Abstract

Subarachnoid hemorrhage (SAH) is a medical emergency which is mostly caused by aneurysm rupture. Acute onset of severe headache is the primary manifestation. Everyone has suffered from headache at least once in their life. Self-reliance to treat her/his own headache causes further delay in transferring and getting proper management. Pre-hospital death approximately contributes to 10-12% of total mortality.

The re-bleeding risk peaks in the first 24 hours while other complications occur later. Cerebral edema arises in the second 24 hours. Cerebral vasospasm which leads to delayed cerebral ischemia starts from day 4 and reaches its peak on day 10. Thereafter, it gradually improves until day 21. Routine TCD examination is one of diagnostic tools that can be used in the follow up period of vasospasm. Hydrocephalus is another complication in SAH. Blood clot can readily obstruct CSF flow at any time.

The most emergent management of SAH aims to prevent re-bleeding. Treating ruptured aneurysms can be achieved by either surgical clipping or endovascular intervention (coiling or coiling with stenting). Surgical clipping is associated with lower risk of developing DCI because blood clot can be thoroughly explored and removed during surgery. Thus, it is preferred when the aneurysms' location is easily operable. In contrast, endovascular coil embolization with or without stenting gains its place when the ruptured aneurysms are situated in difficult locations. Albeit, patients still have risks of developing DCI and thrombosis. Therefore, both therapeutic choices that should be cautiously chosen.

Keywords: subarachnoid hemorrhage, vasospasm, clipping, coiling, stenting, TCD