Acute Myeloid Leukemia post radiation treatment. t-MDS/t-AML occurring after treatment cervical carcinoma are rare. Though case reports are available, these neoplasms occurring post Cisplatin based concurrent are not seen after cervical cancers. Moreover, those t-MDS/t-AML occurring after concurrent chemo-irradiation for cervical cancer are seen with use age of Topoisomerase II inhibitors. This is a case report of a patient with carcinoma cervix treated by chemo irradiation with cisplatin who developed AML arising in the background of MDS. Therapy related AML usually exhibit certain cytogenetic abnormality like losses of chromosomes 5 and/or 7. They are usually aggressive and have poor prognosis with a median survival of 8 months. Bone marrow transplantation (BMT) appears to represent the only potentially curative regimen in patients diagnosed with therapy related Myeloid Neoplasms.

Abstract Id: YUGP5690
Delayed Presentation Of Orbital Malignant Melanoma
Presenter - *Dr. VASIREDDY ABHINAV
Co-author - DR.VASIREDDY ABHINAV, DR.Siva sankar kotne, DR.Ananda rao

A 53yr old male came to us with paraplegia of both lower limbs since 2 months. For that MRI spine was done which shows wedge compression of L2 vertebrae and later he underwent L2 laminectomy with L1-L3 spine fusion on 9/11/15. HPE report suggestive of malignant melanomatous secondary. Even after thorough workup primary site could not be found and treated as unknown primary with metastatic melanomatous deposits. So he received palliative RT to spine to a dose of 30Gy in 10# followed by chemotherapy with 6 cycles of dacarbazine During the course of treatment with chemotherapy patient complained of gradual blurring of vision in left eye, headache and reeling sensation on and off. MRI brain was done suggestive of brain secondaries and lobulated mass of 2.1*1.7 cm involving the left globe. FNAC from pars plana of left eye shows shows malignant melanoma. Hence it was considered as primary ocular melanoma with metastasis to spine and brain which is a delayed presentation of primary. Now patient was given palliative RT to brain and left orbit to a dose of 30Gy in 10#. Now patient is kept under follow up.

Abstract Id: YUGP5694
Exploring Post-Traumatic Growth Experience Among Cancer Survivors
Presenter - *Ms. Shrinidhi Parthasarathy
Co-author - Shrinidhi.P.

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Abstracts

Being diagnosed with cancer can be a traumatic experience that shatters the individual’s understanding of the world and his or her position in it. Advancements in early detection and treatment of the disease have resulted in higher survival rates and increased longevity of cancer survivors. Cancer often serves as the traumatic event that spurs psychological growth in the individual who survives it. Post-traumatic growth (PTG) as described by Tedeschi and Calhoun (2004) is “the experience of positive change that occurs as a result of the struggle with highly challenging life crises.” The phenomenon is ongoing in nature, involving the gradual realization of life wisdom. There has been a paucity of research in factors that sustain post-traumatic growth in an individual who survived a traumatic experience. According to the family systems theory, the family to which the individual belongs has an important role in sustaining post-traumatic growth after survival. Post-traumatic growth, when initially experienced by the individual, is manifested in interactions with family members. When these growth-dominated disclosures cultivate congruent responses from family members, it persists. The principle purpose of this study is to understand the nature of family dynamics that nurture and sustain post-traumatic growth in the individual. Eight blood cancer survivors participated in semi-structured in-depth interviews after being screened using the Post-Traumatic Growth Inventory (PTGI). All the participants had completed treatment for Leukemia or Lymphoma at least a year before the interviews were conducted. Data was analysed using Interpretative Phenomenological Analysis based on the phenomenological approach. Case-by-case as well as cross-case analysis was done. The basic themes were organized under super-ordinate themes. Emergent super-ordinate themes related to PTG include embracing vulnerability, transforming inside-out, non-striving, growing spiritually, looking beyond oneself and valuing differently. Emergent super-ordinate themes related to family dynamics include cancer as a familial experience, storying cancer, changing together and cultural influences. Keywords: Post-traumatic growth, blood cancer survivorship, family dynamics.

Abstract Id: YUGP5704
Role Of 18F-Fdg Pet-Ct In Detecting Regional Lymph Node Metastasis In Patients With Endometrial Cancer
Presenter - Dr. Deepali Raina
Co-author - Dr Rashmi Bora, Dr Rama joshi,

OBJECTIVE: To evaluate the role of 18F-FDG PET-CT in detecting regional lymph node metastasis in patients with endometrial cancer

SUBJECTS AND METHODS: A retrospective analysis of the records of thirty eight patients with biopsy proven endometrial cancer who underwent FDG PET/CT as a part of pre-operative evaluation was done. All of them underwent staging/debulking including hysterectomy with Lymphadenectomy. PET/CT findings were then compared with the final histo-pathologic results. The criterion for malignancy on PET/CT images was increased FDG uptake by a lymph node independent of its size. RESULTS: Hyper-metabolic FDG Avid lymph nodes were present in 8 out of 38 patients. 12 patients had metastasis to lymph nodes on histopathology and 26 were negative. The overall sensitivity, specificity, negative & positive predictive value of PET/CT for detecting nodal metastases were 63.64% , 96.3%, 86.7% and 87.5% respectively. CONCLUSION: Though FDG PET/CT has a high specificity and negative predictive value but it is role in diagnosing nodal metastasis in patients with endometrial cancer is limited because of its low sensitivity. PET/CT should not replace lymphadenectomy.

Abstract Id: YUGP5706
Head And Neck Sarcoma – Retrospective Analysis From Dedicated Sarcoma Medical Oncology Clinic From A Tertiary Care Centre In North India
Presenter - Dr. Sameer Rastogi
Co-author - Aditi Aggarwal, Asit Mridha Ranjan, Ekti Dhamija

Background and rationale- Till date the data on head and neck soft tissue sarcoma (STS) is exceedingly sparse and is either supported by case reports or data of handful of patients spanning over a decade. Material methods- head and neck soft tissue sarcoma patients ? 14 years, referred during January 2016 to August 2017 in dedicated sarcoma clinic in AIIMS were analyzed through retrospective records. SPSS 23 was used for statistically calculations. Results – There were 28 head and neck STS patients, majority being males (n=20,71%) and median age 37 years (Range-14 to 73 years). Most common sites were neck 32% (n=9), face 29% (n=6), scalp 18% (n=5). 75% were unresectable with 12 being locally advanced (43%) and 10 metastatic (36%) while only 21% of patients (n=6) were resectable. 33% were the novo and 7% patients were RT induced sarcomas (n=2). Most common type of sarcomas were synovial sarcomas (n=6, 21%), pleomorphic undifferentiated sarcoma (n=5, 18%), followed by MPNST, angiosarcoma, rhabdomyosarcoma (each n=3, 10.7%) and others (29%). Clinicoradiologically lymph node involvement was present in 3 cases only (10.7%) namely in epitheloid sarcoma, angiosarcoma and synovial sarcoma. Of 12 locally advanced patients, neoadjuvant chemotherapy was given in 10 patients (2 with concurrent RT) while imatinib in one patient and 25% (n=3) could be converted to surgically resectable. For the entire group (n=28) of patients median PFS was 7 months (95% CI 5-8 months) with a median follow up of 10 months. Conclusions – This study throws light on these exceedingly rare and heterogenous tumors with advanced but distinct presentation with younger age and nodal involvement limited to specific subtypes. The outcome even with multidisciplinary management remains dismal and should be further substantiated by prospective data.

Abstract Id: YUGP5710
Robotic Assisted Radical Nephroureterectomy And Extended Template Lymphadenectomy By Da Vinci Xi System- Demonstration Of Technique And Initial Outcomes
Presenter - 'Dr. Vineet Goel
Co-author - Ashwin Tamhankar, Puneet Ahuwalia, Gagan Gautam

Robotic assisted radical nephroureterectomy and extended template lymphadenectomy by da Vinci Xi system- demonstration of technique and initial outcomes Vineet Goel, MS, DBN (Resident, Surgical Oncology, Max Hospital, Saket, New Delhi) AshwinTamhankar, MS, MCh (Urology), Vattikuti Fellow in Robotic Urooncology PuneetAhuwalia, MS, MCh (Urology) GaganGautam, MS, DBN, MCh (Urology) Introduction Upper tract transitional cell carcinoma (TCC) amounts to around 5 % of urological malignancies. Clayman et al have described laparoscopic approach for this in 1991 following which multiple modifications in approach are described including Si and Xi system of Robot in recent past. Unfortunately current data on Robotic nephroureterectomy (RNU) do not incorporate details about lymphadenectomy. Methods We operated 9 patients for RNU with Xi system in last one year one of which was with cystectomy. For lower ureteric tumors (n=3) repositioning of patient and redocking was performed for ensuring adequate oncological principles and completeness of pelvic lymphadenectomy. Pelvic and upper ureteric tumors (n=6) were operated without redocking, using advantage of port switching feature of Xi system in which camera port was switched one port down for the completion of pelvic part. Extended template lymphadenectomy was done in all patients the levels of which were aortic bifurcation, common iliac bifurcation and pelvic for renal pelvis, upper ureteric and lower ureteric tumors respectively. Results Median age was 69 years. Right and left sides were performed in5 and 4 patients. Five had renal pelvic, 2 had mid ureteric, 2 had lower ureteric growth. Five patients had carcinoma of bladder precurrent or concurrent onset. Median console time was 172 min (158 -270). Median blood loss was 100 cc. In all patients drain was removed on Day 1. Median stay was 2.5 days. There were no open conversions with zero positive surgical margin rate. 11% had ClausenDindo grade 1 complications. Median follow up were 7 months in which 2
Abstract Id: YUGP5712

**Palliative Intent Chemotherapy In Recurrent/Metastatic Carcinoma Cervix At Cancer Institute, Chennai**  
**Presenter:** Dr. Sharada Mailankody  
**Co-author:** Manikandan Dhanushkodi, Thanda Joshua, Vasanth Christopher

Carcinoma cervix is the second most common cancer among females in Chennai. Recurrent/metastatic carcinoma cervix has poor prognosis. There is limited data on the outcome of recurrent carcinoma cervix from India. This study was done to find the outcome of palliative chemotherapy in carcinoma cervix. Materials and methods This was a retrospective study from the case record of patients with carcinoma cervix given palliative chemotherapy from Jan 2012 to Dec 2016. The demographic and clinical details and outcome were collected. Patients were treated with carboplatin or paclitaxel and carboplatin. Local radiation was given for symptomatic patients. Patients were assessed for response clinically and/or radiologically after 3 and 6 cycles of chemotherapy. Results A total of 60 patients with recurrent/metastatic carcinoma cervix were treated with palliative chemotherapy. The median age was 50 years. 33.3% patients had metastatic disease at presentation. The common sites of metastasis were paraaortic (60%) and supravacular (45%). Of the 40 patients with disease relapse, 67.5% patients were asymptomatic. 72.5% had received prior cisplatin. The common sites of recurrence were lung (22/40), retroperitoneum (17/40) and supravacular nodes (14/40). Biopsy confirmation of relapse was established in 68% of patients. Patients received paclitaxel carboplatin (85%); single agent carboplatin (11.6%) and other chemotherapy regimens (3.3%). The mean number of cycles was 4.8 (±1.8) and 65% patients completed 6 cycles of chemotherapy. Side effects were neuropathy and myelosupression. Grade 3/4 toxicities were seen only in 3 patients. Local radiation was given in 34 patients (56.7%). The evaluable responses were complete response (13%), partial response (55%), stable disease (5%) and progressive disease (23%) with overall response rate 68.3%. The median duration of follow up was 11.8 months. The median DFS and OS were respectively 12 months [95% CI 9.4-14.5] and 16.9 months [95% CI 7.2-26.7]. 18 month DFS and OS were respectively 39% and 45%. Conclusion Palliative chemotherapy with paclitaxel carboplatin is a safe and effective option in Indian patients with recurrent/metastatic carcinoma cervix.

Abstract Id: YUGP5718

**Retrospective Analysis Of Outcomes With Second Line Chemotherapy In Advanced Pancreatic Adenocarcinoma - Results From A Tertiary Cancer Centre In India**  
**Presenter:** Dr. Mridul Malhotra  
**Co-author:** Dr. Sangeetha Pratibhan, Dr. Vikas Ostwal, Dr Prabhat Bhargava

Background Second line chemotherapy (CT2) for patients with advanced pancreatic adenocarcinoma (PDAC) progressing on first line chemotherapy (CT1) is not standardized. Multiple studies have identified 5 Fluorouracil (5FU) based monotherapy or 5FU based doublet regimens as feasible in this setting. Data from India is scarce. Materials and methods Data of patients diagnosed with PDAC between August 2013 to August 2016 was retrieved from a prospective database maintained at the Department of Gastrointestinal Medical Oncology at Tata memorial centre. All patients who had previously received chemotherapy (either as adjuvant or palliative) and further received CT2 were included for evaluation and analysis. Baseline demographic data, prior treatment, details of CT2, adverse events and tolerance was enumerated using descriptive statistics. Event free survival (EFS) was calculated from the date of start of CT2 till date of progression, death, or loss to follow up. Overall survival (OS) was computed from the date of start of CT2 till date of death. Median EFS and median OS were calculated using the Kaplan–Meir product limit method and comparison across subgroups was done using the log-rank test. Results: A total of 237 patients had received CT2 during the pre-specified time period for PDAC, of which 94 patients (39.6%) were considered for CT2. 76 patients (32.07%) finally received CT2 and were evaluable for efficacy, adverse events and outcomes. Median age of the cohort was 59.5 years (38-82) and majority of patients were males (M: F = 2.3 : 1). 14 patients (18.4%) had undergone previous surgery and adjuvant chemotherapy, while 62 patients (81.6%) were either borderline resectable, locally advanced unresectable or metastatic PDAC. CT1 commonly used were FOLFIRINOX 18 (23.7%), Gemcitabine-Nabpaclitaxel 17 (22.4%) and Gemcitabine 12 (15.8%) patients, respectively. Reasons for starting CT2 included progression on CT1 in 55 patients (72.4%), recurrence post adjuvant therapy in 9 (11.8%), adverse events on 1st line therapy in 7 (9.2%), patient choice in 1 (1.3%) and poor PS in 4 (5.3%). CT2 used were gemcitabine, capecitabine and 5FU as single agents or as doublets as mentioned [Gemcitabine 3 (3.9%), Gem-cisplatin 1 (1.3%), Gem-OX 2 (2.6 %), FOLFIRI 27 (35.5%), FOLFOX 1 (1.3%), Caepecitabine 3 (3.9%), CAFCI 5 (6.6%), CAPOXY 3 (3.9%), FOLFIRINOX 6 (7.9%), Gem-Abraxane 14 (18.4%), Gem-Cape 1 (1.3%), Gemcitabine-Erlotinib 9 (11.8%), Others (Gemcitabine-Docetaxel) 1 (1.3%), 15 (19.7%) had grade 3/4 toxicities and 4 (5.3 %) were admitted for complications. Causes for Cessation of 2nd line chemotherapy were progressive disease in 51 patients (67.1%), adverse events in 11 patients (14.5%), loss to follow up in 3 (3.9%), patient choice in 5 (6.6%), while 6 patients (7.9%) were on CT2 at the time of analysis. Partial response was seen in 21 patients (27.6%), while stable disease was seen in 16 patients (21%) as best radiological response. Radiological response could not be assessed due to premature stoppage of chemotherapy in 8 (10.5%) patients, while data was not available for 8 (10.5%) patients. Median OS was 8.08 months (95% CI: 7.12 – 9.05) and Median EFS on 2nd line chemotherapy was 5.94 months (95% CI: 4.69 – 7.21). Median OS was higher on patients who underwent prior surgery (15.08m vs 7.29m; p: 0.024) Conclusion 2nd line chemotherapy can prolong survival in a select cohort of patients with advanced pancreatic cancer. Further evaluation is required for standardization of chemotherapy regimens.

Abstract Id: YUGP5720

**Perioperative Outcomes Of Cytoreductive Surgery And Hyperthermic Intraoperative Chemotherapy For Peritoneal Carcinomatosis**  
**Presenter:** Dr. Ajay Chanakya Vallabhaneni  
**Co-author:** Dr Ravi Chander Veligeti

BACKGROUND: Although the feasibility of cytoreductive surgery(CRS) plus hyperthermic intraperitoneal chemotherapy(HIPEC) has been evaluated in numerous studies, the mortality and morbidity rates of CRS+HIPEC have not been investigated. The objective of the study was to evaluate the influence of CRS+HIPEC on peri-operative outcomes, both immediate and late, for the treatment of peritoneal carcinomatosis(PC).  
**PATIENTS and METHODS:** A prospective observational study is done at the institute from Jan 2015 to present. All patients with peritoneal carcinomatosis without any disease elsewhere outside the abdominal cavity and who have given consent for the procedure have been included. In all patients HIPEC is preceded
Role Of Il-8-Cxcr1/2 Axes In Glioblastoma Cell Proliferation And Invasion.

Background: Glioblastoma multiforme (GBM) is the most fatal neoplasm of central nervous system. Chemokines are known to play critical role in tumor biology. Previously, we had studied the differential gene expression pattern of chemokines and their receptors between grade IV and grade II astrocytomas, which helped us to identify pro-gliomagenic chemokine axes. Among these chemokines, IL-8 appeared to be most frequently upregulated in GBM. In present investigation we aimed to elucidate the role of IL8-CXCR1/2 axes in GBM progression. Materials and Methods: Localization of IL-8, CXCR1 and CXCR2 was studied by immunohistochemistry. Furthermore, we checked the impact of targeting IL-8 in vitro on cell proliferation and invasion in two GBM cell lines. For this expression of IL8 and its receptors was first confirmed by RT-PCR and immunocytochemistry. IL-8-CXCR1/2 axes were targeted using neutralizing antibodies as well as by pharmacological antagonist- Reparixin-I-lysine. The impact on cell proliferation and viability was assessed by MTT assay. Spheroid invasion assay was performed to assess the impact on invasion. Results: Immunohistochemical staining of IL-8 and CXCR2 revealed cytoplasmic expression in GBM cells, while CXCR1 was primarily observed in tumor associated micro-vessels. This suggests possible autocrine and paracrine mode of signalling through which these axes may be promoting tumor cell proliferation and neovascularisation in GBM. Further in vitro experiments unravelled exact biological function in GBM, where in effective inhibition of IL-8-CXCR1/2 axes led to significant reduction in cell proliferation, clonogenic survival and invasion in U-87MG and LN-18 cell lines. Conclusion: These results suggest an important role of IL-8-CXCR1/2 axes in GBM biology, contributing in both mitogenic and angiogenic function, thus displaying a strong potential as candidate molecular target.

Abstract Id: YUGP5730

Role Of Il-8-Cxcr1/2 Axes In Glioblastoma Cell Proliferation And Invasion.

Abstract:

Computed Tomography Based Image Guided Interstitial Brachytherapy For Early Squamous Cell Carcinoma Of Mobile Tongue, Dosimetric And Clinical Outcome Analysis

Presentation: Dr. Poulami Basu

Co-author: Dr. Anish Bandyopadhyay, Dr. Arunima Gupta, Dr. Arnab Adhikary

Background: Radiotherapy is a standard treatment modality for mobile tongue cancer. Intstitial brachytherapy (ISTBT), in particular, shows high local control rates , equivalent to those of radical surgery. Radical surgery (hemiglossectomy) is associated with loss of function and swallowing difficulties. Image guided high-dose-rate ISBT (HDR-ISBT) with optimization is can achieve good local control rates with organ preservation. Methodology: Between august 2011 to July 2015, 11 patients of T1- T2N0 (4 T1 and 7 T2) squamous cell carcinoma of oral tongue treated CT based image guided interstitial HDR brachytherapy in our institute are analysed regarding dosimetric parameters, response and local control and late toxicity. Results: The median age at treatment was 52 years (32-64), with 8 males and three females. All patient were N0 and median size (largest diameter by MRI) was 2.4 cm. The median number of plastic catheters inserted was 8 (range 5-12) mostly in 2 planes, the mean volume of CTV being 25.7cc. The mean D90 and D100 was 118% and 98% of the prescribed dose (PD). The dose prescribed was 45Gy/12f - 54Gy/12f. The Median Homogeneity Index (HI) was 0.67. The mean 0.01 cc Mandible dose was 153% of PD. After a median follow up 23 months three cases failed out of 11, 2 in the nodes and one just behind the CTV. Persisting pain (> 3 months) requiring opioid analgesics, trismus and fibrosis of the tongue are major late toxicity encountered. Conclusion CT based HDR interstitial brachytherapy of early tongue lesions is a relative safe procedure with acceptable local control and late toxicity, however proper case selection reducing the dose to 0.01cc to mandible may further reduce recurrence and toxicity respectively.

Abstract Id: YUGP57522

Computed Tomography Based Image Guided Interstitial Brachytherapy For Early Squamous Cell Carcinoma Of Mobile Tongue, Dosimetric And Clinical Outcome Analysis

Presentation: Dr. Poulami Basu

Co-author: Dr. Anish Bandyopadhyay, Dr. Arunima Gupta, Dr. Arnab Adhikary

Background: Radiotherapy is a standard treatment modality for mobile tongue cancer. Intstitial brachytherapy (ISTBT), in particular, shows high local control rates , equivalent to those of radical surgery. Radical surgery (hemiglossectomy) is associated with loss of function and swallowing difficulties. Image guided high-dose-rate ISBT (HDR-ISBT) with optimization is can achieve good local control rates with organ preservation. Methodology: Between august 2011 to July 2015, 11 patients of T1- T2N0 (4 T1 and 7 T2) squamous cell carcinoma of oral tongue treated CT based image guided interstitial HDR brachytherapy in our institute are analysed regarding dosimetric parameters, response and local control and late toxicity. Results: The median age at treatment was 52 years (32-64), with 8 males and three females. All patient were N0 and median size (largest diameter by MRI) was 2.4 cm. The median number of plastic catheters inserted was 8 (range 5-12) mostly in 2 planes, the mean volume of CTV being 25.7cc. The mean D90 and D100 was 118% and 98% of the prescribed dose (PD). The dose prescribed was 45Gy/12f - 54Gy/12f. The Median Homogeneity Index (HI) was 0.67. The mean 0.01 cc Mandible dose was 153% of PD. After a median follow up 23 months three cases failed out of 11, 2 in the nodes and one just behind the CTV. Persisting pain (> 3 months) requiring opioid analgesics, trismus and fibrosis of the tongue are major late toxicity encountered. Conclusion CT based HDR interstitial brachytherapy of early tongue lesions is a relative safe procedure with acceptable local control and late toxicity, however proper case selection reducing the dose to 0.01cc to mandible may further reduce recurrence and toxicity respectively.
Abstract Id: YUGP5738
Predicting Drug Response In Cancer In Cancer Cell Lines Using Deep Learning For Precision Treatments In Breast And Lung Cancers.
Presenter - Dr. Deva Reddy
Co-author - Deva Reddy

Predicting Drug Response in Cancer in Cancer Cell Lines using Deep Learning for precision treatments in breast and lung cancers. Coauthor(s) Dr Rama Mohan Reddy Sr.Oncologist, Deva Reddy Sr.Scientist, Samyukta Reddy Scientist ABSTRACT PURPOSE: Precision oncology aims to improve cancer patient outcomes but major challenge in cancer treatment is predicting the clinical response to anticancer drugs for each individual patient. Since cancer, characterized by high inter-patient variance, the implementation of precision medicine approaches is dependent upon understanding the disease process at the molecular level. While the ‘omics’ era provides unique opportunities to understand the molecular features of diseases, the ability to apply it to targeted therapeutic efforts is hindered by both the massive size and diverse nature of the ‘omic’ data. We are applying recent advances with Deep Learning Neural Networks (DLNN), suggests that DLNN could be trained on large data sets to efficiently predict therapeutic responses.

METHODS AND MATERIALS Data: Compiled from CCLP & GDSC, 10001 Cell lines, 251 drugs We used GDSC 8 as our drug response data source for 139 therapeutic compounds, which provided IC-50 values for each compound, as well as information on tissue origin. Given their molecular profiling data, both large cell-line panels (CCLE and GDSC) have been utilized in attempts to identify biomarkers for predicting drug response of specific cancer cell lines. Today’s complex “omic” data sets have been proven too multi-dimensional to be effectively managed by classical Machine Learning algorithms.

To our knowledge, this is the first time that the DLNN framework is systematically applied to predict drug efficacy against cancer. DLNN architecture demonstrates that it is well suited for complex biological data because it can automatically construct complex features and allows for multi-task learning. For our drug response classification framework, we selected the Deep Learning Framework because it has redefined the state-of-the-art in many applications ranging from image recognition to genomics. Technology – Deep learning, it has redefined the state-of-the-art in many applications ranging from image recognition to genomics. By applying the existing techniques in predicting the drug responses.

Abstract Id: YUGP5746
Thoracoscopic supra-azygos dissection in carcinoma esophagus
Presenter - Dr. KVKN Raju
Co-author - dr KVKN RAJU,

Thoracoscopic supra-azygos dissection in carcinoma esophagus

Abstract Id: YUGP5748
Laparoscopic RPLND
Presenter - Dr. KVKN Raju
Co-author - drkvknraju,

Laparoscopic RPLND

Abstract Id: YUGP5754
Analysis Of Interfraction And Intrafraction Prostate Motion By Kilovoltage Cone Beam Computed Tomography During Image Guided Radiotherapy Of Prostate Cancer
Presenter - Dr. Ashar Iqbal Lodi
Co-author - Dr. VIREN德拉 BHANDARI, Dr. K. L. GUPTA, Dr. OM PRAKASH GURJAR

BACKGROUND: Radiotherapy of prostate cancer is a challenging task due to its mobile nature owing to the changes in the adjacent organs. Image guided radiotherapy (IGRT) combined with kilovoltage cone beam computed tomography (kV CBCT) offers precise dose delivery to the treatment volumes with minimal dose to the surrounding structures. Possible prostate shifts during treatment delivery necessitate the study and analysis of its position before-and-after treatment. MATERIALS & METHODS: Four patients diagnosed with localized prostate cancer were planned for definitive IGRT abiding by strict bowel and bladder protocol combined with a pair of CBCT imaging on 16 fractions. Patients were set on linear accelerator couch using immobilizing devices. CBCT images were taken before the plan delivery to check the pretreatment couch shifts and the interfraction motion was nullified. Immediately after the plan delivery, repeat CBCT was performed to measure intrafraction motion. Both the shifts in a total of 128 kV CBCT imaging sets of 64 sessions were analyzed and planning treatment volumes (PTV) margins given at our institution were compared. RESULTS: The mean lateral, longitudinal and vertical shifts (in cm) in pre-treatment CBCT were found to be 0.20 (standard deviation (SD): ±0.18), 0.37 (SD: ±0.49), 0.17 (SD: ±0.18), respectively and 0.12 (SD: ±0.13), 0.10 (SD: ±0.18), 0.12 (SD: ±0.18) in post-treatment CBCT. The mean isodisplacement vector (IDV) was found to be 0.54 (SD: ±0.46) and 0.25 (SD: ±0.24) in pre-and post-treatment CBCT respectively. CONCLUSIONS: Based on these observations, daily CBCT is recommended and PTV margins should be reduced to 2 mm such that the dose to the organs at risk (OARs) is decreased.

