One Year Follow Up on Hybrid System in Spinal Tuberculosis Surgery
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INTRODUCTION: Tuberculous spondylitis causes damage to the corpus and makes spinal instability. Operating procedures have been developed treating tuberculous spondylitis with some combination of conventional techniques and minimally invasive technique (Hybrid System) which allows the incision is required at the level of the vertebrae which will be stabilized.

METHODS: Patient who have tuberculous spondylitis which had been had corpus damages on vertebrae Th12-L1 and L4-L5, had been treated with posterior spine stabilization with Hybrid System and percutaneous abscess drainage. Blood loss, duration of surgery, length of stay, Visual Analogue Scale (VAS) and fusion status were evaluated for one year. The improvement of neurological was documented and its functional outcome was assessed using measurements Oswestry Disability Index (ODI).

RESULT: Intraoperative blood loss was 150cc, 5 hours operating time and 5 days duration of hospitalized. After one year of follow-up, we found several data such as: a deflation in VAS score from 7-8 into 0-1; an x-ray photograph of anteroposterior thoracolumbal and lateral showed appearance of bridging trabeculae at the anterior and posterior column, there was no significant changes on moteric function at lower limb and improvement of neurological on L1 dermatome. The functional scoring based ODI before surgery was on 27 points (54% severe disability category) and after one year of follow-up, it changed into 2 points (4% minimum disability category).

DISCUSSION AND CONCLUSION: Compared with conventional techniques, Hybrid System procedures have similar effectiveness in achieving spinal stability and abscess drainage. This procedure proved to be more effective in reducing the amount of bleeding, tissue damage and length of stay, although this procedure still requires a longer operating time.