Management of Chronic Subdural Hematomas: A Single Institution Retrospective Review

Milano, Vanessa – Neurosurgery Resident

Objective:
Chronic subdural hematomas are a growing epidemiological concern that confers increased morbidity and mortality and which often requires neurosurgical expertise. Here, we studied 194 cases of chronic subdural hematoma and subsequent management results within a 3 year period at a single institution.

Methods:
The management of chronic subdural hematomas was retrospectively examined at a single institution among from 2011 to 2014. Management either consisted of burr hole drainage, subdural evacuation port system, or craniotomy. Average length of stay, 30 day readmission, and rate of return to OR were documented.

Results:
From 2011 to 2014, 133 patients were treated with burr hole drainage, 56 patients were treated with craniotomy, and 5 patients were treated with a subdural evacuating port system (SEPS). The average in-hospital length of stay for burrhole drainage was 4.3±2.2 days, which was shorter than that for both craniotomy (7.5±5.1 days) and SEPS (6.9±5.1 days). Of patients in the burr hole drainage group, 12 (9%) returned to the OR for repeat drainage (10) or craniotomy (2). Craniotomy was related to a 5.3% risk of need for reoperation, whereas 2 of the patients in the SEPS group required additional burr hole drainage (40%).

Conclusion:
Overall length of stay was increased for patients with chronic subdural hematomas undergoing craniotomy and SEPS; however, need for reoperation was increased for patients undergoing burr hole drainage versus for craniotomy. Selection of neurosurgical procedure in this series was mainly influenced by patient characteristics and radiographic findings, however these data can be used to better inform our practice in the management of subdural hematomas. It is essential to continue to investigate modalities that will minimize length of stay and need for return to OR in patients with chronic subdural hematomas, given the expanding prevalence of oral anticoagulants and the aging population.