Abstract Id: YUGP5756
Prospective Randomized Controlled Study Comparing Primary Surgery Versus Neoadjuvant Chemotherapy Followed By Surgery In Gastric Carcinoma-Early Outcomes
Presenter - Dr. Ramachandra Chavali

Prospective randomized controlled study comparing primary surgery versus neoadjuvant chemotherapy followed by surgery in gastric carcinoma - early outcomes.
Abstracts

Co-author - Dr. Syed murtaza ahmed,

Prospective randomized controlled study comparing primary surgery versus neoadjuvant chemotherapy followed by surgery in gastric carcinoma-early outcomes. Background: Carcinoma stomach is one of the commonest gastrointestinal malignancies in South India. The symptoms and signs of the stomach cancer are often reported late when the disease is already in advanced stages and 5-year survival is less than 30% in developed countries and around 20% in developing countries. Also, in advanced stage gastric cancers, it may not be possible to achieve an R0 resection due to local/regional extent of disease. The morbidity of surgery may also limit the ability to deliver postoperative chemotherapy effectively. The prospective randomized study was conducted to compare early outcomes after primary surgery versus neoadjuvant chemotherapy followed by surgery in gastric adenocarcinoma. Material and Method: The study consisted of 60 consecutive patients of carcinoma stomach randomized into two groups of 30 patients each in primary surgery and neoadjuvant chemotherapy followed by surgery arms. After routine work up and staging evaluation, random number was generated by random sequence generator at Random.org. All even number patients were allotted to primary surgery arm and all odd number patients were allocated to neoadjuvant chemotherapy followed by surgery arm. RESULTS: Rates of postoperative complications were similar in the perioperative-chemotherapy group and the surgery group, as were the numbers of deaths within 30 days after surgery. The resected tumors were significantly larger and less advanced in the perioperative-chemotherapy group. CONCLUSIONS: In patients with resectable adenocarcinoma of stomach, neoadjuvant chemotherapy with 5-FU and Cisplatin didn't improve R0 resection rate, but contributed to a non-significant trend of lower incidence of tumor, optimal treatment strategy remains controversial.

Abstract Id: YUGP5760

“A Rare Presentation Of Primary Neuroendocrine Carcinoma Of Breast In A Young Lactating Mother”
Presenter - Dr. Nikhil Kumar Athmakoor
Co-author - Prof.Dr.Srikanth, Dr.Raghu Raman, Dr.Sudha Rani

ABSTRACT Title: “A rare presentation of primary neuroendocrine carcinoma of breast in a young lactating mother” INTRODUCTION: Primary neuroendocrine tumors (NETS) of breast are rare and account for less than 0.1% of all breast cancers and less than 1% of all NETS. The mean age of patients presenting with NETS of breast is 66 years. Case presentation: Here, we present a case of young 23 years old lactating mother, who presented with a huge mass in her right breast, occupying all four quadrants, with ulceration. FNAC elsewhere showed ductal cell carcinoma. On further evaluation patient was found to have multiple liver and bone metastasis. So patient was empirically started on FAC+2A, after taking true cut biopsy for IHC, which later showed poorly differentiated malignancy with IHC profile showing, chromogranin-A positive in more than 90%1s, CD56 +ve, Ki67:70%, favoring the diagnosis of NETS. Later investigations were done to rule out primary from lung and elsewhere in the body, a diagnosis of primary neuroendocrine carcinoma of breast is thus made. Conclusion: Primary NETS of breast are infrequent and account for less than 0.1% of breast cancers. Diagnosis is complex as they lack characteristic clinical and radiological findings. Because of lower incidence of tumor, optimal treatment strategy remains controversial.

Abstract Id: YUGP5762

A Rare Case Of Axillary Porocarcinoma
Presenter - Dr. Hema Padmini
Co-author - Dr.K.V.L Anusha, Dr.E.Frahalad, Dr.P.B.Anand Rao

INTRODUCTION: Porocarcinoma is rare cutaneous neoplasm arising from the intraepidermal portion of sweat glands. It accounts for 0.005% of cutaneous neoplasms. Here we report case of axillary porocarcinoma. CASE REPORT: 50 year old male first presented with 7*5cm right axillary mass on May 2016. Mass was excised on July 30, 2016.Patient returned with 4*4cm firm recurrent mass 5 cm proximal to scar in right axilla partly fixed to chest wall in 3 months. INVESTIGATIONS: Chest X-ray PA view - clear CT THORAX: Right axillary mass (? Lymph node) with surrounding inflammatory changes. RE-EXCISION OF MASS done with axillary dissection. Small residual tumor at axillary vein. POST OP HPE of excised right axillary mass showed features consistent with Porocarcinoma of right axilla. Post - operatively patient received EBRT dose of 6000cGy in 30 fractions, 5 fractions per week, followed by 6 cycles of cisplatin and paclitaxel adjuvant chemotherapy During follow up patient is in complete remission since 1 year. DISCUSSION: Mean age of presentation as per available case reports is 67.5years with equal incidence between both sexes. Most commonly affected sites are lower extremity(50%), trunk (24%), head and neck (18%). Main stay of treatment is surgery. Approximately 20% of cases have local recurrence, 20% of cases develop into metastatic disease with mortality rate of 67% seen in lymphnode involvement. CONCLUSION: Carcinoma of eccrine and apocrine (sweat glands) are rare. we report successful treatment with surgery followed by radiotherapy and chemotherapy. Further follow up is required for survival data.

Abstract Id: YUGP5768

Pattern Of Palliative Radiotherapy Delivered Using Telecobalt Machine For Different Malignant Sites.
Presenter - Dr. Shreya Dwivedi
Co-author - Dr.Chaitali Waghmare, Dr.Vandana Jain, Dr.Gopal Pemmaraju

Pattern of palliative radiotherapy delivered using Telecobalt machine for different malignant sites. Dr. Shreya Dwivedi, Post Graduate Student, Under the guidance of Dr. Vandana Jain, M.D, Professor & HOD Dr.Chaitali Waghmare, M.D, Dr.Gopal Pemmaraju, Dr.Mayuresh Virkar Department of Radiotherapy & Oncology, Rural Medical College, Pravara Institute of Medical Sciences, Loni 413736, Dist. Ahmednagar (M.S.) E-mail : oncology@pmtips.org Abstract: Background: Majority of the patients with advanced or metastatic cancer need palliative radiotherapy for palliation of their symptoms. The purpose of this study was to assess pattern of palliative radiotherapy (PRT) delivered using Telecobalt machine for different malignancies. Materials and method: This was a retrospective analytical study. The case records of all patients who received radiotherapy (RT) on Telecobalt machine from 1st July 2015 to 31st July 2016 were screened. Patients receiving PTV on Telecobalt were included in the study. All patient and treatment related details were filled in a preformed proforma. Data entry was done in X-cell. Result: The study cohort was comprised of 61 patients. The median age was 56.11 years and male to female ratio was 1:1.4. Most common primary malignancy treated with PRT was head and neck cancer (24.59%), followed by genitourinary and gynecological (21.31%) and breast (16.39%). Squamous cell carcinoma (39.34%) was most common histopathology type followed by adenocarcinoma (34.42%). The disease was non-metastatic in 36.06% (22) and metastatic in 63.93% (39) cases. Majority (86.36%) were multiple metastasis and only three (13.63%) were oligometastasis. Twenty eight patients received RT at primary and or local lymph node site while 33 patients received PRT at metastatic site. Head and neck cancer (12) was the most common primary site receiving local RT for palliation followed by oesophagus (05) and cervix (04). Among the metastatic site bone metastasis was most commonly treated (72.72%). All patients received RT on daily basis. Two patients (3.27%) were treated with single fraction RT while 59 (96.72%) patients received fractionated RT. Commonly used dose fractionation schedule was 20 Gy in five fractions over a week (57.37%). Conclusion: RT is an effective
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Abstract Id: YUGP5770
Role Of Pet-Ct In Management Of Carcinoma Cervix
Presenter- Dr. Justin Benjamin
Co-author - Julie Hephzibah, David Mathew, Nylla Shanthly

Introduction Cervical cancer is the commonest cause of cancer mortality among women in developing countries. Every year in India, 122,844 women are diagnosed with cervical cancer and 67,477 die from the disease. Clinical staging is based on the International Federation of Gynaecology and Obstetrics (FIGO) system, revised in 2009. Cross-sectional imaging, although not used to assign stage is important to accurately assess loco-regional spread and distant metastases. In patients with a high probability of failed loco-regional control, it is desirable to acquire a baseline and regular follow up PET-CT to deliver optimal therapy. PET-CT can be incorporated into the vigilant follow-up protocol. Aim: To study the role of PET-CT in the management of carcinoma cervix patients Materials & Methods: Patients diagnosed with carcinoma cervix who had undergone PET-CT at our institution between December 2014 - July 2017 were retrospectively analyzed. The treatment, FIGO staging, PET-CT staging and any other additional interventional procedures were studied. Out of 766 patients during this time, 93 had PET-CT in the course of their management; 77 of them upto FIGO stage 3b were studied. Results Of the 77 patients, 37 were upstaged from initial FIGO staging. Group A (4/37) had baseline PET-CT; Group B (16/37) had PET-CT within 6 months of treatment; Group C (17/37) had PET-CT between 6 months - 3 years. Groups Initial FIGO Stage(range) PET-CT stage(range) A (n = 4) 2a-2b 3b-4b B (n = 16) 1a1-3b 3b-4b C (n = 17) 2a-2b 4b Conclusion PET-CT has upstaged all patients in groups A and B. The superiority of PET-CT over FIGO was evident in those who had baseline PET-CT. The staging and management could have changed considerably if PET-CT was done prior to treatment as was evident from the group B patients. PET-CT is a good tool for detecting distant metastases. Overall, PET-CT made a significant contribution for primary evaluation of cervical carcinoma.

Abstract Id: YUGP5772
Involvement Of Bone In Ovarian Germ Cell Tumour - A Rare Metastatic Event
Presenter- Dr. ASMITA KULSHRESTHA
Co-author - DR. VIRENDRA BHANDARI, DR. K. L. GUPTA, DR. TANVI SINGH

BACKGROUND : Germ cell tumours (GCT) constitute less than 3% of all ovarian malignancies, common in adolescents with predominance in 11-15 years of age group. Early diagnosis of GCTs owing to clinical imaging and histopathological findings offers these tumors a favourable prognosis. The end point of advanced ovarian malignancy is death by intra-abdominal metastasis or intestinal obstruction but rarely by hematogenous or lymphatic spread to other sites. Bone metastasis from ovarian malignancy is extremely rare with < 1 % incidence. MATERIALS AND METHODS: A rare case of a 12 year old girl with GCT of the ovary with lung and bone metastasis is being mentioned. Initially evaluated for complaints of abdominal pain and distension and diagnosed with ovarian GCT based on computed tomography (CT) imaging and histopathology reports. BEP and TIP chemotherapy ensued a significant regression of the tumour. The patient eventually presented with neuromuscular weakness below umbilicus and bladder and bowel incontinence. Subsequent detection of destructive lesions of D10-D12 vertebrae on magnetic resonance (MR) imaging whole spine was followed by palliative radiotherapy with 30 Gy in 10 fractions to the diseased vertebrae post debulking surgery. Thereafter, continued with physical rehabilitation to enable persistent recovery to previous functional mobility. Patient was scheduled for follow up at regular intervals. RESULT: Patient showed a considerable response to the initial chemotherapeutic treatment and competently tolerated the subsequent cytoreductive therapy with significant symptomatic resolution of bladder and bowel incontinence. CONCLUSION: Bone metastasis of ovarian malignancy indicates an advanced stage of the disease signifying a poor prognosis. This case demonstrates the inclusion of prompt radiotherapy subsequent to debulking surgery to achieve local control and symptomatic alleviation in this rare event.

Abstract Id: YUGP5775
Comparative Evaluation Of Pleural Fluid Cytology And Pleural Histopathology In Diagnosis Of Suspected Malignant Pleural Effusion
Presenter- Dr. Sunaina Kharb
Co-author - K B Gupta, Dhruba Chaudhary, Rajeev Sen

Comparative evaluation of pleural fluid cytology and pleural histopathology in diagnosis of suspected malignant pleural effusion. K B Gupta1,Sunaina kharb2,Dhruba Chaudhary3, Rajeev Sen4 1Department of Respiratory Medicine&TB ,Pt BD Sharma Post Graduate Institute Of Medical sciences ,Rohtak (Haryana),India 2 Department of Respiratory Medicine&TB ,Pt BD Sharma Post Graduate Institute Of Medical sciences ,Rohtak (Haryana),India 3 Department of Pulmonary Medicine and Critical Care ,Pt BD Sharma Post Graduate Institute Of Medical sciences ,Rohtak (Haryana),India 4 Department of Pathology ,Pt BD Sharma Post Graduate Institute Of Medical sciences ,Rohtak (Haryana),India ABSTRACT Background Suspected malignant pleural effusion is diagnosed using pleural fluid cytology and any histopathological examination of pleural tissue either taken by closed biopsy needle or thoracoscopic guided biopsy. Both the methods are used frequently. cytology is easy and has less complication Methods The present study compare pleural fluid cytology and pleural histopathology in 40 patients suspected of malignant pleural effusion . Age ,clinical features , radiological investigations ,and pleural fluid cytology and pleural biopsy either closed or by thoracoscopic method were evaluated. Results Of 40 cases with confirmed diagnosis , 17(42.5%)were females and 23 (57.5%) were males with male to female ratio 1.34:1 .The mean age in our study is 54.71 years .Malignancy was positive in, pleural biopsy in 36 (90%) , pleural fluid cytology in 10(25%) ,both fluid and biopsy 4(10%),only fluid 4(10%). Conclusion In suspected malignant pleural effusion cases pleural biopsy has more diagnostic yield as compare to pleural fluid cytology , combination of both pleural fluid cytology and pleural biopsy increase overall yield in diagnosis.

Abstract Id: YUGP5776
Grisotti Flap For Central Quadrant Defect In Carcinoma Breast Video
Presenter- Dr. Sai Rajendra Sriram
Co-author - dr sai rajendra,

grisotti flap for central quadrant defect in carcinoma breast video

Abstract Id: YUGP5778
Prospective Study To Compare Conventional Chemoradiotherapy With Hypofractionated Chemoradiotherapy In Carcinoma Larynx
Presenter- Dr. Manisha Himthani
Co-author - Dr.SN Prasad,

INTRODUCTION Head and Neck cancer refers to a group of biologically similar cancers that start in the lip, oral cavity, nasal cavity, paranasal sinuses, pharynx and larynx. Carcinoma of larynx represents 2% of total cancer patients. Combined surgery and chemoradiation is now an established practice for advanced laryngeal...
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**Abstract Id: YUGP5780**

Laparoscopic Radical Cystectomy Video
Presenter - Dr. Sai Rajendra Striram
Co-author - dr sai rajendra ,

laparoscopic radical cystectomy video

**Abstract Id: YUGP5782**

Prospective Study To Compare Conventional Chemoradiotherapy With Hypofractionated Chemoradiotherapy In Carcinoma Cervix
Prospective Study To Compare Conventional Chemoradiotherapy With Hypofractionated Chemoradiotherapy In Carcinoma Cervix
Presenter - Dr. SHRUTI AGARWAL
Co-author - DR. S N PRASAD ,

BACKGROUND Cervical cancer is the leading cancer in Indian women and the second most common cancer in women worldwide. Even though cancer screening has become prevalent with an aim of early diagnosis and treatment, about 60% of patients still present in late stage. Treatment for advanced stage carcinoma cervix is a combination of external beam radiation and brachytherapy. Conventional external beam radiation delivers a dose of 2Gy per fraction with standard pelvic portals with antero-posterior or box field technique. Overall treatment time has considerable effect on local control and survival. Hypofractionated treatment the overall treatment time is reduced. In our institute, we focused on hypofractionated radiotherapy, which is a modality without additional burden to the patients. We therefore conducted a clinical study to evaluate the effect of a fraction size of 3 Gy on local control in advanced stage cervical cancer. AIM To evaluate the efficacy in terms of locoregional response & toxicity of a hypofractionated chemoradiation regimen of Carcinoma Cervix vs. Conventional chemoradiation regimen.

**Abstract Id: YUGP5784**

Assessing Acute Toxicities Of Surgery Followed By Adjuvant Radiotherapy In Stage Ib-Iia Cervical Cancer
Presenter - Dr. Manisha Himthani
Co-author - Dr.Kanika Sharma, Dr.Aditi Tanwar,

Abstract BACKGROUND: Stage Ib and Ila cervical carcinoma can be treated by radical surgery or radical radiotherapy. These two procedures are equally effective, but differ in associated morbidities and type of complications. In this retrospective study, our aim was to assess the acute toxicities in scenarios of dual modality treatment. MATERIAL AND METHODS: Between July, 2013 and July, 2015, 34 eligible patients with newly diagnosed stage Ib and Ila cervical carcinoma underwent surgery followed by adjuvant radiotherapy. Adjuvant radiotherapy was delivered after surgery as per Sedlis criteria. The primary outcome measure was assessing acute toxicities. The analysis of toxicities was done by CTCAE v4. RESULT: 34 patients who underwent surgery followed by adjuvant radiotherapy (EBRT followed by Brachytherapy) were analysed. The technique of delivering radiotherapy in all patients was by conformal technique (either IGRT or IMRT). After a median follow-up of 3 months (range 2-6) months, acute toxicities of bowel mucosa in the form of diarrhea, was of grade 1/2 nature in 32/34 patients while skin reactions were of grade 1/2 nature in 33/34 patients as per CTCAE v4. CONCLUSION: There is no treatment of choice for early-stage cervical carcinoma in terms of overall or disease-free survival. Dual modality treatment in the form of surgery followed by radiotherapy is considered to have more morbidity than single modality treatment (surgery alone or radiotherapy alone) but our study suggests that in the current scenario with the use of modern precise radiotherapy techniques such morbidities can be controlled or minimized in high risk cases who require adjuvant radiation post surgery.

**Abstract Id: YUGP5786**

Role Of Tracheal Resection In Carcinoma Thyroid
Presenter - Dr. Ramachandra Chavali
Co-author - dr ramachandra nagaraju ,

Abstract BACKGROUND: Role of Tracheal Resection in Carcinoma Thyroid is to treat locally invasive disease. The indication for Resection of a trachea is either direct invasion or encasement of trachea by lymph nodes. The aim of this study is to assess the utility of resection of trachea in Carcinoma Thyroid. MATERIAL AND METHODS: Between January 2014 to July 2015 a total of 52 patients were enrolled, and tracheal resection was done in 3 patients. The median total treatment time in group I was 8 weeks and 6 weeks in group II. Response rate was comparable between two groups, with complete response in group I and group II 73.07% vs. 69.23% respectively. On comparing the incidence of acute toxicity (grade II) in group I vs. 23.07% in group II; GI toxicity (grade II/III) was 50% in group I vs. 57.6% in group II. Skin and mucosal toxicities (grade III) were 11.5% in the former group vs. 23.07% in the latter whereas haematological toxicity 20% vs. 23% in group I and group II respectively. CONCLUSION: In locally advanced carcinoma cervix hypofractionated radiotherapy with concurrent cisplatin weekly followed by Brachytherapy is a reasonable alternative to the standard fractionated regimen with concurrent cisplatin weekly followed by Brachytherapy offers advantages of decreased overall treatment time with comparable response rate and toxicity profile. Decreased treatment time seems an upper edge in view of work load.
Abstract Id: YUGP5792

Squamous Cell Carcinoma Breast: Clinical Profile And Survival Outcomes From A Single Institution.

Presenter - Dr. Abhishek Anand
Co-author - Rudresha A H, K C Lakshmaiah, K Govind Babu

Background:. Squamous cell carcinoma of the breast (SCCB) is a rare entity with limited data pertaining to the clinicopathological profile and treatment outcome. These tumors are characterized by rapid progression and have a poor outcome. The optimal therapy for SCCB has not yet been standardized. Most SCCB are treated with the similar conventional chemotheraphy regimens used in the ductal variant of breast cancer. Methods. This was a retrospective observational study of patients diagnosed with SCCB diagnosed from March 2013 to August 2015 at our institute. The medical records were reviewed and patients were contacted telephonically to study the clinicopathological profile and treatment outcome. Results. We identified 6 (9.43%) patients of SCCB out of 1396 breast cancer patients treated. The median age at presentation was 48 years. All tumor specimens showed macroscopic findings of a cystic lesion and central necrosis. After a median follow-up of 34 months, 4 (60%) were surviving whereas 2 (40%) patients succumbed to disease progression after recurrence. Conclusion. SCCB is a rare subtype of breast cancer with no standard treatment approach. These are associated with poor prognosis and larger studies are needed to investigate different treatment options.

Abstract Id: YUGP5794

Experience Of Computed Tomography (Ct) Guided Fine Needle Aspiration Cytology (Fnac) In Diagnosis Of Suspected Cases Of Lung Cancer

Presenter - Dr. Sushila Verma
Co-author - Dr vipul kumar, Dr KB Gupta, Dr Rohtas K Yadav

Experience of Computed Tomography (CT) Guided Fine Needle Aspiration Cytology (FNAC) In Diagnosis Of Suspected Cases Of Lung Cancer Vinup Kumar*, Sushila Verma*, KB Gupta*, Rohtas K Yadav** Department of Respiratory Medicine &TB, Pt BD Sharma Post-graduate Institute of Medical Sciences, Rohtak, Haryana, India *Department of Radiology, Pt BD Sharma Post-graduate Institute of Medical Sciences, Rohtak, Haryana, India Introduction: Lung cancer is the most commonly diagnosed malignancy across the globe, especially in males. It is the leading cause of cancer related deaths with an average 5 year survival rate of 17.7%. Early and accurate diagnosis is the key for the optimal treatment of lung cancer patients. For patients with a lung nodule or mass on chest radiography or computed tomography (CT), a histological or cytological confirmation of malignancy is required before treatment. Material And Methods: The study was conducted in the Department of Respiratory Medicine, Pt B D Sharma Rohtak. 20 patients of either sex having lung cancer suspected clinically or suspected on Chest X-ray/CT Thorax underwent computed tomography guided fine needle aspiration. Results: 17 (85%) were diagnosed as having neoplasm out of which in 11 (55%) cases a diagnosis of specific cell type could be made and in 6 (30%), a diagnosis of a lesion suggestive of malignancy was made. In 3 (15%) cases, inflammatory lesions were diagnosed. Conclusions:CT guided FNAC is a safe, sensitive and reliable method for diagnosing chest mass lesions. Percutaneous CT-guided FNAC is an effective and fast procedure for diagnosis of suspected pulmonary malignancy, with a low complication rate. We believe that FNAC should be considered the procedure of choice for initial evaluation of suspiciousfor- malignancy lung lesions.

Abstract Id: YUGP5796

Computed Tomography Based Customized Surface Mould High Dose Rate Brachytherapy For Non Melanotic Skin Cancer Of Scalp And Face - Optimizing For Reduction Of Late Toxicity And Improving Cosmetic Outcome
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Presenter- Dr. Poulami Basu
Co-author - Dr. Anish Bandyopadhyay, Dr.Rajiv Lochan Jena, Dr.Kaushik Ray

Abstract For IBSCON 2017 Abstract For IBSCON 2017 Objective-To quantify the late effects and outcomes of a cohort of non melanoma skin cancer patients treated with customized surface mould HDR Brachytherapy and to find any possible correlation of mould characteristic and dosimetric parameters with the toxicity, local control and cosmetic outcome. Methods-In this Single institutional retrospective study the clinical and dosimetric parameters affecting late toxicity and cosmetic outcome are assessed in patients of non-melanoma skin cancer of face and scalp, treated with customized Surface mould Brachytherapy from January 2012 to December 2015. Results During the study period 17 patients of non melanoma skin cancer of face, forehead or scalp were treated with customized surface moulds either as definitive RT or as adjuvant therapy for high risk features, to a dose 3200- 4500 cGy to the PTV, delivered in twice daily fraction in total 9 to 12 fractions.Twelve cases were of Squamous cell carcinoma and five were basal cell carcinoma. The mean depth of skin treated was 3 mm. The mean mould thickness was 8 mm. The mean D90 to the PTV was 376cGy. Nine out of 17 patients developed Grade III or IV late skin toxicity. A correlation was found between the 1cc skin dose and Grade III or IV late skin toxicity. No local or distant relapses were observed after a follow-up of 24 months. Cosmetic result was good or excellent in majority of patients with acceptable acute toxicity. Conclusion - Customization of mould parameters as per skin or target volumes may lead to reduced skin dose and better dosimetry thus improving long term cosmetic outcome.

Abstract Id: YUGP5798
Histopathological Factors Of The Primary Penile Tumor Can Stratify The Risk Of The Development Of Inguinal Lymph Node Metastases.
Presenter- Mr. Girish Ms
Co-author - dr. sanjay, dr. krishnamurthy,

ABSTRACT Purpose: We determine if histopathological factors of the primary penile tumor can stratify the risk of the development of inguinal lymph node metastases. Materials and Methods: Clinical records of 61 consecutive patients with squamous cell carcinoma of the penis who underwent resection of the primary lesion and either inguinal lymph node dissection or were observed for signs of recurrence (median followup 36 months) were reviewed. Parameters examined included pathological tumor stage, quantified depth of invasion and, histological grade, in the primary tumor, and presence or absence of vascular invasion. Variables were compared in 19 lymph node positive and 42 lymph node negative cases. Results: Pathological tumor stage, vascular invasion and histological grade were the strongest predictors of nodal metastasis on univariate and multivariate regression analyses. 13 pT1 tumors none of them exhibited vascular invasion and 3 (23%)with lymph node metastases. Of 48 patients with pT2 or greater tumors 12 (25%) had vascular invasion and 16 (33%) had lymph node metastases . No other variables tested were significantly different among the patient cohorts. Conclusions: Pathological stage of the penile tumor, vascular invasion and histological grade were independent prognostic factors for inguinal lymph node metastasis. Prophylactic lymphadenectomy in compliant patients with pT1 lesions without vascular invasion and histological grade does not appear warranted.

Abstract Id: YUGP5802
Radiology In Diagnosis Of Retinoblastoma
Presenter- Prof. Sunita Sehrawat
Co-author - Sunita ,

Introduction - Retinoblastoma is the most common intraocular tumor in children. High-resolution MRI has emerged as an important imaging modality for pretreatment assessment, i.e. for diagnosis and confirmation, detection of local tumor extent, detection of associated developmental malformation of the brain and detection of associated intracranial primitive neuroectodermal tumor (trilateral retinoblastoma). The most appropriate techniques for imaging in a child with leukocoria are reviewed. CT is no longer recommended. Implementation of a standardized MRI protocol for retinoblastoma in clinical practice may benefit children worldwide, especially those with hereditary retinoblastoma, since a decreased use of CT reduces the exposure to ionizing radiation. Retinoblastoma is curable. If detected while still confined to the globe and if there are no metastatic risk factors, the child will nearly always survive following appropriate treatment. the preservation of visual function depends on ocular preservation, initial tumor volume, the anatomical relationships of the tumors to the macula and optic disk and the adverse effects of the treatments (cataracts, vitreous hemorrhage). Materials and methods Imaging protocol - MRI protocols vary because of differences in available equipment and individual preferences. For orbits, Regardless of laterality, at least one transaxial thin-slice (? 2 mm) T2-weighted sequence should cover both orbits. For T2-weighted imaging based on a (fast) spin-echo technique, it is recommended to use a long TE (heavily T2-weighted; TE ? 120 ms) for generating the image contrast necessary to provide an optimal differentiation.
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of retinoblastoma and surrounding vitreous or subretinal fluid. Fat saturation combined with T2-weighted imaging is not recommended. When fat suppression is used, the resulting loss in SNR should be compensated (e.g., by increasing the number of acquisitions). For Eyes and distal optic nerve: Increased spatial resolution will improve the accuracy of MRI in assessing the anatomical details of the papilla, lamina cribrosa and pre- and postlaminar segments of the optic nerve. The continuous improvement of MR units and the use of small fields-of-view with either multi-channel head coils or surface coils now allows much higher image resolution. High spatial resolution means section thickness ≤ 2 mm and in-plane pixel size ≤ 0.5 mm × 0.5 mm. For optimal detection of optic nerve invasion, the image plane through the orbit (transaxial and sagittal oblique) should align with the orientation of the distal (1 cm) end of the nerve, just posterior to the lamina cribrosa. One section in each of these sequences should be precisely aligned within the distal part of the optic nerve at the level of the middle of the optic disk. Although the use of the fat-saturation technique is highly recommended for contrast-enhanced MR imaging in orbital pathology, its use in high-resolution contrast-enhanced T1-weighted MRI in retinoblastoma is declining. In the minimal requirements for diagnostic evaluation of retinoblastoma or mimicking lesions according to the consensus reached among members of the ERCB, the use of fat saturation in contrast-enhanced T1-weighted sequences is no longer recommended. • Transaxial or sagittal oblique T1-weighted spin-echo helps detection of intraocular blood and subretinal fluid with high protein content. Retinoblastoma is slightly hypointense with respect to the vitreous body. • Transaxial or sagittal oblique heavily T2-weighted spin-echo provides detailed information about the classic low signal intensity of retinoblastoma and presence of retinal detachment. • Transaxial and sagittal oblique contrast-enhanced T1-weighted spin-echo provides information about the enhancement of lesions, optic nerve- and ocular wall invasion, and anterior eye segment enhancement. Results - On CT, retinoblastoma is typically a mass of high density compared with the vitreous body, usually calcified and moderately enhancing after iodinated contrast medium administration. CT detection of calcifications in retinoblastoma has a sensitivity of 81–96%, and an even higher specificity. However, delineation of intraocular soft-tissue detail is limited. The evidence from surveys suggests that CT is still regarded an obligatory imaging tool for evaluation of leukocoria, primarily because CT is supposed to be the best imaging modality for detection of intraocular calcifications. However, justification of the irradiation of a large group of retinoblastoma patients requires a base of evidence of the procedure’s clinical effectiveness and possibly also radiation-effectiveness for supplying (1) valuable additional information leading toward the diagnosis of retinoblastoma and (2) valuable additional information, compared to non-ionizing radiation modalities in detection of tumor extent. Diagnostic MRI evaluation of a suspected retinoblastoma requires much more than performing a routine MR imaging examination of the orbit. High-resolution contrast-enhanced MRI is the technique of choice and should be used whenever possible to answer the key clinical questions (to evaluate an intraocular mass and to determine disease extent. MRI has proved to be the most sensitive technique for evaluating retinoblastoma, especially regarding tumor infiltration of the optic nerve, extraocular extension, and intracranial disease. A major factor influencing the success of MRI is the use of appropriate hardware and optimized pulse sequences with appropriate spatial resolution for ocular MRI.

Abstract Id: YUGP5804
Pulmonary Tuberculosis Masquerading As Lung Cancer – A Case Report
Presenter - Prof. RITU AGGARWAL
Co-author - Dr VIPUL KUMAR, Dr K B GUPTA,

Background: Pancoast tumors represent a subset of bronchial carcinomas that occur in the apex of the lung and frequently invade the first two or three ribs, the nearby vertebral bodies and the lower part of the brachial plexus, the subclavian vessels and the stellate ganglion. These tumors present radiologically as homogeneous shadows of the extreme apex with local rib destruction and vertebral infiltration. However, infection as a cause for Pancoast tumor is rare. Tuberculosis continues to be a health problem despite efforts at eradication and control and a total of 9.2 million cases of tuberculosis are reported worldwide annually. Pulmonary tuberculosis exhibits variable radiological findings, mimicking all the other pathological conditions of the lung and present clinical difficulties for diagnosis. Bacterial pneumonias, fungal infections, and bronchogenic carcinoma are such common diseases which mimic Tuberculosis because of non-specific symptoms and similar radiological findings. Over-reliance on clinical findings and imaging may lead to misdiagnosis. We present a case of Pancoast tumor which on investigations turned out to be tuberculosis. Case Details A 45 year old male smoker patient presented to the hospital with complaints of right sided chest pain radiating to right arm since one month. There was no history of paraesthesia. General and local examination was unremarkable. No signs suggestive of Horner’s syndrome were observed. Chest radiograph showed a mass lesion right upper zone. Contrast enhanced computed tomography showed mass in right upper lobe infiltrating into adjacent tracheal and mediastinal plane. CT guided Fine Needle Aspiration was done which showed Langerhans giant cells in a necrotic background.ZN staining for AFB was positive. A probable diagnosis of TB was made. Patient was advised CT guided biopsy/ Thoracoscopic biopsy for a more definitive diagnosis but he denied any further investigations and was lost to follow-up. Conclusions: This case report demonstrates that tuberculosis can mimic many other pathological conditions of lung and should be kept in mind as a differential diagnosis of thoracic lesions especially in an endemic country like India. However, malignant tumors always have to be confirmed by histologic examination since coexistence of tuberculosis and malignancy has been reported in literature.

Abstract Id: YUGP5806
Can Mean Platelet Volume Be Used As Prognostic Factor For Predicting Disease Free Survival In Resectable Lung Cancer?
Presenter - Mr. Girish Ms
Co-author - DURGESH, DR. RAVI ARJUNAN, RAVI KOPPAD

INTRODUCTION : -Increased mean platelet volume (MPV), an early marker of platelet activation has been shown to be associated with the pathophysiology of various cancers. Studies have demonstrated a significant association of MPV with overall survival (OS) in patients with advanced non small-cell lung cancer (NSCLC). However studies analyzing the prognostic effect of MPV in resected NSCLC are lacking. AIM : of this study was to analyse the effect of MPV on disease free survival (DFS) of completely resected NSCLC patients over the last 6 yrs. MATERIAL AND METHOD : We retrospectively analysed the data of 96 consecutively resected patients. The associations between MPV and clinicopathological factors were assessed. We estimated DFS employing the Kaplan-Meier analysis . Differences between survival curves were tested for statistical significance using the log-rank test. RESULTS:The cut-off of MPV was taken as 7. The median survival in the group with MPV > 7 was 11 months ( 95% Confidence Interval (CI) : 9.07 – 12.93) and that in the group with MPV< 7 was 13 months ( 95% Confidence Interval (CI) : 8 – 17.99). However on statistical analysis using the long rank test it did not achieve statistical significance (p= 0.124). DFS was not associated with type of resection done or histology of tumor but there was a significant association with stage of tumor (p=0.001). Our results show that DFS has got an association with the pathological stage of the cancer , but no association with MPV.

Abstract Id: YUGP5808
Role Of Rho Gtpases And Bone Morphogenetic Proteins In Breast Cancer Metastasis

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Role of RHO GTPases and Bone Morphogenetic Proteins in Breast Cancer Metastasis

Renu Sharma, Bitihiah Grace Jaganathan

Breast cancer is the most common cancer in women. The incidence of breast cancer increases with age and this is true in India like rest of the world. Around 70% of all patients living with advanced breast cancer have bone metastasis. Metastasis involves a complex series of steps in which cancer cells leave the original tumor site and migrate to other parts of the body. With an osteolytic metastasis, the cancer cells promote severe bone loss significantly increasing the risk of bone fractures. Matrix metalloproteinase (MMPs), Bone Morphogenetic proteins (BMPs), Ras homolog gene family member A (RHOA) and other factors like (Ras-related C3botulinum toxin substrate) Rac1, Tissue factors that are regulated by Rho (TMRPs) are key factors for metastasis. MMPs are endopeptidase which has ability to degrade extracellular matrix protein and over-expression is associated with invasion and metastasis. In this study, four model breast cancer cell lines MDA-MB-231 (ER- PR-HER2-), T-47D (ER+PR+HER2+), MCF-7 (ER+PR-HER2-) and Sk-Br-3 (ER- PR-HER2+) were used. We found that breast cancer cells express high RHOA in the periphery of the tumor suggesting their role in metastasis. All the three GTPases of RHO family, RHOA, RAC1 and CDC24 were expressed in both mRNA and transcript levels and significant levels of active form was seen in the breast cancer cell lines. The breast narrow derived primary breast tumors increase the migration of metastatic cell line MDA-MB and RHOA activity regulates migration in a context dependent manner. RHOA and mitochondria were localized in the migratory front in metastatic breast cancer cells. High levels of MMPs were observed in all breast cancer cells and it was considerably high in TNBC samples. High levels of anti-apoptotic and stem cell self-renewal genes were expressed in TNBC samples. Both the secreted factors and the breast cancer cells themselves inhibit the differentiation of bone cells, osteoblasts. Metastatic MDA-MB cells showed higher resistance to cell death during adherence independent culture. We are studying the signaling pathways that are regulated by Rho (TRMPs) and understanding the role of Rho GTPases in metastasis will help in identifying novel targets to inhibit breast cancer metastasis.

Abstract Id: YUGP5810

“Clinico-Pathological Co-Relation Using Various Immuno-Histochemistry Markers Like Er, Pr, Her-2 Neu, Ck5/6, Egrf And Ki-67 In Carcinoma Breast”

Presenter- Dr. Gyanendra Mittal

Co-author - Dr. Suraj Manjunath, Dr. Sharan Choudhari, Dr. Niranjan Naik

INTRODUCTION: Worldwide, breast cancer is by far the most common cancer amongst women, with an incidence rate more than twice that of colorectal cancer and cervical cancer and about three times that of lung cancer. However breast cancer mortality worldwide is just 25% greater than that of lung cancer in women (WHO, 2003). In 2004, breast cancer caused 519,000 deaths worldwide (7% of cancer deaths; almost 1% of all deaths) (WHO 2006). The aim of this prospective study is to correlate clinical and pathological findings with various Immuno-histochemistry (IHC) markers like ER, PR, HER-2 NEU, CK5/6, EGF, Ki-67 in cases of carcinoma breast in India. These aims shall be fulfilled with the help of following objectives: 1. To study the clinical and pathological profile of patients of carcinoma breast enrolled in the study. 2. To carry out immunohistochemical investigations like ER, PR, HER-2 NEU, CK 5/6, EGF, and Ki-67. 3. To classify them into molecular classification based on IHC markers and try to correlate them clinically. Most of the studies with IHC markers have been carried out in western population. In Indian subcontinent data from immunohistochemistry based studies in carcinoma breast is sparse. Considering these facts, the proposed study shall try to evaluate the role of IHC markers in identification, classification and established clinic-pathological correlation in cases of carcinoma breast in North Indian population. MATERIAL AND METHODS: The present study has been carried out with Department of Surgical Oncology in collaboration with Department of Pathology, Dharamshila Hospital & Research Centre (DHRC), Delhi, during the period from June 2012 to December 2013. The study has been done as a prospective study and the cases of carcinoma breast attending OPD of Surgical Oncology Department, DHRC, Delhi included in the study. Total 60 patients had been included in this study. Only female patients with early carcinoma breast (stage-I and stage-II) and who underwent upfront surgery with or without reconstruction had been included.

Data Analysis: In these results Ki-67 value is significantly high in triple negative and Luminal-B patients. NPI is also having low P value, although not reaching the level of significance.

Table 1: Numerical data in all the cases

<table>
<thead>
<tr>
<th>Parameter</th>
<th>N (%)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age groups</td>
<td>Normal Breast (NBL)</td>
<td>N=7</td>
</tr>
<tr>
<td></td>
<td>N (%)</td>
<td>p value</td>
</tr>
<tr>
<td>Age-specific groups</td>
<td>N (%)</td>
<td>p value</td>
</tr>
<tr>
<td>0-19 years</td>
<td>2(28.6)</td>
<td>0.323</td>
</tr>
<tr>
<td>20-29 years</td>
<td>43(60)</td>
<td>0.443</td>
</tr>
<tr>
<td>30-39 years</td>
<td>15(62.5)</td>
<td>0.443</td>
</tr>
<tr>
<td>40-49 years</td>
<td>6(85.7)</td>
<td>0.777</td>
</tr>
<tr>
<td>50-69 years</td>
<td>31(51.6)</td>
<td>0.777</td>
</tr>
<tr>
<td>&gt;70 years</td>
<td>15(62.5)</td>
<td>0.777</td>
</tr>
<tr>
<td>Laterality</td>
<td>Normal Breast (NBL)</td>
<td>N=7</td>
</tr>
<tr>
<td></td>
<td>N (%)</td>
<td>p value</td>
</tr>
<tr>
<td>Right</td>
<td>27(45)</td>
<td>0.443</td>
</tr>
<tr>
<td>Left</td>
<td>16(50)</td>
<td>0.443</td>
</tr>
<tr>
<td>Histological grade (Elston/Ellis)</td>
<td>N (%)</td>
<td>p value</td>
</tr>
<tr>
<td>Grade I</td>
<td>21(35)</td>
<td>0.255</td>
</tr>
<tr>
<td>Grade II</td>
<td>24(40)</td>
<td>0.255</td>
</tr>
<tr>
<td>Grade III</td>
<td>14(23)</td>
<td>0.255</td>
</tr>
<tr>
<td>Tumor size (cm)</td>
<td>N (%)</td>
<td>p value</td>
</tr>
<tr>
<td>&lt;2</td>
<td>36(60)</td>
<td>0.255</td>
</tr>
<tr>
<td>2-5</td>
<td>12(20)</td>
<td>0.255</td>
</tr>
<tr>
<td>&gt;5</td>
<td>12(20)</td>
<td>0.255</td>
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<tr>
<td>Lymph node status, n (%)</td>
<td>0.241</td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>36(60)</td>
<td>0.241</td>
</tr>
<tr>
<td>Negative</td>
<td>24(40)</td>
<td>0.241</td>
</tr>
<tr>
<td>Tumor grade (Clark)</td>
<td>N (%)</td>
<td>p value</td>
</tr>
<tr>
<td>Tumor grade (Clark)</td>
<td>N (%)</td>
<td>p value</td>
</tr>
<tr>
<td>Stage I</td>
<td>18(30)</td>
<td>0.111</td>
</tr>
<tr>
<td>Stage II</td>
<td>20(33.3)</td>
<td>0.111</td>
</tr>
<tr>
<td>Stage III</td>
<td>22(36.7)</td>
<td>0.111</td>
</tr>
<tr>
<td>Stage IV</td>
<td>34(56.7)</td>
<td>0.111</td>
</tr>
<tr>
<td>Stage V</td>
<td>16(26.6)</td>
<td>0.111</td>
</tr>
<tr>
<td>Stage VI</td>
<td>23(38.3)</td>
<td>0.111</td>
</tr>
<tr>
<td>Stage VII</td>
<td>11(18.3)</td>
<td>0.111</td>
</tr>
<tr>
<td>Stage VIII</td>
<td>8(13.3)</td>
<td>0.111</td>
</tr>
</tbody>
</table>

**RESULTS:** (Table-1) We used ANOVA-F test to categorizes variables and measure the test of significance. In these results Ki-67 value is significantly high in triple negative and Luminal-B patients. NPI is also having low P value, although not reaching the level of significance.
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PR status Positive 32(53.3) 24(100) 8(100) 0 0 0 Negative 28(46.7) 0 0 9(100) 8(100) 7(100) 17. HER 2-Neu Positive 14(23.3) 0 5(62.5) 9(100) 0 0 Negative 42(70) 24(100) 3(37.5) 0 8(100) 7(100) 0. 18. Ki-67 index, n (%) 11.6% 6.45% 18.12% 6.67% 25.62% 10.7% 0.01 <5% or 10% 49(81.7) 24 4(50) 8(88.9) 4(50) 6 15% 11(18.3) 0 4(50) 1(11.1) 4(50)

1 CONCLUSION: Breast carcinoma is a heterogeneous disease and it behaves differently in different groups of populations. Previously it was seen that breast cancer was common in developed countries and cervical cancer was more common in developing countries like India. In recent times the incidence of breast cancer is increasing in our country and in the last decade it is becoming the most common cancer in females. Types of breast carcinoma, which took histologically similar behave differently in their clinical presentation and in prognosis. That is why, it was thought that there was something which we were missing, which we did not recognize and that affects the prognosis. After this molecular classification has come into clinical practise. In our study also, none of the poor risk clinical or histological parameter correlated significantly with bad prognostic group subtypes of molecular classification as Luminal-B or triple negative type. We can conclude that prognostication by molecular classification is different as compare with similar looking clinical and histological parameters. Oncotype DX and Mamma Print data on this comparison is sparse and still recommendations are using of Polyurethane catheters in patients like kinking were more common with Silicon (Groshong) catheter. However, this benefits a limited numbers of the patients and mainly restricted to the ER positive (Luminal-A) patients. Presently there is also some controversy in this molecular classification, as in “Luminal B” subtype how to differentiate basal types cancers from pure breast like cancers. But in future this will be resolved and we hope that there will be less need to take chemotherapy and patients will enjoy the treatment mainly based on targeted therapy.

Abstract Id: YUGP5812
Title: “Chemoport (Totally Implantable Venous Access Device) In Oncology: Comparative Study Between Polyurethane And Silicon (Groshong) Catheter System”.
Presenter - Dr. Gyanendra Mittal
Co-author - Dr. B.N. Naik, Dr.Sushil Kumar, Dr. Deepak Sundriyal

INTRODUCTION: Chemoport, a totally implantable venous access device which is required for delivering chemotherapy in cancer patients, represents a major advancement. Through this safe and long term venous access system, it is possible to deliver even highly thrombogenic and vesicant chemotherapy drugs. Apart from delivery of chemotherapy it can serve various other purposes like venous sampling, administration of parenteral nutrition and blood transfusion. Objective of this study was to compare between two different types of chemo-catheters Polyurethane (white) and Silicon (Groshong) in terms of placement, patient satisfaction and complications. As data on this comparison is sparse and still recommendations are not very clear to select the type of catheter in different clinical situations, mostly they are guided by the surgeon’s choice. MATERIAL AND METHODS: A total of 312 chemoports were inserted in adults patients of different types of cancers over a period of 3 years (Jan 2011 to Dec 2013). 9.6 F Polyurethane (n=155) and 8.0 F Silicon (Groshong) (n=157) catheters put by team of surgical oncologists through puncture in subclavian vein using a standard surgical technique. Analysis of the complications and outcome was done. Follow up was conducted on outpatient basis and during clinical readmissions with a period of about 12 months. RESULTS: A total of 312 chemoports were inserted during the study period. 27(8.6%) patients were lost to follow up while 37(11.8%) patients died with port in situ. A total of 47(15.06%) patients developed complications. 9(2.9%) patients had early complications and 38(12.17%) had late complications, with 11 (3.5%) major complications and no death. Complications include arterial puncture, malposition of catheter tip, pneumothorax, haemopneumothorax, haematoma, seroma, DVT, thrombosis of catheter, leakage from port site, fracture of catheter, catheter migration, reversal of port, bacteraemia, catheter kinking and infection. Only few complications required premature port and catheter removal. All these complications occurred with both types of catheters with almost similar frequency but in our study port side and catheter infection related complications were more common with Polyurethane catheter and mechanical complications like catheter kinking were more common with “Groshong” catheter. CONCLUSION: There were low rate of major complications associated with chemoport using either type of catheter with high rate of patient satisfaction. Infection rate was more common with Polyurethane catheter and mechanical complications like kinking were more common with Silicon (Groshong) catheter. However, it requires expert handling to minimise complications. Our recommendations are using of Polyurethane catheters in patients who requires short term chemotherapy like early breast cancer patients and Silicon (Groshong) catheters with the metastatic carcinomas in which long term chemotherapy is required.

Abstract Id: YUGP5814

Pathways To Seeking Diagnosis And Treatment Among Indian Cancer Patients
Presenter - Ms. Aishwarya Krishna Priya
Co-author - Aishwarya Krishna Priya, Dr. Mahati Chittem, Sravanthi Maya

Background: In India, patients often arrive at tertiary care centres when they are already at an advanced stage of cancer. The objective of this study is to understand the navigational processes of oncology patients in the context of the healthcare system and their journey to a tertiary care centre for their diagnosis and treatment. Method: 600 patients receiving treatment and diagnosis for cancer participated in the study carried out in various hospitals in Hyderabad, India. A survey was conducted, wherein participants answered questions on demographics, medical details, symptom discovery, treatment experiences and their thoughts regarding the current hospital. Data was analysed using IBM Statistical Package for Social Sciences 22. Frequencies and crosstabs, as well as directional and symmetric measures to test the strength of association were computed. Results: The results of the study revealed that there exist multiple agents which played a role in the patient’s journey with respect to the diagnosis of cancer, access to healthcare and their coping strategies. The geographical location of the patient (C=0.89), classification of cancer (C=0.77, =0.73), and type of cancer (C=0.72) were strongly associated with the time between diagnosis and starting treatment. The presenting complaints leading to the diagnosis of cancer were associated with the patient’s response to cancer (C=1.00, =0.83). The data also indicated a strong association between gender and response to the diagnosis (C=0.986, =0.988). Conclusion: This study highlights that the cancer journey is determined by several factors such as geographical location, type of cancer, symptoms identification and gender. Future research and practice can focus on developing interventions addressing these barriers to seeking appropriate and timely care in cancer contexts.

Abstract Id: YUGP5816

Pelvi-Glossectomy With Or Without Mandibulectomy In Locally Advanced Tongue Cancer : Institutional Experience
Presenter - Dr. Naseem Akhtar
Co-author - Arun Chaturvedi, Sanjeev Misra, Vijay Kumar

Background: Locally advanced tongue cancer is one of common problem in India. These cancers usually fail locally and come with
Breast Cancer in a Medical College of Western Rajasthan
Study of Accelerated Hypofractionated Radiation in Carcinoma Breast
Abstract Id: YUGP5822

Abstract Id: YUGP5820
Modular Segmental Replacement System (Msrs) Is One Of The Options For Limb Conservation Surgery In Bone Tumours
Presenter - Dr. Tarun Gogineni
Co-author - Dr. Hemanth GSN,

The study analyses a single center experience of use of MSRS for limb conservation in cases of primary bone tumors. Retrospective analysis was done for a series of cases of limb salvage procedures done over a five year period. All Patients with bone tumors who underwent limb salvage procedures utilising MSRS prosthesis were included in the study. The patients' record were perused for pre operative staging; neoadjuvant therapy used, if any; surgical procedure done; follow-up for prosthesis related complications and overall survival achieved.

Abstract Id: YUGP5821
Tsh Levels Assessment In Pre And Post Operative Thyroidectomy
Presenter - Dr. Amritha Prabha
Co-author - Dr. Tarun Gogineni

To determine the correlation between pre operative TSH levels and post operative pathological features like invasiveness, lateral Lymph node metastasis and stage in well differentiated thyroid cancer patients.

Abstract Id: YUGP5826
Expression And Purification Of Tumor Specific Epidermal Growth Factor Receptor Mutant In Baculovirus Expression System
Presenter - *Ms. Sunita Kodengil Vettath
Co-author - Menon Krishnakumar N, Vijayachandran Lakshmi S,

Background of the study: Epidermal Growth Factor Receptor variant III (EGFRvIII) is a ligand independent mutant of EGFR, generated by deletion of exons 2-7. It is expressed in Non Small Cell Lung Cancer, gliomas, ovarian and breast cancers and confers increased proliferation potential, resistance to chemotherapy and reduced apoptosis in cells expressing them. Potential of EGFRvIII as a prognosis marker and therapeutic target is being investigated in several cancers. Characterization and structure elucidation of this protein could help in design of small molecule inhibitors and biotherapeutics targeting the receptor. Large scale recombinant expression of the protein in eukaryotic systems is essential for carrying out such studies. In our study, we have expressed and purified the extracellular domain of EGFRvIII from baculovirus expression system using insect cell line Spodoptera frugiperda (Sf21). Methods: EGFRvIII ectodomain gene along with His tag was cloned into pACEBAC2 vector in the MultiBac system and transferred into DH10EMBACY cells. The recombinant bacmid from DH10EMBACY cells was transfected into Sf21 cells. After infection with V1 virus, protein expression at 24 hour intervals was assessed by YFP (Yellow Fluorescent Protein) analysis, SDS PAGE and Western blot. Protein was purified using Ni-NTA purification under native conditions. Results: Fluorescent emission spectrum of transfected Sf21 cell lysate showed the characteristic emission spectra of YFP with a peak at 530nm indicative of virus production. Protein expression in the virus infected culture was detected using anti His antibody, near 150kDa. The higher M.W of the protein compared to the predicted value could be due to glycosylation and multimerisation, which has to be confirmed by mass spectrometry analysis. Protein purification was done using Nickel affinity chromatography, under native conditions and a significant level of purity was attained. The identity of purified protein was confirmed by detection using anti His antibody. Purity of the protein can be improved by incorporating downstream purification steps like size exclusion chromatography and used for X-ray crystallography studies and development of drug-screening platforms.

Abstract Id: YUGP5834
Incidence Of Post-Radiation Thyroid Dysfunction In Head And Neck Cancer Patients
Presenter - Dr. Vivek Immanuel
Co-author - vivek immanuel,
Abstract Id: YUGP5836
Perineural Invasion: A Predictor Of Extracapsular Spread In Carcinoma Tongue
Presenter- Dr. Ramanuja Rao Madiraju
Co-author - ramanujan rao,..

PERINEURAL INVASION: A PREDICTOR OF EXTRACAPSULAR SPREAD IN CARCINOMA TONGUE BACKGROUND- Perineural invasion (PNI) is associated with an increased risk of local recurrence and cervical metastasis and is an independent predictor of survival of the patients with squamous cell carcinoma of tongue. Extracapsular spread (ECS) is also an important predictor of locoregional recurrence and survival. Very few studies have addressed the association between PNI and ECS. We herein report the association between PNI and ECS. METHODS. Three hundred and thirty patients of carcinoma tongue were operated from January 2010 to December 2012 at our institute. Recurrence post RT salvage, and non squamous histology cases were filtered and finally 193 patients’ medical records were selected for the present retrospective study. RESULTS. Out of 193 patients, 163 (84.4%) were PNI negative and 30 (15%) PNI positive. The sex distribution, grade of tumor, margin status, stage of tumor and other parameters were identical in both the groups. PNI positive group had higher positive nodes (56.6% vs 39%) though it was not statistically significant (p=0.106). The number of positive lymph nodes with extracapsular invasion was significant higher in PNI positive group in 40% as compared to PNI negative group which had 16.5% (p=0.0372). Also lymphovascular space invasion (LSVI) was also significantly higher in PNI positive patients (p=0.002). Depth of tumor infiltration was stratified into 3 groups, group 1 with tumor infiltration 1-3 mm, group 2 with 4-7 mm and group 3 with 8mm and above. PNI positive group had statistically higher number of group 3 tumors (i.e., tumor infiltration of 8mm and above) (p=0.0157). CONCLUSIONS. Patients with squamous cell carcinoma of tongue with PNI positive had significantly more pathological nodes with extracapsular spread. Also PNI positive group had significantly higher lymphovascular space invasion and increased thickness of tumor.

Abstract Id: YUGP5837
Breast Cancer In The Elderly In India
Presenter- Dr. Asha Reddy
Co-author - Dr. Naga Amulya Mullapudi, Dr. Kirthi Katherine Kabeer, Dr. Selvi Radhakrishnan

INTRODUCTION: Numerous studies have shown that over 30% of women diagnosed with breast cancer are above the age of 70 years. Management of breast cancer in the elderly tends to be more challenging, as with age the performance status of an individual is likely to decline. Several factors impede treatment in this group of women such as co-morbidities, limited physical mobility, functional dependence, emotional and cognitive conditions, and socio-economic status. MATERIALS AND METHOD: This study is a retrospective analysis of breast cancer in elderly women (aged over 70 years) from a specialist breast center in Southern India. Data was collected from 2007 to 2016 using Onco-collect and statistical analysis was done using Medcalc. RESULTS: A total of 1698 patients were treated at our centre from 2007 to 2016, of which 203 patients (12%) were over the age of 70 years. Invasive ductal carcinoma was predominant in 163 patients (80%), with more than half of them (52%) being stage 2 and 57% being low grade tumours. Over 80% (162) had hormone receptor positive disease, among which 19 (12%) received primary hormone therapy while the remaining underwent surgery 143 (88%). Mastectomy was done in 157 patients (77%) and BCS was done in 27 (13%). Chemotherapy was given to 27 patients (13%). SNLB was done in 69 (34%) and axillary clearance in 107 (53%). No axillary surgery was done in 8 patients. Axillary lymph nodes were positive in 71 patients (40%). Survival analysis was done using the Kaplan-Mier curves for 92 patients who underwent surgery from 2007 to 2013. Out of 24 patients who died, 13 (54%) were due to disease and 11 (46%) died of other unrelated causes. The 3-year OS in the elderly who underwent surgery is 90.1% and PFS is 86%. Hormone receptor positive patients did better than Hormone receptor negative patients. Among the patients treated with primary hormone therapy, 2 were lost to follow up. There was no mortality in this group. CONCLUSION: Hormone receptor positive disease is predominant in the elderly and did better than hormone receptor negative patients. A significant proportion of elderly women underwent BCS. Primary hormone therapy is an effective alternative treatment to surgery in patients with significant co morbidities.

Abstract Id: YUGP5839
Melanoma Of The Anal Canal: A Case Series.
Presenter- Dr. Ramanuja Rao Madiraju
Co-author - dr ramanujan rao,..

The medical records of patients with anal melanoma treated at Basavakunanda ind American cancer hospital and Research Institute between 2011 and 2017 were reviewed. RESULTS: 11 patients were identified seven were females with a median age of 59 (range, 27-86) years. 3 patients had nodal involvement, and one had bone metastases at the time of diagnosis. . Five of the 11 patients without metastatic disease relapsed or died within the first year of diagnosis Median time to relapse was 6.5 (range, 4-31) months. The liver was the most common site for relapse. CONCLUSIONS: Anorectal melanoma is a rare and challenging disease. The preoperative staging influences the treatment schedule. In the absence of strong survival benefit of abdominoperineal resection in managing the nonmetastatic form of the disease, it is reasonable to consider local excision as the initial treatment of choice. Adjuvant radiation therapy is well tolerated and is promising in improving locoregional control

Abstract Id: YUGP5844
Achieving Margin Negative Resection – Doing Less Is Justified: Oncological Outcomes Of Wedge Excision Of Liver In Gall Bladder Cancer (Gbc) Surgery
Introduction The extent of liver resection for gall bladder cancer (GBC) is still debated. We evaluated the post-operative and oncological outcomes in patients who underwent liver wedge excision. Material and Methods Patients who underwent radical cholecystectomy (with a liver wedge excision of 2.5-3 centimetres) from January 2010 to December 2015 were retrospectively analysed. Patients of incidental GBC requiring revision surgery and those who received neoadjuvant therapy were excluded. Results: 97 out of 558 cases of primary GBC were selected for the study. Majority of our patients were of stage III disease (52%). At a median follow up of 29 months, 64% of patients were disease free where as 14% were alive with disease. 2.5% died in postoperative period. 12% patients died of disease and 6% died of unrelated causes. 13 patients had loco regional recurrence and 10 failed at distant sites. Only one patient recurred in the gall bladder bed. 3-year overall survival of stage II was 85% and of stage III was 60%. Conclusion Surgical outcomes of GBC at our centre, where we perform radical cholecystectomy with wedge resection of the liver, parallels published world literature. With low morbidity and mortality, it emphasis oncological equivalence of liver wedge resection as compared to formal segment IVb/V excision, provided margin negative resection is achieved.

Abstract Id: YUGP5846

Gall Bladder Cancer (GBC) is a common cancer world wide and various studies have shown that the proximal gastric cancer malignancies have worst morbidity and mortality rates compared to that of distal gastric cancers. Aim: Compare the behaviour, surgical outcomes and prognosis of proximal and distal gastric cancer at our institute operated during 2015 to 2016. Methods and Results: 42 patients of operated gastric cancer at Vidyasagare hospital during the time period from Jan 2015 to Dec 2016 have been included in the study and the results collected retrospectively. The clinical, endoscopic, radiological, surgical and histopathological findings have been analysed. All the patients underwent either D1+ or D2 nodal dissection. The total mean nodes dissected in Subtotal gastrectomy was 17.7 with mean positive nodes of 4.72 and 11.2 and 21.83 respectively in total gastrectomy. Morbidity was more in total gastrectomy group with 1 person having anastomotic leak and prolonged hospital stay compared to subtotal group. Despite of shorter duration of presentation, the T stage and N stage was more in proximal group compared to the distal group of gastric cancer. The ratio of metastastic nodes to total number of nodes is more in proximal group compared to the distal group of gastric cancer. Conclusion: Surgical outcomes of GBC at our centre, where we perform radical cholecystectomy with wedge resection of the liver, parallels published world literature. With low morbidity and mortality, it emphasis oncological equivalence of liver wedge resection as compared to formal segment IVb/V excision, provided margin negative resection is achieved.

Abstract Id: YUGP5854

Growing Burden Of Cancer In West Bengal: A Retrospective Study

Purpose- To analyse the burden of cancer and its patterns in West Bengal in a single institution based cancer registry. Background- Cancer has become one of the leading causes of death worldwide. Analysis of the growing burden and changing pattern according to geographical locations helps in designing epidemiological studies and planning of cancer prevention and control programs. In India, since cancer is not a notifiable disease, various cancer registries under the NCRP carry out active data collection. In this study, we have attempted to understand the distribution of cancer burden in West Bengal based on data collected from patients attending the Out Patient Department of Radiotherapy, IPGMER and SSKM Hospital, Kolkata over a period of one year. Materials and methods- The data of a total of 3342 new patients who attended the Out Patient Department of Radiotherapy, IPGMER and SSKM Hospital, Kolkata from June 2016 to June 2017 were analysed. Medical records were evaluated and relevant information regarding age, sex, primary site of cancer and demography were extracted. 304 patients were excluded from analysis, due lack of of knowledge of primary site of malignancy or benign nature of tumour. Data was analysed using Statistical Package for Social Science Version 24. Results- Proportion in males: females was 1.48:1. In males, four most common primary sites of malignancy: Lung (16.2%), Oral cavity (5.6%), Stomach (5.0%), Pancreas (4.5%). Similarly in females: Breast (27.3%), Cervix (14.6%), Gall bladder (8.8%), Ovary & Lung (4.9%). Highest burden of cancer is from the following districts: Kolkata - 16.4% (most common- lung, breast & gall bladder cancers) South 24Pgs – 14.6% (Lung, breast, stomach cancers) Howrah – 13.6 % North 24Parganas – 7.4% Murshidabad – 6.9% Geographical distribution of four most common malignancies in our study population Lung Cancer (11.9%) Kolkata (20.5%), South 24Parganas (17.5%) Howrah (11.4%) Breast Cancer (10.4) Howrah & Kolkata (17.3%), South 24Parganas (12.9%), North 24Parganas (12.2%) Cervical Cancer (5.5%) Murshidabad (12.0%), West Medinipur(10.7%), Bankura & South 24Parganas(9.3%) Oral cavity (4.4%) Howrah(21.3%). Kolkata (14.8%), South 24Parganas(13.1%) CA Gall Bladder (4.0%). Howrah & Kolkata (18.2%), Howrah (14.5%), South 24Parganas (12.7%). Conclusions: Males were found to be almost 1.5 times more afflicted by cancer than females. Highest cancer burden is found to be from Kolkata, closely followed by South 24 Parganas. When compared with data from Population based cancer registry, Kolkata, 2006-07, lung and breast cancer remain the most common malignancies in males and females respectively, though the subsequent pattern differs, especially in males, where number of prostate cancer patients has reduced and carcinoma stomach has risen. Among lung cancers, in general, squamous is the major histology. However, adenocarcinoma is catching up in urban areas like Kolkata(3 : 1) (ratio in rural areas like East Medinipur 4.5:1 & Murshidabad 4:1). Majority of the most commonly occurring malignancies, lung, breast, oral cavity and gall bladder cancers occur more in urban and suburban areas like Kolkata, South & North 24 Parganas, Howrah whereas cancer of the cervix appears to be from Murshidabad, Medinipur, Bankura. As the data was collected from a tertiary care centre in Kolkata, there is possibility of demographic bias. Also, IPGMER is one of the three brachytherapy referral institution for the entire state of West Bengal and beyond of study; which might result in biased data of carcinoma cervix. However, there is scope for further studies, integrating data from other government medical colleges, private health care institutes in the various districts for a more comprehensive result.

Abstract Id: YUGP5862

Neopharyngeal Augmentation In Laryngopharyngectomy With Patch Supraclavicular Flap(Scf)

Purpose- To analyse the burden of cancer and its patterns in West Bengal in a single institution based cancer registry. Background- Cancer has become one of the leading causes of death worldwide. Analysis of the growing burden and changing pattern according to geographical locations helps in designing epidemiological studies and planning of cancer prevention and control programs. In India, since cancer is not a notifiable disease, various cancer registries under the NCRP carry out active data collection. In this study, we have attempted to understand the distribution of cancer burden in West Bengal based on data collected from patients attending the Out Patient Department of Radiotherapy, IPGMER and SSKM Hospital, Kolkata over a period of one year. Materials and methods- The data of a total of 3342 new patients who attended the Out Patient Department of Radiotherapy, IPGMER and SSKM Hospital, Kolkata from June 2016 to June 2017 were analysed. Medical records were evaluated and relevant information regarding age, sex, primary site of cancer and demography were extracted. 304 patients were excluded from analysis, due lack of of knowledge of primary site of malignancy or benign nature of tumour. Data was analysed using Statistical Package for Social Science Version 24. Results- Proportion in males: females was 1.48:1. In males, four most common primary sites of malignancy: Lung (16.2%), Oral cavity (5.6%), Stomach (5.0%), Pancreas (4.5%). Similarly in females: Breast (27.3%), Cervix (14.6%), Gall bladder (8.8%), Ovary & Lung (4.9%). Highest burden of cancer is from the following districts: Kolkata - 16.4% (most common- lung, breast & gall bladder cancers) South 24Pgs – 14.6% (Lung, breast, stomach cancers) Howrah – 13.6 % North 24Parganas – 7.4% Murshidabad – 6.9% Geographical distribution of four most common malignancies in our study population Lung Cancer (11.9%) Kolkata (20.5%), South 24Parganas (17.5%) Howrah (11.4%) Breast Cancer (10.4) Howrah & Kolkata (17.3%), South 24Parganas (12.9%), North 24Parganas (12.2%) Cervical Cancer (5.5%) Murshidabad (12.0%), West Medinipur(10.7%), Bankura & South 24Parganas(9.3%) Oral cavity (4.4%) Howrah(21.3%). Kolkata (14.8%), South 24Parganas(13.1%) CA Gall Bladder (4.0%). Howrah & Kolkata (18.2%), Howrah (14.5%), South 24Parganas (12.7%). Conclusions: Males were found to be almost 1.5 times more afflicted by cancer than females. Highest cancer burden is found to be from Kolkata, closely followed by South 24 Parganas. When compared with data from Population based cancer registry, Kolkata, 2006-07, lung and breast cancer remain the most common malignancies in males and females respectively, though the subsequent pattern differs, especially in males, where number of prostate cancer patients has reduced and carcinoma stomach has risen. Among lung cancers, in general, squamous is the major histology. However, adenocarcinoma is catching up in urban areas like Kolkata(3 : 1) (ratio in rural areas like East Medinipur 4.5:1 & Murshidabad 4:1). Majority of the most commonly occurring malignancies, lung, breast, oral cavity and gall bladder cancers occur more in urban and suburban areas like Kolkata, South & North 24 Parganas, Howrah whereas cancer of the cervix appears to be from Murshidabad, Medinipur, Bankura. As the data was collected from a tertiary care centre in Kolkata, there is possibility of demographic bias. Also, IPGMER is one of the three brachytherapy referral institution for the entire state of West Bengal and beyond of study; which might result in biased data of carcinoma cervix. However, there is scope for further studies, integrating data from other government medical colleges, private health care institutes in the various districts for a more comprehensive result.
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remains to be the workhorse in most high volume tertiary centres against free flaps even in the present era. SCF is an equally viable alternative with advantages of either. Aim: To assess the reliability of Supravacular flap in augmentation of neopharyngeal reconstruction with Patch Supravacular flap. Methods: Primary Hypopharyngeal cancers undergoing Total laryngectomy with partial pharyngectomy at our institution from June 2017 was included in the study. SCF was harvested from contralateral side in view of ipsilateral Selective neck dissection. Results: A total of 4 cases were selected for the study. All were T4a lesions of Pyriform fossa. Following laryngectomy, the pharyngeal defect was reconstructed with patch SCAIF. The average duration of the flap used 7.8x5.2cm, that was harvested in median duration of 48 minutes. The average length of hospital stay was 4 days. Prophylactic neck strapping with crepe bandage was initiated on POD-4 till 2 weeks post op followed by oral soft diet. Adjuvant Radiation was initiated around 4-5 weeks postop. One patient had post op medical complication of PSVT, that was managed. No Pharyngocutaneous leak, stomal stenosis or aspiration were noted. Conclusion: Patch Supravacular flip is a reasonably versatile and reliable flap when utilized for neopharyngeal reconstruction in view of minimal learning curve and ease to harvest without affecting the oncological safety.

Abstract Id: YUGP5864
Near Total Laryngectomy- Revisited (Institutional Experience)
Presenter- Dr. Deepak Janardhan
Co-author - Dr Deepak Janardhan, Dr Bipin T Varghese, Dr Sajith Babu

Purpose-The indication for surgical intervention in laryngeal and hypopharyngeal cancers have narrowed down to T4a SCC and treatment failures. Radiation still remains the treatment in other case scenarios. But unlike the morbid procedure of total laryngectomy, near total laryngectomy whenever feasible is a better alternative in view of better speech quality without prosthesis. Aim- To retrospectively analyse the oncological safety of NTL in the setting of a tertiary care centre, after extensive resections and for salvage surgeries with regard to oncological outcome, morbidity, complications, recurrence and survival Methods- Retrospective study of 29 patients who underwent near total laryngectomy from Jan 2003 to Jan 2017 at our institution. Results- Of 29 patients, 48% were salvage cases. 58% underwent near total laryngectomy alone followed by 24% with partial pharyngectomy also. Excellent communicable speech was attained in 24%. Completion laryngectomy was done in 10% due to shunt failure, shunt stenosis or local recurrence. Locomotoral failure was noted in 27% in a median follow up of 8 years. Survival was plotted with Kaplan mier curves. Conclusions- Near total laryngectomy remains to be a maintenance free, oncologically safe when carefully opted and well tolerated option for both primary and salvage scenarios of laryngectomy.

Abstract Id: YUGP5868
Cancer Staging System: Is It A Time For Change
Presenter- Dr. Harthans Kapoor
Co-author - Dr. Prof. H L Kapoor

The staging systems for various types of cancers have been in practice since a long time with many scientific bodies having evolved the staging systems based upon the size, extent and spread with additional sub classifications. These systems have served the purpose of defining the treatment strategies and the outcomes in various stages. The therapeutic strategies have also been based upon these staging systems. In recent years we have witnessed an unprecedented scientific revolution in all aspects of cancer management. From basic understanding of tumor biology, various pathways in molecular research, tumor markers, diagnostic tools, pathological sub-types, use of targeted molecules, surgical overreach, radiation precision and whole body and semi body irradiation to control even hitherto “out of bounds” extensions of cancers and incorporation of multi-modality management. WHAT IS THE NEED FOR CHANGE? We all know that for a tumor to be clinically detectable the cells have to be billions in numbers and when we club the stages into 1 2 3 4 there are multiple choices for tumor size, number of lymph nodes and local invasion. With technological advances we can pick up tumors much early and treat based upon the tumor total profile. The staging has to be uniform for all solid tumors. The clinical and radiological work up must be expressed in the staging. The tumor size must be expressed in millimeters, the lymph nodes numbers and mobility status defined, the metastatic sites and number of metastases to be defined. The stages from 1 to 4 must be abandoned. I shall further expand on these issues

Abstract Id: YUGP5874
Effect Of Secoisolariciresinol Diglucoside (Sdg) On Colon Cancer Associated With Diabetes Mellitus
Presenter- Dr Bhoomika Patel
Co-author - Dr. Bhoomika M. Patel

Background and objectives: There is increased risk of colon cancer in both men and women having diabetes. The objective of the study was to evaluate the role of Secoisolariciresinol diglucoside (SDG) in colon cancer associated with type 2 diabetes mellitus. Methods: Diabetes was induced by administering high fat diet with low dose streptozotocin model. After 6 weeks, diabetes was confirmed and 1.2 dimethylhydrazine(25mg/kg, sc) weekly administration was from 6th to 18th weeks. Rats were treated with the SDG(1mg/kg) orally from 8th to 24th week. After 24 weeks, various biochemical and enzymatic parameters were estimated. Animals were sacrificed and colon tissue was separated and subjected to analysis of histopathological, PCNA studies and m mRNA expression of CDK4. For in vitro studies, MTT assay, scratch assay and clonogenic assay was carried out. Results: Disease control rats depicted hyperglycaemia, hyperinsulinaemia, elevated pro-inflammatory cytokines and cancer biomarker levels, and marked presence of proliferating cells. Treatment with SDG controlled hyperglycaemia, hyperinsulinaemia, reduced pro-inflammatory cytokines and cancer biomarker levels, and decreased no. of proliferating cells. We found that disease control rats depicted over expression of CDK4 mRNA levels which were reduced by SDG treatment. In vitro studies revealed that SDG showed a decrease in cell viability in MTT assay in HCT-15 cell line. IC 50 of simvastatin was calculated to be 21.25 uM. Similarly there was dose dependent decrease in clone formation as evaluated by clonogenic assay. There was decrease in the rate of migration with increase in concentration of SDG in scratch assay. Conclusions: Our data suggests that SDG exhibits protective role in colon cancer associated with diabetes mellitus as evident from control in glycemic parameters, reduction in tumor burden, tumor volume, tumor incidence and improvement in histopathological studies. The in vitro studies suggest that simvastatin acts possibly via inhibition of angiogenesis and down regulation of CDK4.

Abstract Id: YUGP5878
Presenter- Dr. ASHWINI LAKSHMAIAH
Co-author - Dr. Ashwini L, Dr Durgapoorna

Analysis of Outcome in cases of Intracranial Ependymoma [Grade II/III] after Post-Operative Radiation therapy: A case series from single institution Dr.Ashwini Lakshmaiah, Dr.Durgapoorna Purpose: To evaluate the outcome of patients with intracranial Grade II/III ependymoma who were treated with post operative radiation therapy at our institute with respect to various risk factors including histological
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grade & post-operative residual disease. Materials & Methods: An analysis of 21 patients with intracranial ependymoma [Grade II/III] who treated with post operative radiation therapy from June 2009 to August 2016 was done. The age of the patients ranged from 2 years to 61 years [median-32 years], ten patients were diagnosed with Grade II & eleven patients had Grade III ependymoma according to WHO Grading System. All the patients with [n=11:52.38%] and without[n=10:47.61%] operative residual disease as per MRI, were offered external beam radiation therapy with 4500cGy to 6000cGy [median dose-5040cG], using 15 or 6 MV photons beams. Median follow up period was 32 months [range, 5 months to 92 months]. Results: Eight out of 21 patients had tumor progression & 5 among them had Grade II ependymoma. 7 patients succumbed to disease-related complications within 12 months of progression. The study showed that after a median follow up of 20 months, patients who had incomplete resection progressed faster than those who had no post operative residual disease [88.9% versus 54.5%; p=0.028]. In terms of histology, PFS for Grade II & Grade III were 71.6% & 68.6%, respectively, after a median follow up of 15 months. The cumulative overall survival at a median follow up of 32 months was 68.5% [71.6% & 68.6% in Grade II & III, respectively]. The overall survival rate, in patients with post operative residue was 63.6% & 87.5%, in patients who had complete resection [p=0.116]. Discussion: In this study, we conclude that extent of surgical resection is one of the most important prognostic factors in intracranial ependymoma. Grade of the tumor, which was thought to influence the PFS & OS did not show any significant difference with respect to progression as well as survival. We recommend more randomized clinical studies to look into the benefits of SRS either as an adjuvant choice of therapy in case of small volume tumors or as a boost following EBRT in large tumor volumes, especially in a residual disease status.

Abstract Id: YUGP5899

Head And Neck Radiotherapy And Critical Weight Loss–How Critical Is It?

Presenter- Dr. Shebin George

Co-author - Dr. Pamela Jeyaraj, Dr. Jaineet Sachdeva, Dr. Preety Negi

Head and neck Radiotherapy and Critical weight loss—how critical is it? ABSTRACT Background:- Head and neck cancers in India are emerging as major public health problems, accounting for 20% of the cancer burden of our country. Radiotherapy alone or in combination with chemotherapy is an effective and standard treatment for head and neck carcinomas. Radiotherapy is associated with various adverse reactions, which leads to decreased oral intake and consequent malnutrition. Recognizing patients at risk of malnutrition and providing them with a good nutritional counselling and support programme is vital for the success of treatment and improving overall survival rate.

Materials & Methods: - This prospective study was done in patients with histopathological diagnosis of squamous cell carcinoma of the head and neck in the Department of Radiotherapy, Christian Medical College, Ludhiana. The pre-treatment, during treatment and post-treatment nutritional parameters of these patients receiving chemotherapy and radiotherapy were evaluated. Results:- This study identified the need for early dietetic intervention for high nutritional risk groups of head and neck cancer patients to prevent significant weight loss. Pre-treatment nutritional status did not influence weight loss during treatment. It was the primary tumor volume and the primary tumor site that was found to have correlation with critical weight loss during and after treatment. Keywords: - Head and Neck Cancer, Malnutrition, Tumor volume, Critical weight loss.

Abstract Id: YUGP5913

Breast Leiomyosarcoma; The Flowery Diagnosis!

Presenter- Dr. Ashwini Kannamma Kalimuthu

Co-author - Dr. Raja Senthil V, Dr. Kailiappa C, Dr. Ponniyah Iyappan R

Mitochondrial Ribosomal Small Subunit (MRPS) family comprises a set of 30 proteins encoded by nuclear genes involved in mitochondrial translational machinery. In addition to its functions in translation machinery, a significant aspect that has come to light is that some of the proteins appear to be bifunctional, endowed with extra-ribosomal functions. MRPS genes were reported to be differentially expressed in varied tumours and also in response to cancer treatment with drugs and radiation. In the present work 14 MRPS genes which were predicted to be present in alternate cellular localization other than mitochondria were shortlisted and mRNA expression levels were identified using quantitative real-time PCR in various cancer cell lines. A set of 17 cell lines comprising 2 control cells lines (HBL-100 & HaCat), 3 gastric cancer (AGS, NUGC & SNU638), 2 lung cancer (A549 & NCI-H460), 4 cervical cancer (HeLa, SiHa, Bu25Tk & HTB-34), 5 breast cancer (MDA-MB-231,MDA-MB-468, SKBR3, MCF7 & ZR-751) and one leukemia (K562) cell lines were used to analyze the mRNA expression levels of 14 MRPS genes (MRPS6,MRPS10, MRPS14, MRPS15, MRPS18B, MRPS23, MRPS24, MRPS27, MRPS29, MRPS31, MRPS35, MRPS37, MRPS38, MRPS39). The results show that most of the genes were found to be downregulated in cervical cancer cell lines when compared with control cell lines. Except MRPS35, other 13 genes were found to be downregulated in lung cancer cell lines when compared with control cell lines. Except MRPS10 and MRPS14 were also found to be upregulated in gastric cancer cell line and MRPS29 was found to be upregulated in K562 cell line when compared with control cell line. MRPS6, MRPS10, MRPS14, MRPS23, MRPS24, MRPS27 and MRPS31 were found to be upregulated in breast cancer cell lines. Incidentally, we found that the genes that were upregulated in ER+ breast cancer cell line were found to be downregulated in ER- cancer cell lines and vice versa, suggesting a possible relationship between the hormonal status of breast cancer and expression levels of these genes. Further functional studies have to be carried out to assess the relevance of MRPS gene expression in molecular pathways of cancer and their potential as prognostic marker for cancer.
Abstract: Immune Dysfunction In Cervical Cancer
Presenter- *Ms. Hascitha J

Objective This study aims to analyze the predictive role of Treg cells, tumor associated macrophages, natural killer (NK) cells and the enzyme Indoleamine 2,3 Dioxygenase, all of which contribute to a pro-tumorigenic microenvironment resulting in disease progression. Introduction Immune perturbation in cervical cancer has been widely reported but the pathological interaction between tumor and immune cells within the tumor microenvironment which creates an immunosuppressive network promoting tumor growth, needs to be studied in order to tailor therapies accordingly. Materials and methods Tumor biopsy samples were obtained from patients after getting an informed consent. The samples were subject to enzymatic digestion overnight. Surface and intracellular staining was done using a panel of antibodies FOXP3, CD45, CD25, CD4, CD3, Cytokeratin, CD56, CD20, CD163 and IDO were analyzed in a flow cytometer. Realtime PCR was done with cDNA of RNA extracted from tissue samples to quantitate IDO expression levels. Supernatants from homogenized tissue samples were used for determining the Kyn/Trp ratio by HPLC. Results Infiltrating cell analysis in 100 cervical cancer and 5 normal cervix tissue biopsy samples, revealed that CD4/CD8 cell ratio infiltration was lower while CD4+Tregs were higher in the tumor tissue samples when compared to normal cervix tissue. There was an inverse association of IDO expression and CD3 cells found. We compared the expression of IDO mRNA levels in cervix tumor tissue and normal tissue which revealed a 3 fold upregulation in the former. The conversion of essential aminoacid tryptophan to its metabolite L-kynurenine which is catabolized by the enzyme IDO, was monitored by HPLC. Higher K/T ratio was found in nearly 60% of cancer patients showing a marked difference in Kynurenine level between normal and cancer tissue indicating the presence of active IDO enzyme in the tissues. Conclusion Treg accumulation may be an important prognostic indicator in cervical cancer patients and may also vary with disease progression. The enzyme IDO may play a vital role in immunosuppression of T cells that infiltrate the cervical tumor milieu.

Abstract Id: YUGP5929
Efficacy Of Targeting And Functional Studies On The Fusion Region Of EWS-Fli1 Chimeric Protein And Characterization Of Anti-Cd99 Monoclonal Antibodies
Presenter- *Ms. Krishna Priya
Co-author - Dr.G.Gopal, Dr.Priya, Dr.T.Rajkumar

Efficacy of Targeting and Functional Studies on the Fusion Region of EWS-Fli1 Chimeric Protein and Characterization Of Anti-Cd99 Monoclonal Antibodies Authors: Krishna priya Thankaretnam1,2, Gopisetty Gopal2, Priya Ramamohan2 and Thangarajan Rajkumar2 1- Presenting author, qualification: Msc, M.Phil, Designation: SRF, E-mail ID: priyabiochem6@gmail.com 2- Department of Molecular Oncology Cancer Institute (WIA), Adyar Chennai, 600020 Abstract: Ewing's sarcoma (ES) is a highly malignant bone and soft tissue tumour typically diagnosed in the second decade of life. ES is driven by the aberrant transcription factor EWS-Fli1 which is uniquely expressed in ES due to chromosomal translocation. In the present study, we introduced a polypeptide (TAT/NLS/EWS-PEP) comprising of thirty amino acids spanning the junction region of EWS-Fli1 in conjunction with TAT cell penetrating peptide and nuclear localization signal sequence (NLS). Peptide localization studies revealed its conjunction with TAT cell penetrating peptide and nuclear localization of thirty amino acids spanning the junction region of EWS-FLI1 in study, we introduced a polypeptide (TAT/NLS/EWS-PEP) comprising of EWS-FLI1. Co-immunoprecipitation and EMSA assays revealed an interaction of the peptide with EWS-Fli1. Further, in the pull down assay, the peptide was found to interact with proteins known to potentially interact with EWS-Fli1. CD99 is an O-glycosylated transmembrane protein over expressed on the cell surface of ES tumours. It can be considered as an attractive target antigen in ES based on the fact that certain clones of CD99 antibodies induce apoptosis and reduce malignant potential of ES cells also considering that it is easily accessible and expressed in virtually all cases of ES. We have developed and characterized monoclonal antibodies against CD99 which could aid in targeting the peptide to the cancer cells in vivo. These findings show that the peptide could be applied in targeting ES cells guided by anti-CD99 antibodies.

Abstract Id: YUGP5931
Chemopotent Insertion By Cephalic Vein Approach Video Presentation
Presenter- *Dr. VENKATA CHALA
Co-author - 

Dr. Venkatachala K, MBBS MS MCh FMAS Consultant Surgical Oncologist HCG, Bengaluru 9845671017 dvenkat24@gmail.com Abstract Background: Many chemotherapy drugs like anthracyclines, taxanes, methotrexate, vincristine etc are highly toxic and vesicants. Administration of these drugs through peripheral veins can cause thrombophlebitis, limb edema, extravasation and cellulitis, skin necrosis, contracture and dysmotility of neighbouring joints. Also, some regimens mandate prolonged infusion of chemotherapeutic drugs. It's a common practice to implant chemoports prior to initiation of a chemotherapy regimen. The usual Seldinger technique for central venous access carries risk of arterial puncture, hematoma, pneumothorax, hemothorax, catheter fragmentation with embolism. These complications can be avoided if cephalic vein venotomy is used for central venous access. Method: 1000 patients underwent chemopotent insertion between Jan 2007 and July 2017. A 2.5- 3.5 cm transverse infraclavicular incision over the deltopectoral groove was used to dissect the Cephalic vein, venotomy was done and cathether threaded to position the tip at the distal Superior venacava. Catheter was then tied to the cephalic vein to prevent migration/embolism in the event of catheter fragmentation. A subcutaneous pocket is created for the port inferiorly. Catheter is connected to the port, locked and checked. Bard X-port 8Fr Groshong tip cathether was used in all these cases because of the ease to thread the cathether through the venotomy. This procedure was performed under local anesthesia in majority of the cases unless general anesthesia was needed for another major procedure in the same sitting. If the cephalic vein was < 2mm in diameter or any vascular anomaly preventing threading of the cathether in to the subclavian vein (nearly 5% of our cases), Seldinger technique is employed. Results: 95% of our patients underwent chemopotent insertion using cephalic vein cut down. Remaining 5% cases needed the Seldinger technique. 3 cases needed internal jugular vein venotomy for catheter insertion. 2 patients developed hematoma with Seldinger technique, one patient had pneumothorax which didn't necessitate a chest tube drainage. None of the patients who underwent chemopotent insertion by cephalic vein cut down developed these complications. The latter procedure was also associated with less blood loss. Conclusion: Central venous catheter insertion using cephalic vein venesection during chemoport implantation procedure can be comfortably performed under local anesthesia with less incidence of complications like arterial puncture, hematoma, pneumothorax, hemothorax, catheter fragmentation with embolism compared to Seldinger technique and also associated with less blood loss.

Abstract Id: YUGP5933
Sentinel Lymph Node Biopsy In Early Breast Cancer Video Presentation
Presenter- * DR. VENKATA CHALA

Abstract Background: 70% cases of early breast cancer cases (cT1, T2 N0) harbor no axillary lymph node metastases. Axillary lymph node dissection is associated with complications like lymphedema in
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15-25% cases, intercostobrachial numbness in 78% cases, shoulder dysmotility in 17% cases, paresthesia, prolonged lymphorrhea, seroma formation and prolonged hospital stay. Sentinel node biopsy is an acceptable modality for axillary lymph node staging in early breast cancers as an alternative to axillary lymph node dissection and also avoids the morbidity of axillary node dissection. Method: 214 patients of early breast cancer cases (cT1, T2 N0) underwent sentinel node biopsy between Jan 2007 and July 2017 using combined radioisotope and blue dye technique. 0.2ml (0.2 mCi) of 99Tc-Sulphur colloid is injected peri -tumorally/ intradermally (total of 1ml), two hours prior to surgery. Radioscintigraphy is performed to map the sentinel node location and patient is shifted to the operating room. 1ml Methylene Blue dye is injected peri- tumorally/ retroareolar (total of 4 ml), 20 mins prior to surgery. In case of breast conservation surgery, 2.5- 3.5 cm transverse axillary skin crease incision is made over the index radioactive node. If mastectomy is planned, axilla is exposed after raising the superior skin flap. Deep blue stained node identified per-operatively and its radioactivity checked using hand held gamma camera. The sentinel node must have a significant high radioactivity compared to the background (at least 10:1). Entinel node is harvested and sent for frozen section. Axilla is checked for any palpable suspicious nodes or residual radioactivity. Frozen section analysis and multiple serial sections (12 to 15) are taken on the sentinel node. If sentinel node is found to harbor metastases, complete axillary dissection is performed. If no metastases are found in the sentinel node, no further axillary surgery is performed. Results: 214 patients of early breast cancer cases (cT1, T2 N0) underwent sentinel node biopsy between Jan 2007 and July 2017 using combined radioisotope and blue dye technique. 17% cases had T1 tumors and 83% cases had T2 tumors. 135 cases had Right sided and 79 cases had left sided breast cancers. Sentinel lymph node was identified in all (100%) cases. On an average, 1-2 sentinel nodes identified, mean size of positive sentinel node was 7mm. Sentinel node was the only positive node in 54 cases (69%). Gamma probe and methylene blue combined identified the sentinel node in 87% cases, gamma probe alone in 8.7% cases and methylene blue alone in 4.3% cases. The sensitivity, specificity, positive predictive value, overall accuracy and false negative rate were 95.8%, 100%, 100%, 98.7% and 4% respectively Conclusion: SLNB allows better staging of axillary nodes and false negative rate were 95.8%, 100%, 100%, 98.7% and 4% alone in 8.7% cases and methylene blue alone in 4.3% cases. The combined identified the sentinel node in 87% cases, gamma probe positive node in 54 cases (69%). Gamma probe and methylene blue all (100%) cases. On an average, 1-2 sentinel nodes identified, mean had left sided breast cancers. Sentinel lymph node was identified in 83% cases had T2 tumors. 135 cases had Right sided and 79 cases had left sided breast cancers. Sentinel lymph node was identified in all (100%) cases. On an average, 1-2 sentinel nodes identified, mean size of positive sentinel node was 7mm. Sentinel node was the only positive node in 54 cases (69%). Gamma probe and methylene blue combined identified the sentinel node in 87% cases, gamma probe alone in 8.7% cases and methylene blue alone in 4.3% cases. The sensitivity, specificity, positive predictive value, overall accuracy and false negative rate were 95.8%, 100%, 100%, 98.7% and 4% respectively Conclusion: SLNB allows better staging of axillary nodes in early stage breast cancers. It also avoids morbidity of axillary node dissection.

Abstract Id: YUGP5939
Study Of Efficacy Assessment Of Intensity Modulated Radiotherapy (IMRT) With Simultaneous Integrated Boost In Head And Neck Squamous Cell Carcinoma.
Presenter- Dr. ROHINI KHURANA, Dr. MADHUP RASTOGI, Dr. KAMAL SAHINI
Co-author - Dr. BIDYUT MANDAL, Dr. AVIK MAJI, Dr. DEBJIT GHOSH
Study of efficacy assessment of intensity modulated radiation therapy (IMRT) with simultaneous integrated boost in head and neck squamous cell carcinoma. Narayan P.Singh, R.Khurana, M.Rastogi, K.Sahi, R.Hadi, S.P.Mishra, S.Sapru, A.K.Gandhi, A.K.Srivastava, S.Rath, Farzana S Dr. RMLIMS, Lucknow, Uttar Pradesh, India. Contact no.: 8176007042 E-mail: naryangvsm@gmail.com Background: In locally advanced head and neck cancer patients, various randomized trial has shown that concurrent chemoradiotherapy is the standard of care. It has resulted in a 19% reduction in the risk of death and an overall 6.5% improvement in 5-year survival as compared to treatment with RT alone (p < .0001). This benefit was predominantly attributable to a 13.5% improvement in locoregional control. However, due to comorbidities a large no. of patients are not suitable for concurrent chemotherapy, IMRT is a preferred option. It also receives an intracavitary boost in 5-year survival as compared to treatment with RT alone (p < .0001). This benefit was predominantly attributable to a 13.5% improvement in locoregional control. However, due to comorbidities a large no. of patients are not suitable for concurrent chemotherapy, IMRT is a preferred option. It also receives an intracavitary boost in locoregional control. IMRT is preferred for multimodality radiation beamlets and the ability to conform target volume as well as better sparing of critical structures. IMRT has the ability to selectively increase the dose per fraction to selected sub-volumes of the target where more radio-resistant clones are anticipated to be present - an approach known as simultaneous integrated boost IMRT. Aim: To assess the efficacy of SIB-IMRT in head and neck squamous cell carcinoma in patients deemed unsuitable for CRT. Materials and Methods: 34 Patients with histologically proven squamous cell carcinoma of the oropharynx, hypopharynx and larynx with TNM stage (AJCC 7th ) T1-3 N0-3 M0 who were not candidates for concurrent chemotherapy treated with IMRT using SIB technique with radical intent from 2015 to 2017. Patients were treated with 6600 cGy to PTV-VR, 6000 cGy to PTV-IR, 5400 cGy to PTV-LR in 30 fractions 5 days in a week. Results: The median age was 60.5 yr (35-86). Males were 91%. Primary site was oropharynx (44%) followed by larynx (38%) and hypopharynx (18%). 47% of patients were of stage III, 44% of stage II and 9% of stage IV. Median follow up period was 17 months (6-32), 31 patients had complete response, 2 patients had partial response and 1 had progressive disease. Recurrence was observed in 6 (17.64%) patients (local 66.67%, distant 16.67%, locoregional 16.67%). Seven (20.58%) patients died due to disease progression. Disease free survival rate was 96.8% in 1st year and 76.9% in 2nd year. Overall survival rate was 90.7% in 1st year and 70.9% in 2nd year. Conclusion: IMRT-SIB is comparable to chemoradiation in locally advanced HNSCC patients who are not fit for chemoradiation. IMRT-SIB offers similar results in terms of locoregional control and disease free survival.

Abstract Id: YUGP5947
Concurrent Chemoradiation With Sequential Versus Interdigitated Brachytherapy For Locally Advanced Carcinoma Cervix – An Open Label Randomised Study
Presenter- Dr. ABHISHEK BASU
Co-author - Dr. BIDYUT MANDAL, Dr. AVIK MAJI, Dr. DEBJIT GHOSH
INTRODUCTION Carcinoma cervix is one of the most deadly killer malignancy worldwide with about 500000 diagnosed cases per year and 233000 deaths. In our country disease burden is about 100000 cases per year(2001). A total dose of EBRT of 45 to 55 Gy appears to be sufficient for microscopic disease in the pelvic nodes in most patients. It is customary to treat lymph nodes known to contain gross disease and heavily involved parametria to a total dose of 60 to 65 Gy including the contributions from brachytherapy systems. All treatment, including external-beam and brachytherapy must be concluded within 56 days from initiation of treatment. American Brachytherapy Society proposes that Brachytherapy may be initiated earlier, but no earlier than approximately 20 Gy, if the physician determines that the applicator placed at this time point would provide adequate tumour coverage and sparing of normal tissues. Alternatively, if 45 Gy is delivered to the whole pelvis prior to brachytherapy, two brachytherapy insertions per week should be given to avoid treatment prolongation. This was a prospective study to evaluate the effects of treatment duration shortening with the recommendation of ABS comparing with conventional EBRT followed by brachytherapy to complete the treatment with respect to tumour response, disease free survival, quality of life & toxicity in case of locally advanced carcinoma cervix. AIM & OBJECTIVE a) Primary endpoint - Assessment of Tumour response b)Secondary endpoint - Assessment of disease free survival assessment of toxicity(aute & late) MATERIALS AND METHODS From January 2016 – June 2017, Patients with biopsy proven cases of locally advanced cancer( IIB – IVa) of cervix coming in the OPD of Medical College Kolkata, for management were allocated randomly to one of the following arms, using a computer generated random number table: In study arm,(n=30) patients were treated with EBRT by Tele-cobalt machine to a dose of 50 Gy in 25 fractions over 5 weeks. The high dose rate intracavitary brachytherapy using Ir192 interdigitated from the 3rd week of EBRT, was given in 3fractions(single fraction of 7Gy per week). EBRT was omitted on the day of brachytherapy and the missed fraction was administered on Saturday(Treatment completion within.
In control arm (n=30) patients were treated with external beam radiotherapy by Tele-cobalt machine to a dose of 50Gy in 25# followed by HDR brachytherapy starting 1 week after (Treatment completion within 8 weeks). In both arm concurrent Cisplatin 40mg/m² weekly, was given. Response was assessed using RECIST version 1.1. Radiation induced toxicities was assessed and graded according to RTOG/ EORTC acute and late toxicity grading criteria. All statistical analysis were done by IBM SPSS software, Version 23. RESULTS In this study, youngest included patients were in their 4th decade of life and elderly patients were in their 7th decade of life. Minimum follow up period was 7 month and maximum follow up period was 18 month with a mean period was 12.77±5month. Both the arms were comparable in demographic & pre treatment parameters, most commonly patients presented with FIGO stage III (67.5%) non-bulky(<4cm) disease. All the patients were treated with pretreatment haemoglobin >11 gm/dL and mean pretreatment HB was 11.77gm/dL(12.5±2.5). Dosimetry of ICRT, in view of Point A dose, 2cc bladder dose,2cc rectum dose was comparable in both arms. Post Brachytherapy locoregional response after 6 months was better in Interdigitated arm (p = 0.03). Acute toxicities like, Nausea (p= 0.056), vomiting (p = 0.032), proctitis (p = 0.046), haematochezia (p = 0.049) were more in Interdigitated arm. Late toxicities like vaginal stricture (p= 0.027) & dyspareunia (p= 0.007) was more in study arm though quality of life score was comparable with better 1 yr survival in study arm. CONCLUSION In conclusion, it can be said that Interdigitated Brachytherapy is a viable option to reduce treatment duration in cervical cancer treatment even in our Indian population with acceptable acute toxicity and little more late toxicity expected, which to be evaluated with a large randomised trial in our population. Large study also needed to evaluate potential benefit of interdigitation in achieving better locoregional control, disease free survival and overall survival.

Abstract Id: YUGP5949
The Risk Of Second Malignant Tumors After Definitive Treatment Of Nasopharyngeal Carcinoma Three Case Reports And Literature Review
Presenter - Dr. Devika Sunil
Co-author - Dr.Devika Sunil, Dr.Ashwini LaksmiM, Dr. Dinesh Makuny

CONTEXT Patients with head and neck squamous cell carcinoma (HNSSC) have an increased incidence of developing second malignant tumors (SMTs). This may possibly be explained by the concept of “field cancerization” or “condemned mucosa syndrome”, implying the importance of other risk factors like smoking, alcohol consumption, genetic factors and viral infections. However, risk factors for SMTs have not been documented well, especially in nasopharyngeal carcinoma (NPC). OBJECTIVE Evaluate the presence of risk factors in the development of SMTs after treatment of NPC at our institution after a 6-year follow up. METHODS In this study, we retrospectively analyzed 63 patients with pathologically confirmed diagnosis of non-metastatic NPC from June 2009 to June 2015 treated with curative intent using EBRT (IMRT) 3D with concurrent chemotheraphy for the development of SMTs. Apart from our data, literature review on the topic showed an additional 1970 patients who were also analyzed. RESULTS After a median follow up of 56 months (24 - 96 months), 2 patients were diagnosed with SMTs of tongue after 5 years and 1 patient developed esthesioneuroblastoma of right maxillary sinus after 6 years. CONCLUSIONS In patients with NPC, radiation therapy is probably a potential risk factor for developing SMTs, apart from other independent risk factors like tobacco and alcohol. SMTs can develop as early as 3 years after the completion of treatment and hence warrant close follow up.
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FSRS by Cyberknife to bilateral acoustic schwannomas - Synchronus treatment
P.S. Sridhar1, N. Madhusudhan1, K. Roopesh1, K. Saurabh1, J. Vijay Kumar1, R. Swaroop1, K. Praveen1, G. Swaroop2, R. Satish2, D. Rajkumar3, G. Prashanth4, D. Indresh5, A. Jerrin1, B. Ajai Kumar1. 1Health Care Global Enterprises Ltd, Cyberknife-Radiation oncology, Bangalore, India. 2Sakra hospital, Neurosurgery, Bangalore, India. 3Forts hospital, Neurosurgery, Bangalore, India. 4Health Care Global Enterprises Ltd, Nuclear medicine, Bangalore, India. 5Health Care Global Enterprises Ltd, Radiology, Bangalore, India. Purpose or Objective Vestibular schwannomas account for approximately 8 percent of intracranial tumors in adults and 80 to 90 percent of tumors of the cerebellopontine angle (CPA). The overall incidence of vestibular schwannomas is about one per 100,000 person-years. The tumors are unilateral in more than 90 percent of cases, affecting the right and left sides with equal frequency. Bilateral vestibular schwannomas are primarily limited to patients with neurofibromatosis type 2. Treatment options of acoustic schwannomas are surgery, radiation and observation. Treatments of bilateral schwannomas are challenging. Usually treatment is done sequentially to prevent toxicity. To assess the safety and efficacy of fractionated Cyberknife based SRS in treating bilateral schwannomas simultaneously. Material and Methods 5 Patients (4 Female, 1 Male) diagnosed with bilateral acoustic schwannomas were planned and treated with DOTA PET and MRI based fractionated SRS by Cyberknife to Bil Schwannomas simultaneously from 2010 to 2015.2 were part of NF–2, 4 patients were part decompensation. Constraints were prescribed to normal structures like brainstem and cochlea. All patients were followed up every 3 months with 6 monthly MRI Scans. They were also assessed for toxicity.2 patients are on follow up for 5.5 years, 1 patient 4 years, 1 patient 2 years, others since 1.5 years. Results 5 Patients with 9 lesions were treated by Cyber knife guided SRS with 25Gy/5 frs. prescription isodose range from 75–88%. Size of the lesions ranged from 1.5 to 3.2 cm. Mean volume of the GTV was 15.4cc. Max Brain stem dose in 5 patients was 24.8, 27.5, 11.8, 19.05, 12 Gy respectively. Mean doses to brainstem was 11.9, 10.4, 8.0, 8.71, 4.8 Gy respectively. Cochlear doses were maintained within normal limits. All patients had complete symptomatic response and partial radiological response. None of the patients had brain stem changes or any other toxicity. Conclusion Bilateral acoustic schwannomas can be treated simultaneously with Fractionated SRS at 25Gy/5 fractions with normal brain stem doses and similar toxicity and response profiles. However large number of cases with long follow up is required.

Abstract Id: YUGP5958
FsrS By Cyberknife For Glomus Jugulare -Hcg India Experience
Presenter - Dr. Rupesh Krishnappa
Co-author - Dr Sridhar P S, Dr Madhusudan N, Dr Abhilash G H

FSRS by cyberknife for glomus jugulare -HCG india experience P.S. Sridhar1, N. Madhusudhan1, K. Roopesh1, K. Adarsh1, K. Vija1, K. Praveen1, A. Jerrin2, M. Bijina2, D. Indresh3, S. Shivakumar3, B. Ramesh1, K. Gurunath1, B. Ajai Kumar1. 1Health Care Global Enterprises Ltd, Cyberknife-Radiation oncology, Bangalore, India. 2Health Care Global Enterprises Ltd, Medical physics, Bangalore, India. 3Health Care Global Enterprises Ltd, Radiation Oncology, Bangalore, India. Purpose or Objective Glomus jugulare tumors are rare, slow-growing, hypervascular tumors that arise within the jugular foramen of the temporal bone. They are included in a group of tumors referred to as paragangliomas, which occur at various sites and include carotid body, glomus vagale, and glomus tympanicum tumors. Treatment strategies for glomus jugulare tumors include surgery, preoperative embolization followed by surgical resection, conventionally fractionated external beam radiotherapy, radiosurgery in the form of stereotactic radiosurgery or fractionated stereotactic radiation therapy, and combinations of these modalities. Many a times surgery becomes difficult owing to its inaccessible anatomical location and associated surgical morbidity. Objective is to evaluate the efficacy and safety of Cyber knife SRS in treating glomus tumours. Material and Methods 14 Patients with glomus tumours since 2010 were treated with Cyber knife based robotic radiosurgery. 6 were males and 8 were female. Age ranged from 33 to 65 years. They were all subjected for cyberknife planning DOTANOC PET and MRI scans. Then planned for cyberknife based robotic radiosurgery to a dose of 25–35Gy/5 fractions. All patients were followed up with 3 monthly DOTA PET and MRI scans and clinical evaluation. Results Among all 14 patients, Facial weakness was the most common presenting complaints. Hearing loss, ear block and ear pain, deviation of mouth and tinnitus were among the other complaints. Duration of symptoms ranged from 2 months to 9 years. 8 out of 14 patients had facial nerve palsy. 3 patients had profound SN hearing loss on pre treatment audiometry. None of the patients had histopathological diagnosis. Size of the lesions ranged from 2.2 to 11cm. 4 were left sided lesions 9 were right sided and one was bilateral lesions. One patient had prior surgery and embolisation and recurred. 12 patients were treated with 25Gy/5frs, one patient with 30Gy/5frs, one with 35Gy/5frs. Dose prescribed to 73 to 92 % isodose line. Brainstem doses ranged from 4Gy to 30Gy. Conclusion All patients had complete subjective symptomatic response. Local control defined as either tumor shrinkage or the absence of tumor growth on periodical followup neuroimaging was 100%. FSRS by cyberknife is safe and effective mode of treatment for glomus jugulare tumors.

Abstract Id: YUGP5968
Assessment And Comparison Of Radiation Induced Xerostomia And Quality Of Life In Head And Neck Cancer Patients Treated With Precision Radiotherapy
Presenter - Dr. BIJAYALAXMI SAHO
Co-author - DR SANJUKTA PADHI, DR LINCOLN PUJARI, DR TANUSHREE MISHRA

ABSTRACT INTRODUCTION Radiotherapy with or without chemotherapy is one of the mainstay in management of squamous cell carcinoma of Head and neck. Xerostomia is one of the common side effects which adversely affect quality of life of the patients. The aim of the study was to evaluate the effect of treatment with 3DCRT and IMRT technique on xerostomia and its resultant effect on quality of life of the patients. MATERIAL AND METHOD 20 patients each with Histopathologically proven squamous cell carcinoma of Head and neck were recruited in 3DCRT and IMRT arm between January 2016 to May 2017. Baseline salivary gland function and Xerostomia at conclusion and 3 months post RT were assessed objectively by comparing salivary gland function, using salivary gland scintigraphy and subjectively by using Xerostomia related questionnaire. RESULT Analysis of QoL related questionnaire showed mean score of 11.2 at baseline and 37.82 at the end of treatment and 42.32 at 3 months after radiotherapy in IMRT arm and 14.42, 44.75, 51.53 respectively in 3DCRT arm. Eating assessment tool showed base line score at 11.2, post RT 38.76 and 3rd month following radiotherapy score of 42.82 in IMRT arm and 14.42, 43.53, 51.52 respectively in 3DCRT arm. Salivary gland scintigraphy showed Ejection Fraction score of 51.68 and 25.29 at baseline and 3 month post RT respectively in IMRT arm and 49.47 & 18.49 respectively in 3DCRT arm. CONCLUSION The 3DCRT group patients, experienced more Xerostomia compared to IMRT group patients. So xerostomia can be reduced with precision radiotherapy like IMRT technique which improves quality of life of head and neck cancer patients.

Abstract Id: YUGP5972
Efficacy Of Interventions In Creating Demand For Tobacco Cessation Among Tobacco Users Of Slums In India
Presenter - Mr. Sathish Ramakrishnan
Co-author - Dr. V. Surendran, Dr. E. Vidhubala, Dr. Arvind Krishnamurthy
Introduction. Tobacco usage, an avoidable risk factor of common cancers, is on the rise in India, despite the increasing awareness. On the other hand, GATS (2009-2010) revealed that almost 73% of the tobacco users either think about or make an attempt to quit at a given point of time. Yet, due to the lack of awareness and limited availability of the cessation services, their goal remains unattained. Similarly, the level of awareness among the population of the slums is also highly minimal, thus making them a vulnerable group for a number of life-threatening diseases. Considering the magnitude of the issue, we proposed a study targeting the slum areas in Chennai, to create awareness and demand for tobacco cessation. Method. A total of nine representative slums selected randomly from in and around Chennai, which was then divided into a group of three which was described as experimental group 1, experimental group 2 and control group, with different intervention models for the groups. Tobacco users (n=900) were identified from the respective slums (100 tobacco users from each slum community). Each group was recruited with 300 tobacco users respectively. The phase one observations of the ongoing study were analyzed using descriptive statistics. Results: A total of 264 (29.3%) tobacco users reported for the oral cancer screening. Of the people screened, 57(21.59%) had pre-malignant lesions. Of the three intervention groups, the response rate for the control group was higher. Among the tobacco users with pre-malignant lesions, even after regular follow-ups, the response for cessation is minimal. Overall, the demand for cessation is poor during the initial phase of the study. Conclusion. The demand for cessation among the tobacco users is minimal even with different methodologies. However, the effectiveness of these methodologies on cessation can only be understood in the long run.

Abstract Id: YUGP5979
Awareness And Beliefs With Regard To Screening For Cervical Cancer In Young And Middle Aged Women.
Presenter- Ms. Prarthana Pai
Co-author - *

Background: Most of the cervical cancer cases are diagnosed late leading to poor outcomes. Very few studies have explored the source of information for awareness of women about cervical cancer in India. Hence, this study was conducted with the objective of knowing the knowledge of women about cervical cancer its screening, source of information, and reasons (GLOBOCAN,2012) for not undergoing screening. (National Cancer Institute,2014) Aim: The aim of the study was to know the knowledge of women about cervical cancer, its screening, source of information, and reasons for not undergoing screening if the women had not undergone testing for cervical cancer. Methods: This research method used was the ex post facto design method. It included a mixed method using quantitative initially in the form of a questionnaire and then qualitative using in-depth interviews to understand the data in better light. Using purposive sampling the researcher chose the population that was selected for the study, married women from 20-40 years of age (n=50) and married women from 40-60 years of age (n=50). The total size comprised of (n=100) participants. Quantitative data was collected, using the cervical cancer screening questionnaire (NHS,2002) and for qualitative study, the researcher conducted in-depth interviews on those participants who formed the sub-sample of the population which comprised of two groups of five participants each. Descriptive and inferential statistics was used as part of quantitative study and thematic analysis was used as part of qualitative study. Conclusion: The findings revealed that both younger women and middle aged women possessed similar levels of awareness, and practices on cervical cancer and its screening procedure. Though, both the groups differed in the beliefs that they had about cervical cancer screening, while older women reported higher levels of awareness about cervical cancer, several themes also revealed the reasons for not being screened. There was also a high need for awareness that was expressed by the women. Additional research is needed to understand what deters women with more children from receiving treatment. Key Words: cervical cancer, pap smear, married women, awareness, beliefs, practices

Abstract Id: YUGP5982
The Role Of Social Support And Coping Strategies In The Prediction Of Psychological Well-Being In Type 2 Diabetic Patients Of Zahedan
Presenter- Dr. Iraj Zareban
Co-author - Mahbube Fallah, Alireza Ganjali, Zahra Heidari

The Role of Social Support and Coping Strategies in the Prediction of Psychological well-being in Type 2 Diabetes Patients of Zahedan Azizollah Mojahedi1, Mahbubeh Fallah2*, Alireza Ganjali3, Zahra Heidari MD4. 1 Health Promotion Research Center, Department of Clinical Psychology, Zahedan University of Medical Sciences, Zahedan, Iran. 2* Medical school, Department of clinical psychology, Zahedan University Of Medical Sciences, Zahedan, Iran. Corresponding author: Mahbube Fallah, Medical school, Department of clinical psychology, Zahedan University of Medical Sciences, Zahedan, Iran, E-mail: mahbube.fallah.fm@zaums.ac.ir, TEL: 02144870814, FAX: 03536241825. 3 Health Promotion Research Center, Department of Clinical Psychology, Zahedan University Of Medical Sciences, Zahedan, Iran. 4 Department of endocrinology and metabolism, Zahedan university of Medical sciences, Zahedan, Iran Abstract Background and objectives: Considering the growing incidence of type 2 diabetes as a result of various factors such as psychological ones, the present study was conducted to examine the role of social support and coping strategies in the prediction of psychological well-being in type 2 diabetic patients of the city of Zahedan, Iran. Materials and methods: The studied sample included 225 type 2 diabetic patients. All patients referred to the Aliashgar Hospital of Zahedan’s Diabetes Center from 10/11/2015 to 03/02/2016 were included in the study. The Ryff’s 18-item Psychological Well-being Scales, the Multidimensional Scale of Perceived Social Support (MPSSES), and the Coping Strategies Questionnaire were administered to the patients (n=225) and the scores were analyzed using inferential statistics (correlation coefficient and stepwise multivariate regression analysis). Results: Results suggested that there was a significant positive correlation between social support and coping strategies with psychological well-being. Results from the regression analysis demonstrated that, from six predictor variables out of a 12-variable model, the perceived support from a significant other, avoidance-oriented coping, emotion-oriented coping, and perceived family support can predict 25.4% of the psychological well-being of type 2 diabetic patients, respectively, in terms of their predictive power. Conclusion: According to the results, it can be concluded that there is a relationship between social support and coping strategies with psychological well-being. Social support, in particular support from a significant other and family support, has a positive effect on patients’ psychological well-being. In addition, avoidance- and emotion-oriented coping strategies are good predictors of diabetic patients’ psychological well-being. Keywords: Social support, coping strategies, psychological well-being, type 2 diabetes

Abstract Id: YUGP5986
The Effect Of Benson Muscle Relaxation And Inhalation Of Lavender Essential Oil On The Level Of Fatigue In Patients Undergoing Hemodialysis
Presenter- Ms. Fatemeh Kiani
Co-author - Saleh-al-din Boya, Mohammad Ali Hassanzadeh, Anahita Sarabandi

Background: The complications of hemodialysis may have devastating effects on the quality of life in patients undergoing hemodialysis. Fatigue is one of the most common complications affecting these patients. The current study aimed to evaluate the effect of Benson muscle relaxation and inhalation of lavender essential oil on the level
of fatigue in patients undergoing hemodialysis. Patients and Materials: The current clinical trial was conducted on 105 eligible patients undergoing hemodialysis in Imam Ali and Khatam-ul-ansia hospitals of Zahedan in 2015. The subjects were recruited through random sampling method and categorized into three groups as: relaxation (35 subjects), aromatherapy (35 subjects) and control (35 subjects). Data collection tools were demographic questionnaire and the brief fatigue inventory (BFI), completed before and after the intervention. In the relaxation group, Benson muscle relaxation techniques were employed; in the aromatherapy group, the inhalation of two drops of 5% lavender essential oil added on a cotton ball pinned to patients’ collar for 5-20 minutes twice daily was performed for four weeks. Collected data were analyzed using SPSS ver. 16; since data were normal, Chi-square test and paired T-test were used to analyze data. Results: Results of the current study indicated significant differences in the mean of changes in fatigue scores before and after the intervention between the relaxation and aromatherapy groups (p=0.001), but the difference was insignificant in the control group. On the other hand, the mean of changes in the fatigue score in the aromatherapy group was significantly higher compared to those of the other two groups. Conclusion: Aromatherapy with lavender essential oil can significantly decrease the level of fatigue in the patients undergoing hemodialysis compared to Benson relaxation techniques. Key words: Muscle Relaxation, Lavender, Fatigue, Hemodialysis

Abstract Id: YUGP6002
Patterns Of Systemic Relapse In Curatively Treated Soft Tissue Sarcoma: Long Term Results From A Tertiary Care Centre
Presenter- Dr. Babul Bansal
Co-author - Babul Bansal, SVS Deo, NK Shukla

Introduction: Soft tissue sarcomas (STS) constitute a rare and challenging group of solid tumors. Multidisciplinary care has improved the limb salvage rates and local tumor control. However, despite the curative treatment, a significant number of patients develop systemic disease. We present our experience of systemic relapse patterns in STS. Materials and Methods: A retrospective analysis of prospective database of STS patients treated between 1995 and 2009 was performed. Patients undergoing curative resection and appropriate adjuvant therapy (Radiotherapy for > 5 cm, high grade and recurrent sarcomas and chemotherapy for high grade sarcomas) were analyzed for incidence of systemic relapse, site distribution and risk factors for systemic relapse including primary site, histopathology subtype, grade and stage. Results: A total of 435 patients with STS were analyzed and 375 patients having a curative resection were included for analysis. Seventy six out of 375 (20.26%) had distant relapse, of which 7 (9.21%) also had loco regional relapse. Median time to relapse was 11.76 months. Overall 26% (66/254) of extremity sarcoma patients and 8% (10/126) of non-extremity sarcoma patients developed distant metastases. Sixty two out of 76 (81.57%) patients had pulmonary metastasis and 14 (11.29%) had extrapulmonary metastasis (liver-5, bone-3, brain-1, distant nodes-2, orbit-1, peritoneum-2). Amongst 62 patients with pulmonary metastases 55 (88.70%) had isolated pulmonary only, while 7 (11.29%) had additional sites. Majority of patients with systemic relapse had MSKCC stage III (83%) and high grade tumor (97%). Synovial sarcoma was predominant histology seen in 42% (32/76), followed by Malignant Peripheral Nerve Sheath Tumor (12/76) and Malignant Fibrous Histiocytoma (9/76). Only 9 patients with pulmonary metastases could be salvaged with metastectomy and others received palliative treatment only. Conclusion: Systemic relapse is a significant problem in the management of STS. Lung is the most common site and our experience shows that extremity tumor, high grade, stage III and synovial histology increase the risk of systemic relapse. Since the surgical salvage rates of pulmonary salvage of pulmonary metastasis are low, there is a need to explore effective systemic therapy options.

Abstract Id: YUGP6006
Robotic Assisted Low Anterior Resection Versus Laparoscopic Low Anterior Resection- An Institutional Experience
Presenter- Dr. Madhavi Nair
Co-author - Dr. Jagannath Dixit, Dr. Noor mohammad, Dr. Manish

Robotic approaches have become increasingly used for colorectal surgery. Since the Clinical Outcomes of Surgical Therapy Study Group published its results in 2007 on the first multicenter, randomized controlled trial assessing the laparoscopic approach to colon resection for malignancy, many subsequent studies have reported similar findings. The laparoscopic approach was not only as safe and efficacious; it was superior in perioperative outcomes and postoperative patient recovery. Following these results, many institutions began using laparoscopy as the standard approach for treatment of colorectal diseases. In the current era of minimally invasive surgery, however, use of the da Vinci robot (Intuitive Surgical, Sunnyvale, California) has become increasingly popular and an accepted modality in many fields, such as urology and gynecology. Aim : to compare the outcomes of Robotic LAR with Laparoscopic LAR Materials and Methods: 20 cases of Robotic LAR and 20 cases of Lap assisted LAR were studied. The operating time, peri-operative complications, conversion rate, estimated blood loss, no. of days for return of bowel function, circumferential margin involvement, Final Lymph node yield, duration of hospital stay and patient satisfaction etc were compared. Conclusions : R-LAR was shown to be associated with a longer operating time, shorter hospital stay, earlier return of bowel functions, lower conversion rate, lower rate of circumferential margin involvement, and lower overall complication rate compared with L-LAR.

Abstract Id: YUGP6010
Prevalence Of Androgen Receptors In Breast Cancer: An Institutional Experience
Presenter- Dr. Madhavi Nair
Co-author - Dr. Kirthika Murugun, Dr. Mahesh KB, Dr. Vijay Agarwal

The androgen receptor (AR) is a proven clinical target in prostate cancer. Recent research indicates that it is an emerging hormonal target in breast cancer as well, with potential clinical benefit in both estrogen receptor(ER) positive and negative tumors. Compared to the ER, AR contains unique functional domains with relevance to its altered role in human breast cancer. The majority of ER-positive tumors express AR, and a significant percentage of ER-negative tumors might benefit from combined targeting of AR and the ErbB2/HER2 oncogene. Signaling downstream of AR might also affect many clinically important pathways which are also emerging clinical targets in breast cancer. AR expression might also play a role during tumor progression to metastatic disease. Aim: To study the Androgen Receptor Status in Patients undergoing Surgery for Breast Cancer. Materials and Methods: 50 patients undergoing surgery ( upfront or post neo-adjuvant chemotherapy) were included in the study. Conclusions: Earlier AR status was sought more in ER negative tumors. After reviewing the data, the vast majority of the ER + breast Cancers showed AR positivity. The therapeutic implications of this are immense and require further and larger studies.

Abstract Id: YUGP6016
A Rare Finding In An Area Less Searched
Presenter- Dr. Anjana Vasudevan
Co-author - Dr. Ponniah Iyyappan, Dr. C. Kalyappa,

Anorectal melanoma is rare and aggressive malignancy. Patients commonly present with advanced, even metastatic disease. Risk factors for anal melanoma have not yet been identified. Surgical excision is the treatment of choice. Due to its aggressiveness, early
Abstracts

Abstract Id: YUGP6018
Randomized Controlled Trial Of Yoga Among Non Small Cell Lung Cancer Patients: Effects On Pulmonary Function
Presenter- Dr. Indranil Khan

Background: Since time immemorial, yoga is being practised in India as a complete wellness schedule integrating the body and mind. The importance of yoga is being highlighted in recent times through World Yoga Day celebrated on June 21 across the world. While there are claims that yoga can help patients cope with cancer, there is little scientific research material to establish this. Herein it became imperative to study the effects of yoga on different types of cancer. As a first of its kind, through this randomized controlled trial, the effects of yoga on pulmonary function is being studied in non small cell lung cancer patients receiving radiotherapy. Aim: This study demonstrates the impact of yoga, including physical postures, breathing and meditation exercises on pulmonary function among non small cell lung cancer patients receiving radiotherapy. Patients and Methods: From March 1, 2015 to June 20, 2015, 60 patients attending Radiotherapy department of a tertiary cancer centre in India with locally advanced non small cell lung cancer (Stage IIIA and IIIB) were randomly assigned (1:1 ratio) to a test group receiving concomitant yoga schedule along with radiotherapy and a control group receiving only radiotherapy. Pulmonary function testing was done 2 weeks before commencement and 6 months after completion of radiotherapy in both the groups; predictors of adherence were also assessed. Results: Regression analyses pointed out that the intervention group experienced more improvement in FEV1 (p=0.03) compared to the control group. Conclusion: The above data suggests yoga as a beneficial adjunct tool to improve pulmonary function in non small cell lung cancer patients receiving radiotherapy.

Abstract Id: YUGP6020
Anti-Cancer Potential Of Marine Algae Collected From The Coastal Region Of Rameshwaram
Presenter- Ms. Shabana Parveen
Co-author - Shabana Parveen, Dr.K.N.Varalakshimi

Anti-cancer potential of Marine Algae collected from the coastal region of Rameshwaram Shabana Parveen* and Varalakshimi KN Address: *Department of Biotechnology, Centre for Post-Graduate Studies, Jain University, Jayanagar, Bangalore- 560 011, India E-mail: shabananparveen2784@gmail.com kn.varalakshimi@jainuniversity.ac.in Natural resources have been used as medicine for the treatment of many diseases. Algae have been used as both food and traditional medicine in many countries. Algae consist of several novel biologically active metabolites having biological activities such as anti-viral, anti-tumor and anti-inflammatory activities. The aim of present study is to evaluate the anti-cancer properties of different unique marine macro algae against three different cancer cell lines such as Hela, MCF-7 and HepG2 cell lines. Seven different species of marine algae named as MA1, MA2, MA3, MA4, MA5, MA6 and MA7 were collected from the coastal region surrounding Rameswaram in Tamilnadu. Different concentrations of the methanolic extracts of these algae were initially tested cancer cell lines. The extract from this algal isolate exhibited great promise as potential candidate for purification and characterization studies.

Abstract Id: YUGP6024
Title: Comparison Of Dysphagia And Quality Of Life In Dysphagia-Optimised Intensity Modulated Radiotherapy (Do-Imrt) And Standard Intensity-Modulated Radiotherapy (S-Imrt) In Head And Neck Cancer.
Presenter- Dr. JITENDRA PATRA
Co-author - Dr.Sanjukta Padhi, Dr.Tanushree Mishra, Dr.Lincoln Pujari

BACKGROUND- Long term dysphagia following chemoradiation for head and neck cancers, have a great impact on patient's quality of life and limiting the dose to the critical swallowing structures may result in less dysphagia and better quality of life. Aim of this study is to determine whether radiation dose to dysphagia aspiration related structures (DARS) has an impact on swallowing, using DARS optimized IMRT (Do-IMRT) and Standard IMRT (S-IMRT) in head and neck cancer patients treated with radical chemoradiation.

MATERIALS AND METHODS- This is a prospective study of 30 patients age between 18-65 years receiving chemo-radiotherapy for pharyngeal cancers of stage T1-4 , N0-3 , M0 from May 2016 to April 2017 at our institute. Patients were randomized to either S-IMRT or Do-IMRT arm. 66 Gy/30f were prescribed to primary and nodal tumor along with 54Gy in 30 fractions to areas at risk of microscopic disease in both the arms and a dose constraint of 50Gy(Dmean) was given to the pharyngeal constrictors in Do-IMRT arm. Pharyngeal constrictor muscles are contoured as per the guidelines defined by Christianen et al. Dysphagia and quality of life were compared using the difference in the mean MD Anderson Dysphagia Inventory (MDADI) composite score at pre-treatment, one month, three month and six month post radiotherapy in both the arms. Dose volume histogram of pharyngeal constrictor muscles of all the patients were noted down for comparison. RESULTS – The mean MDADI score in S-IMRT and Do-IMRT arms prior to treatment were found to be 60.6 and 58.3 which were comparable. At one month and three month of completion of radiotherapy the values were found to be 52.4 , 69.1 in S-IMRT arm and 58.6 , 78.9 in Do-IMRT arm respectively. Six months post treatment evaluation results are awaited. The mean dose to pharyngeal constrictors were 47.3Gy and 59.4Gy in Do-IMRT and S-IMRT arms respectively. CONCLUSION – Long term dysphagia and associated quality of life can be improved by prescribing a dose constraint of 50Gy to the DARS in IMRT technique without changing the total dose and schedule of radiotherapy in head and neck cancer patients and further studies in this regard are necessary to support our findings.

Abstract Id: YUGP6028
Volumetric Modulated Arc Therapy In Preoperative Chemoradiation In Carcinoma Esophagus: A Single Institution Experience
Presenter- Dr. Abhilash Menon
Co-author - Dr Shyama Prem, ,

OBJECTIVES : To evaluate the dosimetric parameters of Volumetric Modulated Arc Therapy(VMAT) in patients undergoing neoadjuvant chemoradiation in carcinoma lower thoracic esophagus.

MATERIALS AND METHODS: We analysed the dosimetric parameters of 20 patients with carcinoma esophagus who underwent neoadjuvant chemoradiation in our institute between 2014 and 2016. Radiation was delivered by Volumetric Modulated Arc Radiotherapy using 6 MV photons with a dose rate of 600 Monitor Units . VMAT was delivered in dual arcs. Each arc was set with 98 control points. Progressive Resolution Optimizer (PROM-3) algorithm was used to produce VMAT plans. The radiation dose was 41.4 Gy in 23 fractions with...
concurrent chemotherapy using weekly Paclitaxel (50 mg/m²) and Carboplatin (AUC-2). Most of the patients underwent transthoracic oesophagectomy. 3 field lymphadenectomy and gastric pull up surgery 4 weeks after chemoradiation. Dosimetric parameters with respect to target volume coverage and organ at risk were analysed. RESULTS: Dosimetric analysis of the plans showed excellent target volume coverage and sparing of critical organ. The mean V95 of PTV was 97.46% with a standard deviation of 2.71. The median V95 was 98.38% with a standard deviation of 2.71. The mean conformity index was 1.06. The mean Dmean of right and left lung were 1244.9 cGy and 1345.6cGy respectively. V30 of right and left lung were 6.57% and 10.57% respectively. V20 of right and left lung were 17.14% and 23.85% respectively. V10 of right and left lung were 53.42 and 58.05% respectively. V5 of right and left lung were 77.1% and 93% respectively. The mean Dmean of heart was 2286.7cGy. V5, V10, V25, V30 and V40 of heart was 93%, 86%, 39.45%, 28.87% and 15.11% respectively. The mean Dmean of left and right kidneys were 747.2 cGy and 1016.7 cGy respectively. CONCLUSIONS: Volumetric Modulated Arc Therapy provided excellent target volume coverage with adequate sparing of critical organ.

Abstract Id: YUGP6032
Association Between Bone Marrow Dosimetric Parameters And Acute Hematologic Toxicity In Carcinoma Cervix Patients Undergoing Concurrent Chemoradiotherapy By Three-Dimensional Conformal Radiotherapy And Intensity-Modulated Radiation Therapy
Presenter - Dr. SIBA SANKAR MAHAPATRA
Co-author - Dr Niharika panda, Dr Lincon Pujari, Dr Tanushree Mishra

INTRODUCTION More than 50% of active bone marrow is located in the pelvic region which receives varying degree of exposure during pelvic radiotherapy for cervical cancer resulting in acute haematological toxicity. Acute hematologic toxicity results in delayed treatment in carcinoma cervix patients undergoing concurrent chemoradiotherapy, which adversely impacts the prognosis. AIMs AND OBJECTIVES: To compare different doses of radiation received by bone marrow in concurrent chemoradiotherapy for cervical cancer by 3DCRT and IMRT techniques and to analyse the incidence of hematological toxicity in both the patient cohorts. MATERIALS AND METHODS: A prospective observational Study was done by taking 10 patients of carcinoma cervix in each arm 3DCRT and IMRT with weekly concurrent cisplatin (40 mg/m²) in our institute. All pelvic bones were contoured as a surrogate of bone marrow on planning CT image. V10, V20, V30, V40, and V50 of Bone marrow respectively were calculated in Monaco® 5.11 for IMRT and ONCENTRA 4.2 for 3DCRT. Haematological toxicity according to RTOG toxicity criteria were analyzed on weekly basis during concurrent chemoradiation and the data was analyzed on spss version 22. RESULT: V10, V20, V30, V40, and V50 in the IMRT arm were 94.5±4.0%, 85.4±9.5%, 57.0±14.2%, 32.5±18.8% and 6.09±4.8% respectively and in the 3DCRT arm 98.6±1.76%, 91.6±8.79%, 93.8±9.23%, 53.5±9.5%, and 10.8±6.93%. In IMRT arm grade 1 anemia was in 20% (2/10), whereas as in 3DCRT arm Grade 1 anemia occurred in 40% (4/10) patients. In IMRT arm grade 1 Leukopenia was seen in 10% (1/10) of patients where as in 3DCRT arm no leukopenia. No thrombocytopenia was observed in any of the patients in both the arms. CONCLUSION: As compared to 3DCRT, in IMRT less volume of bone marrow was irradiated in V10, V20, V30, V40 and V50. The incidence of hematological toxicity was less in IMRT arm. Further prospective studies with larger sample size is required to validate the results of this study. KEY WORDS: Hematologic toxicity, Cervical cancer, Concurrent chemoradiotherapy, 3DCRT, IMRT, Bone marrow irradiation.

Abstract Id: YUGP6044
Primary Small Cell Carcinoma Of The Vagina – A Case Report
Presenter - Dr. Sri Harsha Kombathula

Small cell carcinoma (SCC) of the vagina is a rare and aggressive tumor. It amounts to only 1-2% per hundred cases of gynecologic malignancies. Particularly, primary SCC of the vagina is very rare and has only 31 cases of its sort reported in English literature till now. The median survival is 11 months. 85% of the SCC vagina cases die within 12 months of diagnosis. Here we report the case of a 65 year old female diagnosed with FIGO stage III primary neuroendocrine carcinoma of vagina who was treated with the SMCC-2 regimen. SMCC-2 regimen is a protocol used originally to treat small cell carcinoma of the cervix and requires chemotherapy followed by concurrent chemoradiotherapy to be instituted which has to be consolidated again with chemotherapy. The disease exhibited a complete response to the treatment and is surviving 1 year and 10 months after the initial presentation.

Abstract Id: YUGP6050
About Lung Cancer
Presenter - Dr NAFEES AHMAD SIDDIQUI

LUNG CANCER Lung Cancer is a medical condition in which there is uncontrolled cell growth in lung tissue. These abnormal cellnits continue dividing and form lumps or mass of tissue called tumors. Lung Cancer in which cancer cells migrate to other parts of the body through the blood or lymph system, when a tumor successfully spreads to other parts of the body is called metastasis. Lung cancer is one of the commonest cause of death in the world. Majority of cases of lung cancer are caused by smoking or exposure to smoke causes damages in the lining of lungs. Causes and Risk factors of Lung Cancer • Smoking • Tuberculosis • Pollution (air pollution ) • Passive Smoking • Lung Disease like chronic obstructive pulmonary disease • Asbestos • Exposure to arsenic • Nickel • Hydrocarbons • History of lung cancer Symptoms of Lung Cancer • Persistent Haemoptysis or coughing with blood • Pain in the chest, shoulder and may on back especially while laughing • Weight loss • Dyspnoea or difficulty in breathing • Frequent attacks of Pneumonia or Bronchitis • Hoarseness of the voice • Dysphagia or difficult swallowing • Fever • Fatigue • Pain in joints and bones • Swelling of face • Loss of appetite • Generalized weakness • Pleural effusion • Smoker’s cough • Anemia Diagnosis of Lung Cancer Diagnosis mainly include • History of smoking, occupational history, lifestyle, medication • X-Ray chest • CT scan chest • Bronchoscopy • Mediastinoscopy • Lung biopsy • Thoracentesis • Bone scan • Thoracotomy Planning of treatment A frequent factors are looked at that help decide the most tailor made approach to your treatment. These include Doctors use a wide range of diagnostic procedures and tests to diagnose lung cancer. These include the following: The type of lung cancer Whether the cancer is within the lung General health of the patient Whether the cancer has spread (the stage) Results of blood tests and scans Surgery, radiotherapy and chemotherapy are all used to treat lung cancer. They can each be used alone or together. By: Dr.N.A.SIDDIQUI MD(Medicine) LUCKNOW(UP) 9838844551

Abstract Id: YUGP6052
Comparative Response Evaluation Between External Beam Radiotherapy And Intercurrent High-Dose-Rate Intracavitary Brachytherapy With Conventional External Beam Radiotherapy Followed By High-Dose-Rate Intracavitary Brachytherapy In Carcinoma Cervix
Presenter - Dr. Anees Malavat
Co-author - Dr Prashanth Bhat Kainthaje, Dr Vivek Sehra, Dr Salil Raja

Purpose: To compare response evaluation between two groups of patients one treated with External Beam Radiotherapy and intercurrent High-
Abstract Id: YUGP6062
Impact Of Swallowing Exercise On Dysphagia In Head And Neck Carcinoma Patients Receiving Radiation Therapy
Presenter- * Dr. SONDZA SONDZA
Co-author- Dr. Nihanka Panda, Dr. Lincoln Pujari, Dr Tanushree Mishra

INTRODUCTION Head and neck cancer is third most common malignancy seen in both the sexes across the globe but is the commonest malignancy encountered in Indian males. Progress in head and neck cancer therapies has improved tumor response, loco-regional control, and survival. However, treatment intensification also increases early and late toxicities. Dysphagia causes malnutrition, dehydration, aspiration, and pneumonia. Impairment in swallowing develops as early as 2 weeks within the start of radiation treatment in head and neck carcinoma patients. AIM & OBJECTIVES The objective of the study is to compare the impact of swallowing exercise on dysphagia in head and neck carcinoma patients receiving radiation therapy. Secondary objective is to implement this benefit over dysphagia in routine clinical practice to reduce subsequent morbidity. MATERIALS & METHODS This is a prospective study of 40 patients with carcinoma palate, tongue, nasopharynx, oropharynx, hypopharynx & larynx of stage T1-4, N0-3,M0 during the year 2017, who were planned for radiotherapy in our institute. 60-70 Gy was prescribed to the primary tumor and 54 Gy for microscopic disease in 30-33 fractions for all patients. Patients were randomized into treatment with exercise (TWE) arm and treatment without exercise (TE) arm in 1:1 ratio. TWE arm were counseled and taught a battery of exercises following MD Anderson Cancer Center Swallowing Exercise Protocol. All patients were assessed weekly throughout the treatment course and evaluated for dysphagia on the basis of MD Anderson Dysphagia Inventory Score (MDADI). RESULTS The mean MDADI score in TWE arm was 68.6 and TE arm was 65.3 which were comparable. After 2 weeks of radiotherapy, TWE arm showed score of 60.6 and TE arm showed score of 60.3. After completion of radiotherapy, TWE arm had score of 50.3 and TE arm had 40.3(p=0.03). Six weeks post treatment score in TWE arm was 70.4 and TE arm 68.6, which was comparable. Three months post treatment scores in TWE arm was 80.6 and TE arm 80.8 and six months post treatment scores are 88.5 and 86.5 in TWE and TE arm respectively. CONCLUSION Early onset dysphagia can be prevented by practicing pharyngeal exercises which in turn averts treatment interruptions and enhances quality of life in head and neck cancer patients receiving radiotherapy.
behave as Adenocarcinoma of Rectum. The treatment of choice is Surgical Excision and they are usually approached via posterior Krakes approach. In case of Malignancy in Congenital Hind Gut Cysts invading the rectum or sphincter mechanism a combined Abdominoperineal approach is required. In unusual circumstances these procedures are combined with excision of sacral bone. In locally advanced Adenocarcinoma arising in congenital hind gut cysts Neoadjuvant chemo radiation is the key prior to surgical excision to achieve negative margins.

Abstract Id: YUGP6070
Chest Wall Resections & Reconstruction
Presenter- Dr. Tanveer Majeed
Co-author - Dr. Shravan Shetty, Dr Shilpa Deshmukh, Dr. Dhairyasheel Sawant

Chest wall resections are complicated procedures performed for various indications ranging from benign to malignant masses arising from not only from components of chest wall [Bone, cartilage, soft tissue] but as a result of direct invasion from breast, lung cancers and mesothelioma. Rarely chest wall resection is performed for paucity of deep margins as in carcinoma breast invading the pectoralis major muscle and intercostal muscle. Chest wall resections leads to alterations of mechanics of breathings by causing not only flap segments but also mediastinal flutter in cases which are not properly constructed causing life threatening circumstances. The key to undertaking such a major procedure is ability to reconstruct the chest wall. These patients occasionally require mechanical ventilation and vigorous tracheobronchial toileting for preventing complications. Chest wall resections defects limited to three ribs and less than 5 cm in diameter are usually reconstructed with prolene mesh, however defects larger than 5 cm are reconstructed using rigid chest wall fixation, unusually large defects may in addition require large muscle to cover the defect. We performed chest wall resection followed by reconstruction using for our patients of Carcinoma breast invading the pectoralis major muscle and intercostal space.

Abstract Id: YUGP6072
Epidemiological Profile And Response Evaluation To Radiotherapy In Patients With Bone Metastasis A Tertiary Institutional Study
Presenter- Dr. BIKASH RANJAN MAHAPATRA
Co-author - Dr Sanjukta Padhi, Dr Lincoln Pujari, Dr Tanushree Mishra

ABSTRACT INTRODUCTION: Bone is one of the most common site of metastasis in advanced cancer and mainly seen in patients with prostate, breast and lung primary. Bone metastasis is a major concern to both patients and oncologist. Site of metastasis also vary according to primary disease. AIM OF STUDY: To study Epidemiological profile of bone metastasis, fractionation schedules and evaluation of response. MATERIAL AND METHOD: Patients with bone metastasis presented to Dept of Radiotherapy , AHRCC during the period of June 2016 – June 2017 were analysed. subjective pain assessment was done by visual analogue scale before and after completion of palliative radiation to bone. RESULTS: Out of 269 patients analysed majority were 4th-6th decades of life. Cancer prostate followed by lung cancer most common in males. Breast and Gynaecological cancer are most common in females. For bone metastasis Spine is most common site followed by pelvis. Out of 269 patients 221 patients were treated by 30Gy in 10 fraction schedule and 48 patients were treated by 20Gy in 5 fraction schedule. CONCLUSION: Secondary bone metastasis mostly seen in prostate and Breast cancer in male and female respectively. Spine is the most common site of bone metastasis. Visual analogue scale shows comparable results in both fractionation schedules. KEY WORDS: Bone metastasis, Visual analogue scale, Radiotherapy

Abstract Id: YUGP6074
Response Evaluation By Adl (Activities Of Daily Living) Scoring In Patients Receiving Radiotherapy To Brain In Gynaecological Malignancies.
Presenter- Dr. Sayabatra Kanungo
Co-author - Dr Sanjukta Padhi, Dr.Linculn Pujari, Dr.Tanushree Mishra

Response evaluation by ADL (Activities of Daily Living) scoring in patients receiving radiotherapy to brain in Gynaecological malignancies. Introduction: Cervical malignancy is the most common malignancy in Indian females. Most common pattern of spread is loco-regional. Distant metastasis occurs to para aortic lymph nodes, lungs, liver, bone and skin. Central nervous system metastasis is one of the rare patterns of distant metastasis. Materials and Methods- All carcinoma cervix cases presented with brain metastasis to our institute during the period from July 2016 to June 2017 were analysed and subjected to palliative RT to brain with 30Gy in 10# schedule. ADL scores were compared before radiation, four weeks and twelve weeks after completion of RT. Results: Total 731 patients taken radiation treatment for carcinoma cervix in our institution over a period of one year. Out of which six patients were having brain metastasis for which they received palliative radiotherapy to brain in Co 60 teletherapy machine. 30Gy in 10 fractions over two weeks was the radiotherapy schedule used. Mean ADL score of all six patients were 1.16, 3.16 and 3.5 prior to RT, four weeks and twelve weeks after completion of RT respectively. Conclusion: Metastatic diseases to the central nervous system from carcinoma cervix is extremely rare, in our study the incidence is around 0.8% and there is improvement in mean ADL score and associated quality of life after palliative RT to brain with 30Gy in 10 fraction schedule.

Abstract Id: YUGP6076
Anomalous Left Superior Vena Cava - Rare Entity
Presenter- Dr. Shilpa Deshmukh
Co-author - Dr. Tanveer Abdul Majeed, Dr. Sanjay Upadhye, Dr. R.K Deshpande

Central venous catheterization is a commonly performed procedure routinely used during major surgical procedures, however is associated with occasional vascular complications which are very well documented. The principles underlying central venous cannulation is fixed anatomical landmarks along with use judicious use intra operative ultrasound to increase accuracy and decrease complications. Anatomical variations is not very uncommon in the venous system and can be a nightmare in certain circumstances. It is important to recognize these venous anomalies prior to venous cannulation in order to safely perform the procedure. As a matter of practice we perform central venous cannulation on the side of lesion subjected to thoracotomy or thoracoscoppy in order to decrease the incidence of iatrogenic complications which can be taken care of during the procedure and insertion of chest tube post procedure at the end of thoracic procedure. In our case we came across a very unusual anomaly of left sided internal jugular vein which was recognized post operatively although its existence was seen in preoperative C. T. Scan. This anomalous SVC was coursing over the left heart border and draining in to the right atrium traversing inferior to the left ventricle in to the right atrium, moreover this was not associated with dextrocardia and situs inversus. It is important to identify such anomalies as anomalous Superior vena cava is not a very common entity.

Abstract Id: YUGP6080
A Comparative Study Of Weekly Cetuximab V/S Cisplatin With Concurrent Radiotherapy In Locally Advanced Head And Neck Carcinoma
Presenter- Dr. Kampra Gupta
Co-author - Kampra Gupta, Sandeep Jain, Kartick Rastogi
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A COMPARATIVE STUDY OF WEEKLY CETUXIMAB V/S CISPLATIN WITH CONCURRENT RADIOThERAPY IN LOCALLY ADVANCED HEAD AND NECK CARCINOMA Kampa Gupta1, Sandeep Jain1, Kartick Rastogi1, R K Spartacus1 SMS Medical College & Attached Group of Hospitals, Jaipur. PURPOSE- Direct randomized trials comparing radiotherapy (RT) with concurrent cisplatin (CDDP) versus cetuximab (CTX) as first-line treatment of locally advanced squamous cell carcinoma of head and neck (LAHNSCC) is lacking. In this study, we compared these two treatment regimens in terms of compliance, toxicity and efficacy. MATERIALS AND METHODS- In the present prospective study, 25 patients were evaluated in two arms. In study group, patients recieved cetuximab at a loading dose of 400 mg/m2 given intravenously (IV) 1 week before the start of RT followed by 250 mg/m2 IV weekly for the duration of RT. In control arm, patients recieved cisplatin simultaneously with RT at a dose of 30 mg/m2 IV once per week for the duration of RT. For primary end points, compliance to treatment was defined as number of days of treatment discontinuation. The acute and late toxicities were evaluated as per RTOG acute radiation morbidity scoring criteria and worst grade was reported. Tumour response was evaluated according to RECIST version 1.1. RESULTS- At a median follow-up of 10 months, treatment discontinuation of more than 10 days occurred in 16% of patients receiving cetuximab and 4% patients receiving cisplatin. Statistically significant differences in grade III & IV mucositis were seen more in cisplatin group (p=0.04), whereas for dermatitis were seen more in cetuximab group (p=0.01). Complete response (CR) & Overall response (OR) rates were slightly more in control arm, but not statistically significant. CONCLUSION- Weekly cetuximab is a well tolerated regimen with concurrent radiotherapy with similar toxicity profile & response as that of cisplatin in LAHNSCC.

Abstract Id: YUGP6082

A Rare Case Report On Clinical Features And Management Of Lomustine Over Dosage
Presenter- ‘Dr. Sai Kumar’
Co-author- Saikumar S, Dr Shyama Prem S,
Objective : To report clinical features and management of Lomustine over dosage
Introduction: Lomustine is an alkylating agent widely used in the management of high grade Glioma. It is well known for its marrow toxicity. There are only seven case reports on lomustine over dosage reported in literature. We report a case of lomustine over dosage, its clinical progression and management. Case summary: A 45 year old male patient , a case of anaplastic glioma who was started on adjuvant PCV chemotherapy inadvertently took 1120mg of lomustine over one week. He developed severe bone marrow suppression after one week of over dosage which progressed over next five days with nadir on 3rd week. He slowly recovered over next two weeks without any other systemic complications. Discussion: Lomustine over dosage is an extremely rare event. Severe bone marrow suppression is the most common toxicity which is reversible most of the times. Early G-CSF and antibiotic prophylaxis will ensure prompt recovery. Conclusion: Late marrow recovery is possible even after high dose of Lomustine. Avoiding the supply of more tablets than needed for one dose to the patient will prevent such events.

Abstract Id: YUGP6084

Ki-67 Mutation And Its Impact On Survival Of Patients With Breast Cancer
Presenter- ‘Dr. VANKATESH NAGARAJU’
Co-author - DR.N.NARASHIMHASWAMY, DR.LINGARAJU, DR.KUSUMA

Introduction Breast cancer is the most diagnosed cancer in women. Currently the choice of breast cancer therapy is based on prognostic factors. Ki-67 expression is a biomarker for proliferation , is being used increasingly to determine response to neoadjuvant chemotherapy, predicting the recurrence time. The current study analyses the mutation of Ki-67 and its impact on survival of patients with breast cancer. Methods. This study includes patients with primary breast cancer treated between 2014 and 2017 at tertiary cancer center mandida. Ki-67 index was measured in 50 cases, These patients were evaluated simultaneously for estrogen receptor, progesterone receptor, grade of tumour and nodal status. Ki-67 was divided according to percentage levels: < 20% and > 20%. These patients are Followed up and their survival is assessed. Results The Ki-67 index had a wide distribution of 1-99% in primary breast cancer, and the median was 20% in 50 cases. The Ki-67 expression was associated significantly with histological grade, ER, PR. Tumor stage. Nodal stage, and Ki-67 status were independent prognostic factors for survival. Patients with a higher Ki-67 index had significantly lower disease-free survival (DFS) and overall survival rates. A higher Ki-67 index (720%) significantly correlated with other biological markers, poorer prognosis and early recurrence. Conclusion A higher Ki-67 index (720%) correlated significantly with young age, large tumours, positive lymph nodes, negative ER/P. A higher Ki-67 index correlated with a poorer prognosis and early recurrence (<2 years). On the other hand, a lower Ki-67 correlated with a favourable prognosis and late recurrence (>2 years). Thus, proliferative activity determined by Ki-67 may reflect the aggressive behaviour of breast cancer and predict the time of recurrence and the appropriate therapy. It is therefore important marker which indicates the survival in patients with breast cancer.

Abstract Id: YUGP6088

Inter-Fraction Dosimetric Variation In Point A, Bladder, Rectum During High Dose Rate Brachytherapy Treatment Of The Carcinoma Of Uterine Cervix
Presenter- ‘Dr. Sourik Das’
Co-author - Dr. Annesha Lahiri, Dr. Bikramjit Chakraborty, Prof Dr Santanu Pal

Inter-fraction dosimetric variation in Point A, Bladder, rectum during high dose rate brachytherapy treatment of the carcinoma of uterine cervix Dr. Sourik Das, Dr. Annesha Lahiri, Dr. Bikramjit Chakraborty, Dr. Santanu Pal IIPGMER & SSKM Hospital, Kolkata Purpose - Quantification of inter-fraction percentage dose variations to point A, bladder and rectal points using Fletcher suite applicator Background - In India, every year, 122,844 women are diagnosed with cervical cancer and 67,477 die from the disease. Ranking as the second most common cancer among women aged 15-44 years, it becomes imperative to identify patients at an early stage, and offer the best treatment modality. Beyond FIGO stage IIA, chemoradiation followed by brachytherapy is a potentially curable treatment modality. India has developed by leaps and bounds in every discipline. Yet, huge deficit exists where radiation therapy is concerned, being mostly confined to the big cities. Further, centres offering brachytherapy to the poor are even fewer and far between. Brachytherapy is usually administered in fractionated doses over 2-4 weeks. Planning prior to each fraction takes into account the inter-fraction changes in tumour volume, anatomy, applicator placement geometry etc. Considering the huge burden of the disease, we have attempted to evaluated the validity of the plan done during first fraction when applied to subsequent fractions of brachytherapy. Materials and methods - A total of 225 patients of carcinoma cervix attended the Out Patient Department of Radiotherapy, SSKM hospital from November 2016 to July 2017. Out of these, patients receiving External Beam Radiotherapy followed by 3 fractions of HDR-Intra-cavitary Brachytherapy (Nucletron – Ir192) with Fletcher Suite applicator, to achieve a final EQD2 of 80-90Gy to Point A were analysed and 18 patients were selected. For each patient the applicator, tandem angle, placement of OS guard, ovids and vaginal gauze packing was kept constant throughout fractions. A pelvic CT scan was performed after each insertion, catheter reconstruction, placement of ICRU reference points, dose prescription to Point A and optimization was performed by the same
Abstract Id: YUGP6092

Pituitary Germinoma (A Case Report)

Presenter - Dr. ABANI KANTA NANDA
Co-author - Prof. Dr. Surendra Nath Senapati, Dr. Dipti Rani Samanta, Dr. Lincoln Pujiari

Dr. Abani Kanta Nanda Department of Radiotherapy, AH Regional Cancer Centre, Cuttack INTRODUCTION: The incidence of CNS Germ cell tumour varies significantly according to 0.1 to 3.4% of all primary Brain tumors. Though rare, germinomas are the most common Germ Cell Tumor composing 36-70% of all cases. The rare case of Germinoma of Pituitary due to its rarity. CASE DESCRIPTION: A 17 year Hindu Female presented with menstrual disturbances since 2 years, progressive loss of vision in both eyes and severe headache since 1 year with associated CNS abnormalities. Her CT scan and MRI of brain showed a bilobed lobulated mass in the sellar and supra sellar region compressing the bilateral optic chiasma. Right pteralional craniotomy and partial excision was done on 26/07/17. The biopsy revealed 'GERMINOMA'. After hormonal study, Serum growth hormone level is 0.03 ng/ml (N=0.31-3.61 ng/ml); serum LH level is 0.11 mU/ml (N=0.24-12.61 mU/ml in follicular phase); Serum FSH level is 0.134 mU/ml (N=3.5-12.51 mU/ml in follicular phase) and Serum Prolactin level is 1.75 mg/ml (N=0.3-6 mg/ml). CSF beta hCG level is 62.27 ng/ml (N=2.5-161 ng/ml) and CSF AFP level is 0.65 ng/ml (N=0.05-1.15 ng/ml). DISCUSSION: -Germomas typically present in pineal gland (38% to 57%) or supra sellar region (34% to 49%). CNS Germinomas have a Male to Female ratio 1.8-3.5:1 and diagnosed at a mean age of 11 to 12 year usually before 20 year of age. The present case was a female of 17 yrs presented with Germinoma of Pituitary. Patient is having Hypopituitarism hence suffering from menstrual abnormalities. Germinomas do not secrete AFP but may secrete low levels of beta hCG. Hence, AFP and beta hCG are not a diagnostic tool and biopsy is essential in diagnosis in this case. CONCLUSION: Germinomas of Sellar and Supra sellar region is very rare among primary CNS Tumors. It is even more rare among females. Symptoms in this CNS Tumor are according to position of tumor. CNS Germinomas can be confirmed by biopsy. CSF AFP and beta hCG levels provide only supportive evidence.

Abstract Id: YUGP6094

Assessment Of Inter-Fractional Motion Of Uterus And Cervix In Radical Intensity Modulated Radiotherapy Of Carcinoma Cervix.

Presenter - Dr. JANARTHINA KANI
Co-author - Dr M Janarthinakani, Dr R Deepak, Dr D Saritha

INTRODUCTION: The development of advanced 3-Dimensional radiotherapy techniques has emphasized the importance of accurate target delineation. Intensity Modulated radiotherapy (IMRT) can produce dose distributions that conform precisely to a concave volume, sparing surrounding structures and reducing normal tissue toxicity. However, with the steep dose gradients, there is a potential risk of a geographical miss, if the clinical target volume (CTV) is mobile and can move out of the treatment dose region. For clinical implementation of IMRT for primary cervical cancer, it is essential that the margin around the CTV is sufficient to avoid under dosage of the tumour. OBJECTIVES: To assess the inter-fractional motion of uterus in external beam radiotherapy planning for cancer of cervix. To study, if the coverage of CTV in IMRT is adequate. METHODS AND MATERIAL: A total of thirty-two patients were enrolled into the study and an IMRT plan and 3D-CRT plan was generated for each. All patients were treated as per 3D-CRT plans and weekly cone beam CT (CBCT) was acquired on couch for each patient. A total of 128 CBCT were taken for this study. The CTV and organs at risk (OAR) were contoured and change in position of CTV, mean dose to CTV was measured. RESULTS The average movement of uterine body and fundus in anterior direction recorded was 0.66 cm, posterior shift of 1.61 cm, superiorly 0.20 cm and cervical motion posteriorly 1.06 cm. Right and left lateral positional shift were of average 0.86 cm and 0.99 cm respectively. The mean dose to CTV in IMRT plans initially, first week, second week, third week and fourth week was 100.45% (2SD 0.37), 100.53% (2SD 0.37), 100.55% (2SD 0.35), 100.46% (2SD 0.39) & 100.46% (2SD 0.44) respectively. INTERPRETATION & CONCLUSION: The study revealed that, in-spite of the positional shift in CTV, there was no geographical miss and dose coverage was adequate in IMRT plan as long as adequate margins were given. Regression of tumour counters for the shift in uterus. The proposed margins for CTV to PTV expansion should be at least 1 cm anteriorly, 1.5 cm posteriorly, 0.5 cm superiorly, 0.5 inferiorly, 1 cm laterally on right and left direction.

Abstract Id: YUGP6098

Jejunal Perforation Secondary To Metastatic Head And Neck Cancer-A Rare Entity

Presenter - Dr. Rajeshkar Shantappa
Co-author - Dr G Suryanarayan Raju

Small bowel metastasis secondary to metastatic head and neck cancer is very rare and has dismal prognosis. Owing to the limited number of published studies its characteristic features, clinical presentation and the outcome are poorly described. We report a case of 68 year old male patient presented to emergency department on 28 th July 2015 with history of pain abdomen and vomiting of 2 days duration. The clinical and radiological signs were suggestive of perforation peptonitis. Patient was a known case of ca buccal mucosa post composite resection and reconstruction with free fibula flap operated on 06.03.2017 in our institute. The post op HPE was suggestive of squamous cell carcinoma.
Abstracts

with resected mucosal, soft tissue and bony margins free of the tumour. Patient was taken for emergency surgery and the intraoperative finding were suggestive of 1x1 cm perforation in mid jejunum with indurated edges. Rest of the bowel was normal. A segmental resection with end to end anastomosis was done on 28.07.2017. The post op HPE was suggestive of perforation in jejunal metastatic squamous cell carcinoma with resected margins free. Patient was discharged on day 4 in healthy condition. On further evaluation patient was found to have disseminated disease on whole body PET scan. Patient succumbed to death in few months due to disseminated disease. Small bowel metastasis from head and neck cancer is extremely rare and carries poor prognosis.

Abstract Id: YUGP6100
A Better Perspective Of Nuclear Atypia In Nottingham Prognostic Index: Study On Breast Carcinoma Patient Cohort From Eastern India
Presenter- "Dr. JATIN KUMAR SOREN"
Co-author - PROF. SURENDRA NATH SENAPATI, DR. DIPTI RANI SAMANTA, DR. LINCOLN PUJHARI

A Better Perspective of Nuclear Atypia in Nottingham Prognostic Index: Study on Breast Carcinoma Patient Cohort from Eastern India

ABSTRACT Aims: Correlation to Nottingham prognostic index with specific attempt for histologic grade/ nuclear atypia. Materials and Methods: The retrospective analysis of the histopathological data of 1372 breast carcinoma patients was conducted at Acharya Harihar Regional Cancer Research Centre and Hospital, Cuttack, Odisha within a period of 6 years starting from 2008 to 2013. Statistical Methods: SPSS version 22. Results: The correlation of NPI and histologic grade bears statistical significance and especially nuclear atypia and mitotic activity are two of those parameters with higher significance of correlation with NPI. Conclusion: Nuclear atypia as seen from multivariate analysis and correlation study can be a better prognostic marker for a range of values with most the confidence interval being up to 3.71. Keywords: Nuclear atypia; histological grade; Nottingham prognostic index; breast cancer; tumor size; nodal involvement.

Abstract Id: YUGP6104
Ptv Margin For Radically Treated Carcinoma Cervix Immobilized Using 4-Clamp Pelvic Thermoplastic Molds In Patients Undergoing Conformal Radiotherapy
Presenter- "Dr. Aswin Joy"
Co-author - Dr. Shyama Prem, Dr. Parthasarathy V,

Background- PTV margins vary based on immobilization practices in each institute. Adopting standard PTV margins for all patients is not rational while using conformal techniques. Application of IGRT for verification of patient positioning on treatment couch allows minimization of geometrical errors as a result of inter-fraction and intra-fraction variation. Thermoplastic molds are routinely used in radiation oncology departments for immobilization and to reduce set up error. Objective- We decided to find out the setup error in our institute when 4-clamp pelvic thermoplastic mold is used for immobilization. PTV margins will be derived after obtaining the set-up errors. Methodology- 30 radical cases of cervical cancer treated with conformal radiation techniques and immobilized with 4-clamp thermoplastic molds were selected for analysis. Contrast enhanced CT is used during simulation and conformal plans (3D-CRT, VMAT, IMRT) are created based on these images. Paired kV radiographs or Cone beam CT are used for bone and soft tissue matching for setup verification before treatment sessions. Pre-treatment images are co-registered with planning images for calculating displacements in 3 dimensions. Values obtained from offline review were considered as errors and represent deviation between planned and executed treatment. Statistical Analysis- All the errors were recorded separately for vertical, longitudinal and horizontal dimensions. Mean errors and its standard deviation were calculated for each patient. Population mean error was calculated using the individual mean errors of the 30 patients in each dimension and its standard deviation (SD) taken as systematic error (?). Mean of individual standard deviations is taken as random error (?). PTV Margins were calculated with Van-Herks formula method as 2.5 ? + 0.7 ? Results- Systematic error (?) was calculated to be 2.1 mm, 3.1 mm and 2.2 mm in vertical, longitudinal and horizontal directions. Random error (?) was 3.2 mm, 4 mm, 3.3 mm respectively. PTV margins calculated were 7.5 mm vertically, 1.1 cm longitudinally and 7.8 mm horizontally. Conclusions- 4 clamp pelvic thermoplastic molds produce acceptable immobilization. PTV margins derived are slightly higher than routine recommendations. Larger longitudinal margins need to be taken to account for setup variations. PTV margins for each site need to be derived in every institute based on individual treatment protocols and should not falsely rely on recommendations from other treatment centres.

Abstract Id: YUGP6106
Metastatic Prostate Cancer To The Temporal Bone: A Case Report
Presenter- "Dr. JANARTHINA KANI"
Co-author - Dr R Deepak, Dr Saritha D,

Primary tumor of the prostate is well known to metastasize; secondary lesions usually appear at infraclavicular sites, but only rarely in the supravacular organs. The osseous metastatic character of prostatic carcinoma is well known, the most common osseous metastatic sites of this disease are the spine, sacrum, and pelvis. As with other osseous sites, the skull is a common site of metastases from systemic cancers. Skull base metastases from distant tumors occur in 4% of cancer patients. These metastases are most commonly secondary to breast, lung, and prostate cancers. Prostate cancer is the most common cause of skull base metastases in men. Still, metastatic prostate cancer of the temporal bone is a rare finding. This disease may be asymptomatic and discovered incidentally; however, hearing loss, otalgia, cranial nerve palsies, and visual changes can all be presenting symptoms. Although axial bone and cranial metastases are common in patients with prostatic carcinoma, temporal bone involvement is rare. We report a case of prostatic adenocarcinoma with temporal bone metastasis. This case demonstrates that a high index of suspicion for unusual etiologies of seemingly benign symptoms must be maintained in elderly patients having prior history of cancer and substantiates the value of temporal bone imaging when diagnosis may be unclear from history and physical exam. Awareness of the possibility of temporal bone involvement by prostate carcinoma and application of immunohistochemical studies will help to arrive at the correct diagnosis.

Abstract Id: YUGP6108
Histopathological Analysis And Clinical Correlation Of Breast Cancer: A Retrospective Analysis Of 1222 Patients From A Tertiary Care Institute
Presenter- "Dr. SURESH KUMAR ROUT"
Co-author - DR.SURENDRA NATH SENAPATI, DR. DIPTI RANI SAMANTA, DR.NIHARIKA PANDA

Histopathological analysis and clinical correlation of breast cancer: a retrospective analysis of 1222 patients from a tertiary care institute

Aim of the study: To evaluate the clinico-pathological correlation of patients of carcinoma breast with regards to age, tumor size, lymph node ratio, grade, extensive intraductal component, multicentricity, and Nottingham prognostic index. Material and methods: A total of 1222 patients histologically diagnosed with carcinoma of breast were retrospectively analyzed from January 2007 to January 2014 in A.H. Regional cancer centre, cuttack. Statistical analysis: Data were analyzed using SPSS version 21. Results: 87.2% patients were presenting in the age range of 31-60 years with 41-50 years age group being the maximum (37.1%). 75.70% patients were having tumour size between 2-5 cm during presentation. 60.24% patients had
grade-II histological differentiation. 9.49% and 46.08% of patients had EIC and multicentricity positivity on postoperative histopathological examination respectively. Stage III patients were more in younger age group of patients, in comparison to older age group (21-30 years: 54.70%; 31-40 years: 46.34%; 41-50 years: 45.50%; 51-60 years: 40.07%; 61-70 years: 32.53%; and 71-80 years: 17.80%). Lymph node ratio less than 0.20 seen in 59.80% of patients. 6.71%, 41.60%, and 51.60% of patients had Nottingham prognostic index <3.49, 3.5-5.39, and >5.4 respectively. Majority patients presented in stage II and III with stage being maximum 51.10%. Lymph node ratio <0.20 seen in 82.50%, 61.70%, and 43.50% of patients with <2cm, 2-5cm, and >5cm tumour respectively. NPI >5.4 seen in majority of stage III patients constituting 79.08%. Conclusion: There is an age shift towards younger age group. Majority of the young patients are presenting in advanced stage with biologically aggressive tumor histology. The size of primary tumor is strongly correlating with lymph node ratio. Advanced stage carcinomas of breast are positively correlated with poor NPI. Keywords: Breast, carcinoma, clinical, correlation, histopathology, and prognosis.

Abstract Id: YUGP6112
Analysis Of Expression Of Her-2/neu Receptor In Gall Bladder Cancer
Presenter - Dr. Hozefa Lokhandwala
Co-author - Dr. LOUREMBAM SUNIL SINGH, DR. HARI CHATURVEDI, DR. URMU MUKHERJEE

INTRODUCTION Her-2/neu receptor over-expression is being explored in gallbladder cancer as one of the factors involved in carcinogenesis and possible target for targeted therapy. So, our study is proposed with the aim to evaluate the over-expression of Her-2/neu in gall bladder cancer and to see their relation with the clinicopathologic parameters such as age, gender of the patient, stage and grades of the tumour. This may in turn give an insight into the utilization of Her-2/neu expression with the prognostication and treatment of gall bladder cancer. MATERIALS AND METHODS We analysed 70 patients over a period of 2 years. The primary end point was to find out the percentage of Gall Bladder Cancers over-expressing Her-2/neu receptor. The secondary end points of the study was to find out the effect, if any, of age, gender of the patient, stage and grades of the tumour on Her-2/neu over-expression in Gall bladder cancer. We used the ASCO/CAP scoring criteria established for breast cancer in reporting the IHC results. RESULTS A score of 3+ was taken as positive. We found the incidence of Her-2/neu positivity to be 12.86% (9 out of 70 cases). The incidence of Her-2/neu positivity in those younger than 60 year was 6.5% (2 out of 31) as compared to 17.9% (7 out of 39) in the group of age 60 year and older, and 14.3% (3 out of 21) of men and 12.2% (6 out of 49) of women showed Her-2/neu positivity. Her-2/neu positivity rates were 0%, 16.7%, 14.3%, 12.8% in Stages I, II, III and IV cases respectively. Corresponding figures in tumour with well differentiated, moderately differentiated, poorly differentiated and undifferentiated histologies were 9.1%, 17.6%, 4.8% and 25%.

Comparison of these results with previously published studies were hampered by absence of a uniform IHC scoring system in gall bladder cancer, and due to differences in studied cohort characteristics. None of the clinicopathologic variable studied show statistically significant correlation with Her-2/neu positivity CONCLUSIONS In our study there was no statistically significant association of Her-2/neu overexpression with age, gender, stage or grades of the disease. Study with larger sample size are needed which would have statistical power to detect any such association if exists. There is a need of establishing a standard Her-2/neu result reporting system to bring the uniformity across the studies reporting on this issue.

Abstract Id: YUGP6114
Finger Metastases
Presenter - Dr. Sugyan Nandan Mohanty
Co-author - PROF.DR.SURENDRRA NATH SENAPATI, DR.DIPTI. RANI.SAMANTA, DR.LINCOLN PUJARI

FINGER METASTASIS - A CASE STUDY Dr.SUGYAN NANDAN MOHANTY,DEPARTMENT OF RADIOTHERAPY,AH REGIONAL CANCER CENTRE,CUTTACK INTRODUCTION Finger metastases is a very rare manifestation with incidence ranging from 0.007% to 0.3%. So I would like to present this case. CASE DESCRIPTION: A 40 years male who had a growth in the buccal mucosa for 9 months with a h/o tobacco chewing and subsequently diagnosed with carcinoma Buccal mucosa .He had received adjuvant radiotherapy to a total dose of 60Gy/30#/6 weekly along with weekly Cisplatin from January 2017 to March 2017. On 3 months of follow up, the patient had developed an abscess in the right middle finger which was very painful. The cytology from the abscess proved that there was metastatic deposit in the finger. An X-ray picture of the finger proved that it was associated with a complete fracture of the right middle phalynx. A subsequent PET-CT scan of the whole body showed the presence of hypermetabolic mildly enhancing lesion in the left Gingivo-buccal sulcus indicative of recurrence ,along with left pleural deposits and right middle finger soft tissue lesion indicative of metastases. DISCUSSION: Finger metastases is a very rare entity with the usual primaries being Lung, Kidneys and Head and Neck with Lung Cancer accounting for 40% of the lesions. The diagnosis is often delayed as the presentation often gets confused with infection. Treatment includes addressing the Primary along with metastectomy of the involved fingers. CONCLUSION: Delay in diagnosis along with its grave prognosis make finger metastases a very unique case. Early diagnosis and appropriate treatment is the only remedy for improving the quality of life in these patients. Therefore, this case report could contribute in early diagnosis.

Abstract Id: YUGP6120
Association Between Serum 25-OH Vitamin D Levels, Mammographic Breast Density & Breast Cancer
Presenter - Dr. Chandra Singh
Co-author - Dr. Shaji Thomas, }

Background. As breast epithelium is affected by vitamin-D; it is possible that vitamin-D might have a direct impact on breast cancer risk and also on breast density. Mammographic density is a useful intermediate biomarker for breast cancer risk assessment. Our aim was to study levels of serum vitamin-D in patients with malignant and benign breast disease, and to study the association, if any, between mammographic breast density and serum vitamin-D levels, and between molecular subtypes of breast cancer and vitamin-D levels. Methods. This cross-sectional observational study included 162 consecutive adult female patients with benign and malignant breast diseases scheduled for mammography. Patients with breast cancer were further evaluated for Estrogen, Progesterone, and Her-2 neu receptor status. Serum levels of 25-hydroxy Vitamin-D were estimated and correlated with mammographic breast density, and with Immunohistochemical subtyping of breast cancer patients. Results. Our study highlights the dissimilarities in clinico-epidemiological and pathological profile of breast cancer in our population when compared to western countries, such as earlier age at presentation, late stage at presentation, higher proportion of Triple negative subtype, and lack of significant association with classical risk factors, like the reproductive profile of patients. Importantly, our study shows that the rampant vitamin-D deficiency prevalent in India (98-100% of the population) has a significant association with breast cancer (vs. benign breast diseases), high mammographic breast density (a surrogate marker for risk of breast cancer), and Triple negative breast cancer (which is associated with poorer prognosis). Conclusion. The results of our study has important public health implications for India and other developing countries and calls for urgent remedial measures like population-wide evaluation of vitamin-D deficiency, mandatory food fortification with vitamin-D, and increasing public health awareness regarding vitamin-D deficiency and its role in the alarming increase in incidence of young-age poor-prognosis Triple-negative breast cancer.
ABSTRACT

Abstract Id: YUGP1000
A study to evaluate the efficacy of pre op in comparison with post op Chemoradiation in Carcinoma rectum
Presenter- Dr. Hemanshi

AIMS OF THE STUDY:
1) To assess the response rates in patients receiving pre op CT + RT.
2) To compare the local control & overall survival in patients receiving pre op and postoperative chemoradiotherapy.

STUDY DESIGN (materials and methods): This is a retrospective review of preoperative or postoperative chemoradiotherapy in Rectal Ca conducted at the department of Radiotherapy, SSSCHR. The case reports of patients treated between August 2012 to Jan 2017 were reviewed for response rate, LR & OS. There were 60 rectal Ca pts who were treated with curative intent with pre op CTRT or post op CTRT. Eligible patients were also treated with adjuvant CT where indicated. The data was collected for tumour stage, nodal disease, Local Recurrence & Overall Survival. Patients of metastatic disease were excluded. The radiotherapy dose ranged from 50.4-60 Gy in both arms. Chemotherapy consisted of either daily tab Capecitabine alone or weekly Injection Oxaliplatin with tab Capecitabine or FOLFOX regimen. The time gap between surgery & CTRT was 4-6 weeks in both the groups.

END POINTS: The pathological complete response (PCR) in patients receiving pre op RT was documented. The locoregional control & overall survival were assessed & compared in both the arms.

RESULTS: A total of 59 patients receiving one of the two treatments were analysed. Out of the 59 patients, 29 had received preoperative chemoradiotherapy and 30 patients had received postoperative chemoradiotherapy. The pathological complete response was seen in 6 out of 29 patients (20%) who had received pre op CTRT. Median follow up was 573 days (19 months). Survival & Local Recurrence data will be presented later.

Abstract Id: YUGP1001
Comparative Efficacy As a Diagnostic Tool Between Clinical Palpation, CT Scan, Ultrasound & Histopathology in prediction of oral cancer metastasis
Presenter- Dr. Himanshu Soni

Introduction: Head and neck cancers form around 50% of all the cancers. In India, it constitutes about 30% of all cancers. It is the sixth most commonly occurring malignant tumors in the world. Squamous cell carcinoma is the most common malignant tumor found in the head and neck region. Lymphatic spread is considered as the most important mechanism of the spread of the head and neck cancers. The rate of metastasis to cervical lymph nodes tells us about the aggressiveness of the primary tumor. In this study we compared the diagnostic accuracy of clinical palpation, USG and CT scan of the cervical lymph nodes with histopathology for evaluation of lymph node metastasis.

Aims and objectives: The aim of the present study was to evaluate the diagnostic accuracy of oral cancer metastasis through clinical examination, ultrasonography (USG) and computed tomography (CT), histopathology and to compare them with each other so that a suitable surgical neck dissection can be carried out.

Methods: Twenty patients with oral squamous cell carcinoma who underwent 20 neck dissections were included. All the patients underwent examination of neck preoperatively by palpation, Computed Tomography with contrast and Ultrasound for node detection. The findings were correlated with the results of histopathologic examination of the neck specimen. Statistical analysis has been performed using the sensitivity, specificity, Positive Predictive Value (PPV) and Negative Predictive Value (NPV). Through our study, we have compared our results and conclusion with previous such studies

Inclusion criteria
1. Age group 21 to 70 years
2. Primary confined to upper aero digestive tract
3. Histopathologically proven malignancy

Exclusion criteria
1. Previously irradiated patients
2. Previously operated
3. Co morbid conditions making them unfit for GA
4. Patients without the written consent

Results: Ten neck dissection specimens showed metastatic lymph node involvement in postoperative histopathology.

Lymph node involvement was identified preoperatively by palpation in 8 necks, CT in 6necks and US in 17 necks.

The palpation showed 80% sensitivity, 30% specificity. CT showed sensitivity of 50%, specificity of 90% and US showed sensitivity of 90%, specificity of 20%.

Conclusion: Imaging plays a major role in the management of oral cancers. A systematic approach to evaluating lymph node is required for head and neck cancer. From this study, it is concluded that we should not rely solely on clinical examination, and other diagnostic modalities should be considered. CT and USG increase the accuracy of lymph node detection. It is also considered that USG is superior in this aspect and is cheaper, with no hazards of radiation exposure. We recommend that the use of preoperative US and CT scanning of the neck by an experienced radiologist is essential and useful for diagnosis, staging and therapy choices which will help to reduce patient morbidity.

Abstract Id: YUGP1002
A case control pilot study of Her2/neu Expression and Organochlorine pesticide levels in cases of carcinoma urinary bladder
Presenter- Dr. Manish Kumar Gaur
Co-author - Dr. Aakanksha Goel, Dr. Prof. Sanjay Gupta, Dr. B.D. Banerjee, Dr. Vinod Kumar Arora, Dr. K. K. Banerjee, Dr. Iqbal Singh

There is no conflict of interest of the presenting author and co authors regarding abstract provided.

Background: The incidence of urinary bladder cancer (UBC) has risen over few decades but the data regarding role of pesticides in UBC is still inconclusive. Organochlorine pesticides (OCPs), potent endocrine disrupters, are found to be associated with cancers of the prostate, breast, etc. Her2/neu protein is also over-expressed in variety of cancers. We studied Her2/neu expression in combination
with OCPs exposure in order to evaluate role of environmental and genetic interactions in cases of UBC.

Main Objectives: The present study was conducted to quantify OCP levels and expression of Her2/neu in the urinary bladder cancerous tissue compared to controls and to correlate their levels with the stage and grade of UBC.

Methods: The study included 20 histopathologically proven patients of UBC (cases) and 20 age and gender matched deceased persons with normal urinary bladder controls (controls). The levels of ten pesticides: Hexachlorohexane (HCH): α-HCH, β-HCH, γ-HCH and total HCH, Dieldrin, Endosulfan: Endosulfan I, Endosulfan II, DDT and its metabolites - p,p'-DDT, p,p'-DDE, and Heptachlor were determined in urinary bladder tissue of all subjects estimated by Gas chromatography equipped with electron capture detector. Estimation of Her2/neu gene expression was done by Real time PCR and Her2/neu protein expression was done by Immunohistochemistry (IHC). The IHC scoring was done as recommended for Her2/neu protein expression in breast cancer.

Results: There were significantly higher levels of OCPs in urinary bladder cancerous tissue compared to controls - B-HCH (5.93ng/ml vs. 3.17ng/ml, p value- 0.013), α-HCH (3.02ng/ml vs. 1.88ng/ml, p value- 0.020), DDT (2.13ng/ml vs. 1.00ng/ml, p value- <0.001) and Heptachlor (4.72ng/ml vs. 2.50ng/ml, p value- <0.001). There was a significant association of levels of Dieldrin (3.72ng/ml vs. 1.99ng/ml, p value- 0.026) and ENDO II (2.39ng/ml vs. 1.12ng/ml, p value- 0.021) in cancerous bladder tissue with high stage of bladder cancer.

Her2/neu gene expression was significantly up-regulated 5.91 times in UBC.

Conclusions and significance: The present study highlights the higher levels of OCPs and upregulation of Her2/neu in urinary bladder cancerous tissue compared to controls. Further studies with larger sample size are warranted to further analyze the role of OCPs in the pathogenesis of urinary bladder cancer and the gene-environment interactions, especially in agrarian countries where these pesticides are commonly used.

Abstract Id: YUGP1003

Assessment Of The Association Between Nicotine Dependency And Stress Level Among Police Personnel In Haldia City, West Bengal- A Cross Sectional Study

Presenter- *Dr. SilpiChatterjee*
Co-author - Dr.Archana Krishna Murthy

AIM: To assess the association between nicotine dependency and stress level among police personnel in Haldia City, West Bengal.

OBJECTIVES:
1. To assess the nicotine dependency among police personnel in Haldia City.
2. To assess the stress level among police personnel in Haldia City.

MATERIALS AND METHODS: The present study was a cross sectional study. The study was conducted over a period of 1 month among 299 police personnel in Haldia City. The nicotine dependency was assessed by using Fagestrom Scale. The stress level was assessed by using Masiach Burnout Inventory Questionnaire. Both the questionnaires were filled by all the police personnel. After the questionnaire were collected statistical analysis was done using SPSS 24 version to find the association between nicotine dependency and stress level.

RESULTS: There was a significant association found between nicotine dependency and increase in stress level among the police personnel.

PUBLIC HEALTH SIGNIFICANCE: Stress has become significant due to dynamic social factors and changing of life style. Stress is man’s adaptive reaction to an outward situation which would lead to physical, mental and behavioral changes.Work the stress is seen in all the profession. Various factors keep policemen under constant workload, which make it common for them to neglect their general health, and at times engage in deleterious habits which affect their general and oral health. Police personnel can act as role models for the civil society and play an important role in tobacco control which requires strong government commitment as well as the participation from the community. This study gives us the clearer picture for determining the type and quantity of preventive services and personnel required to provide them.

Abstract Id: YUGP1004

Bioanalytical Method Development And Validation For Simultaneous Estimation Of Indomethacin And Omeprazole By Using Rp-Hplc In Rabbit Plasma

Presenter- *Dr. Upendra*
Co-author - G. Raveendra Babu, A. Lakshmana Rao, J. Venkateswara Rao

A novel approach was used to develop and validate a bio-analytical RP-HPLC method for the simultaneous estimation of Indomethacin and Omeprazole in rabbit plasma using Rabeprazole as internal standard. Evaluation of the content of drugs were done by employing a mixture of Phosphate buffer (pH 4.6) and Acetonitrile (65:35, v/v) as the mobile phase and measure the absorbance at 260nm for Indomethacin and Omeprazole. Retention time was established to be 2.014min for Rebeprozole, 3.310min for Indomethacin and 5.479min for Omeprazole. The results shown that the analytical technique furnished here establishes acceptable accuracy and precision, shorter and easy sample preparation, reduced the complications for equipment on satisfactory analysis time.

Keywords: Bioanalytical, Indomethacin, Omeprazole, Estimation, Simultaneous, Plasma.

Abstract Id: YUGP1005

T cell rich B cell Lymphoma of the Breast- A Rare Case Report with emphasis on the role of Immunohistochemistry in the diagnosis

Presenter- *Dr. SapkotaSonii*
Co-author - Naik R

Primary breast lymphoma is a rare tumour that commonly presents as a large lump with an incidence of less than 0.5%. It can be confused with poorly differentiated carcinoma on routine FNAC. T-CELL-RICH B-cell lymphoma (BCL) is a recently described histologic variant of BCL characterized by a minor population of clonal B cells distributed in a back- ground of numerically preponderant polyclonal T lymphocytes. While precise histologic criteria have not yet been defined, clonal B cells typically comprise 10% or less of the total cellular constituency.

Case History: A Forty one year old female, previously diagnosed and treated for T cell NHL of left breast two years back presented with a 3X4 cm, rubbery, nottender, mobile mass in the upper outer quadrant of left breast. Bilateral Mammography showed multiple ill defined nodular opacities in left axillary tail. Biopsy of the breast lump and lymph node revealed T-cell rich B-cell lymphoma of breast. Immune-histochemistry definitely proved it to be a case of TCRBCL.
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Conclusion: Non Hodgkins Lymphoma especially T cell rich B cell Lymphoma involving the breast as a primary site or as a secondary site from systemic disease, is a rare malignancy. Diagnosis of this entity is usually difficult, as it may appear similar to other lymphoid diseases, such as nodular lymphocyte-predominant Hodgkin’s lymphoma and classic Hodgkin’s lympho-ma. Accurate diagnosis requires careful immunohistochemical analysis of the tumour cells and the inflammatory microenvironment. Like other Diffuse Large B Cell Lymphomas, TCRBCLs follow an aggressive clinical course, and patients should be treated aggressively. We are reporting this case because it is a rare case and to emphasize on the role of immuno-histochemistry for differentiation, accurate diagnosis and prompt aggressive treatment of TCRBCL.

Key words: T cell rich B cell Lymphoma (TCRBCL) of breast, Immunohistochemistry.

Abstract Id: YUGP1006
Long term follow up of locally advanced Carcinoma cervix: A single Institutional experience
Presenter: "Dr. SarathChandra Reddy
Co-author - Dr. Ramesh Bilimagga, Dr. Velusamy Mani, Dr. Anuradha, Dr. Praveen, Dr. A Anusaha, Dr. Gowshik, Dr. Aarthi, Dr. Pradeep, Dr. Rita, Dr. Anil

Cervical carcinomas are one of the most common malignancies in the world. In India, cervical cancer contributes to 6-29% of all the cancers in women. Most of them present at an advanced stage with a peak age of incidence at 55-59 years.

The standard of care for locally advanced stage is Concurrent chemoradiation followed by brachytherapy.

Aims and Objectives: To determine and compare the radiation dose received by the heart in free breathing and in deep inspiratory breath hold in breast cancer patients receiving adjuvant radiotherapy.

Method and materials: Prospective observational study where 25 left sided breast cancer patients requiring adjuvant radiotherapy, irrespective of the type of surgery underwent simulation in free breathing and in deep inspiratory breath hold techniques. Contouring of the breast/chest wall, nodes and heart were done with RTOG contouring guidelines. VMAT plans were generated for both the scans and the Dmean, V25 and V30 of the heart were dosimetrically analyzed.

Results: Statistically significant benefit was observed with deep inspiratory breath hold technique when compared to free breathing, with p value: <0.0001 in all three groups.

Conclusion: At the present time, women with left sided breast cancers should be offered some form of cardiac dose sparing technique when feasible. DIBH provided greater percent reductions in mean heart dose in this study. DIBH is advisable for all patients receiving RT for left-sided breast cancer patients receiving breast/chest wall RT with or without nodal RT.

Abstract Id: YUGP1008
Inflammation And Squamous Cell Carcinoma; Are They Related?
Presenter: "Dr. Vidhyaj

COX-2 is an inducible prostaglandin synthase that has its pathophysiological role in modulation of inflammation, ovulation and carcinogenesis. The aim of the study was to assess the immunohistochemical expression of COX-2 in normal oral mucosa, oral epithelial dysplasia and oral squamous cell carcinoma; and to compare its expression in varying grades of dysplasia and squamous cell carcinoma.
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Each case was subjected to IHC with anti-COX-2 monoclonal antibody; staining intensity was scored and the data obtained was subjected to appropriate statistical analysis.

Results showed that COX-2 expression increased in dysplasia and squamous cell carcinoma compared to normal oral mucosa with a p value of 0.001; intra and inter group results were also statistically significant.

The study showed that the expression of COX-2 was directly related to increasing grades of dysplasia and inversely related to grades of squamous cell carcinoma, suggesting that COX-2 might be involved in early stages of oral carcinogenesis and thus, is a prognostic biomarker to determine prognosis and progression of oral cancer.

Keywords: COX-2, Oral Epithelial Dysplasia, Oral Squamous Cell Carcinoma, Immunohistochemistry

Abstract Id: YUGP1009

A Prospective Randomised Comparative Study of Two Pre-Operative Chemo-radiotherapy Schedules for Middle and Lower Third Carcinoma Esophagus (Squamous cell)

Presenter: Dr. Manika Verma
Co-author: Dr. S.K Sharma, Dr Kundan S. Chufal, Dr Anjali K. Pahuja, Dr Abhinav Dewan

Introduction: The current standard of care for locally advanced carcinoma thoracic esophagus is pre-operative chemo-radiation using cisplatin. This study was performed to assess and compare the efficacy and response of preoperative chemo-radiation consisting of carboplatin and paclitaxel with the already established standard of care concurrent cisplatin.

Material and Methods: Assessment of 60 esophageal SCC carcinoma patients, randomised to study (paclitaxel/carboplatin and 41.4 Gy/23# radiation) and control arms (cisplatin and 50.4 Gy/28# radiation) followed by evaluation with baseline and post chemo-radiation 18F-FDG PET-CT scan along with weekly clinical and laboratory parameters were done. The endpoints DFS and OS were calculated by the Kaplan–Meier product-limit method. Log-rank test was used to compare OS between the two groups.

Results: Complete metabolic response was seen in 43.3% of patients in control arm and in 37.9% patients in study arm (p=0.673). SUV of primary tumor showed a mean drop of 26.88 % while study arm showed a drop of 24.004%. After completion of surgery, 37% of patients in control arm and in 37.9% patients in study arm showed a pathological complete response (p=0.703). There was a statistically significant correlation between the radiological and pathological response in both the arms (p<0.005). Median follow up was 9.24 months wherein control arm showed better DFS and median O.S compared to study arm (p=0.250).

Conclusion: This study has shown a significant correlation between radiological and pathological response in both the arms. Novel regimen of neo-adjuvant chemo-radiotherapy with paclitaxel/carboplatin has given almost similar results with reasonably fair pathological response rates. Results with regard to Overall survival and Disease Free Survival will require longer follow up.

Abstract Id: YUGP1010

Mechanistic profiling of phytochemical as anti-cancer agent against multiple clinically aggressive cancers

Presenter: Dr. Nabendu Murmu
Co-author: Debapriya Ghosh Mehrotra, Biswanath Majumder, Pradip K. Majumder

Background: Despite our efforts to develop effective treatment paradigms, the overall success rates of most of the anti-cancer therapies for aggressive cancers remain very low. There is an urgent need to develop novel therapeutics to meet the present challenges. In recent years, several plant derived chemicals showed promising return as antineoplastic agents.

Objective: Here, we evaluate the anti-cancer effects of one well known phytochemical Lupeol on a panel of aggressive cancer types in preclinical platforms.

Methods: Melanoma (B16- F10), breast cancer (MDA MB-231), Cisplatin resistant laryngeal cancer cell line HEp-2c, oral cancer cell line UPCI: SCC131 and prostate cancer (PC-3) cell lines were treated with different doses of Lupeol for 24 and 48 hours. Cytotoxic effects of these agents were measured by different endpoint assays. Matrigel tube formation, Limiting Dilution (LD) and sphere formation assay along with alteration in CD133 expression were performed. The expression status of Ephrin A2 and its downstream molecules were examined in aggressive mouse melanoma solid tumor in vivo. We also established the key findings in a patient derived ex vivo explant model (CANScript TM) for human breast and HNSCC tumors.

Results: Viability (MTT) assay showed significant IC50 value for each cell lines treated with Lupeol followed by CFU assay. Concurrently, induction of apoptosis was found to be prominent in treatment arm.

We also observed down regulation of CD133 expression and disrupted tube formation in all cell lines that together ascertain their ability to inhibit vasculogenic mimicry (VM). The ability of Lupeol to interfere with cancer stem cell (CSC) like properties was also evident where sphere formation and LD profile demonstrated alteration in the CSC pools for majority. The machinery of these effects suggested its link with Ephrin A2 and its downstream elements driving VM in melanoma in vivo tumour model. Further validation of these data in patient derived CANScript ex vivo setting where efficacy of this drug was tested on the patient tumors clinically progressed on standard of care (SOC).

Discussion and conclusion: Together, these data suggest the promising roles of phytochemical in treating diverse cancer indications at aggressive or late stages of the diseases where existing paradigms frequently show limited efficacy.

Abstract Id: YUGP1011

Prediction of anticancer drug response in an adjuvant clinical setting for breast cancers by ex vivo live tumor phenotypic assay platform

Presenter: Dr. Partha Nath
Co-author: Nabendu Murmu, Debaparan Mitra, Muthusami Oliyarashi, Manoj Rajappa, Debapriya Ghosh Mehrotra, Padhma Radhakrishnan, Saravanan Thiyagarajan, Biswanath Majumder, Biswanath Majumder, Tapas Majhi

Basis: Our learning from the limited trajectory of biomarker guided and genomic assay based response prediction to inform clinical action ability of cancers led to the strategic rethinking of developing and validating robust and individualized platform (CANScript) that make prediction based on multiple phenotypic inputs.

Methods: Accelerated CANScript Enabled Personalized Treatment (ACCEPT) is an investigator initiated study aiming to predict response to anticancer drugs at clinic. Surgically resected tumors from primary breast cancer patients (n=30) were cultured in slices and treated with Epirubicin, Cyclophosphamide and SFU in CANScript platform for three days in presence of autologous growth factors, immune milieu and indication specific matrix support where patient tumor microenvironment was extensively preserved. The outcome was measured by integrating

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both pathological (tumor content, viability, proliferation and induction of apoptosis) and kinetic endpoints (cell viability and metabolism) into a single data trained M score algorithm as described (Majumder B et al., Nature Commun, 2015, Brijwani N et al., Scientific Reports, 2017). After 6 cycles of therapy, following surgery, patients were clinically evaluated for response based on multiple criteria including radiological examination. This short-term clinical response was compared with CANScript driven response prediction.

Results: Out of 25 evaluable patients, outcome is available for ten patients (40%) till today. Data indicate that CANScript derived predictive scores for responders and non-responders were highly correlated with clinical observation. For all six clinical non-responders, CANScript guided outcome was found to be matched with clinical outcome. Similarly, for rest 4 patients, while CANScript predicted response, 3 patients showed clinical response. These preliminary data from an ongoing study are encouraging and more patients will be enrolled and follow up data will be collected.

Conclusion: Phenotypic assay based platform technologies are emerging as a new frontier of individual response prediction based on the complex and dynamic interplay of tumor and stroma including immune network. CANScript guided prediction of response showed encouraging results to understand the response of drugs at clinic, would offer further opportunity to incorporate phenotypic inputs for informed treatment decision in an adjuvant setting.

Abstract Id: YUGP1012
Colorectal Carcinoma With A Mucinous Neoplasm – A Double Primary
Presenter: Dr. RajasenthilVerma
Co-author: Dr. J C Bose

BACKGROUND: With the advanced techniques in cancer diagnosis and treatment, the survival rate of cancer patients has improved. However, improved survival rates have led to an increased risk for developing multiple primary cancers which, in turn, can lead to an increase in death rate secondary to having additional primary malignancies. The incidence of synchronous colorectal cancer is about 0.6-1.4 % and metachronous CRC is 1-8 % . Metachronous multiple primary malignancies are commoner than synchronous lesions with a ratio of 2.7:1. Therefore, the detection of multiple primary cancers is very important in order to devise appropriate treatment and follow-up plans.

MATERIALS AND METHODS: A 53 year male, presented with diarrhea x 4 months, along with bleeding p/r, loss of weight and appetite. On examination, patient was conscious, oriented, afebrile, with stable pulse and negative PICCLE. His abdominal findings showed a 2x2cm firm right hypochondrial mass that moved with respiration. Patient’s colonoscopic biopsy showed adenocarcinoma of the ulcerative growth, found in the transverse colon. He was taken up for extended right hemicolectomy where intra-operatively, a 10x8cm mass was found in the hepatic flexure with an incidental finding of an appendiceal mucoele, along with deposits in the pelvic peritoneum, which was sent for biopsy. His HPE revealed:
1. Colon- moderately differentiated adenocarcinoma infiltrating the submucosal layer. Margins free of tumour.
2. Appendix- low grade appendiceal mucinous neoplasm.
3. Peritoneum- acellular mucin without epithelial cells.

RESULT: Thus we present a case of double primary where, histological features of the appendicular adenocarcinoma and colorectal adenocarcinoma were identical. The appendicular mucosa remains inaccessible by both radiology and endoscopy, the accuracy of preoperative diagnosis of appendicular neoplasm is still poor. We wrap up saying the neoplastic changes of the colon and the rectum could affect the appendicular mucosa as it has a similar embryological origin.

CONCLUSION: Though, multiple primary cancers are rare, yet it is believed that the incidence is increasing. Since in patients with multiple cancers, the focus is mainly on the primary disease, there is a higher likelihood of missing incidental co-existence of another primary malignant lesion. Therefore, it is important to make an early diagnosis and administer prompt therapy in case of multiple cancers.

Abstract Id: YUGP1013
QTWiST analysis to compare the benefit of maintenance Erlotinib versus pemetrexed patients with EGFR nonmutated NSCLC
Presenter: Dr. Siddarth

Background: In an open label, Phase 3 randomised study, Pemetrexed maintenance after induction with 4-6 cycles of pemetrexed -Platinum therapy failed to prove its superiority over Erlotinib in patients with EGFR non mutated NSCLC. In this analysis we have assessed the benefit of erlotinib over Pemetrexed using quality adjusted time without symptom or toxicity analysis method.

Methods: The overall survival in each arm was partitioned into 3 health states. TOX state (Time spent in grade 3 or above toxicity after randomization before progression), TWiST state (Time spent after randomization before progression without grade 3 or above toxicity) and REL state (Time spent after progression). The mean QTWiST was calculated for each arm using utility coefficients of 0.65 for TOX, 0.71 for TWiST and 0.67 for REL states respectively. The difference in QTWiST and the 95 % CI of difference were calculated using a nonparametric bootstrap. A p value of 0.05 was considered as significant.

Results: The mean TOX duration was 2.216 days in Erlotinib arm versus 1.359 days in pemetrexed arm, p = 0.572. The mean TWiST duration was 215.85 days in Erlotinib arm versus 217.605 days in pemetrexed arm, p = 0.945. The mean REL state duration was 198.620 days in Erlotinib arm versus 196.254 days in maintenance pemetrexed arm, p = 0.932. There was no statistically significant difference between the two arms in mean TOX duration, mean TWiST duration and mean REL state duration. The mean QTWiST was 287.770 days in Erlotinib arm versus 286.873 days in Pemetrexed arm. The difference was of -0.897 days (95% CI -22.475 to 20.681, p value 0.935).

Conclusions: The mean QTWiST of Erlotinib arm was similar to maintenance Pemetrexed arm. Our results failed to prove the benefit of Erlotinib over Pemetrexed maintenance post induction with 4-6 cycles of pemetrexed -Platinum therapy in terms of quality adjusted time without toxicity.