

Burrhole Versus Craniotomy for the Treatment of Chronic Subdural Hematoma: A Matched Cohort Analysis

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Introduction

Chronic subdural hematomas (cSDH) represent one of the most common neurosurgical disorders with a prevalence of 5/100,000 in the general population. cSDH can present with a variety of complaints which may include headaches, ataxia, hemiparesis, seizures, drowsiness, or speech impairments usually following a subacute course after a head injury. Burr-hole craniostomies have been the standard of care with the rate of recurrence is 5-15% - particularly when there are loculations. Our hypothesis was that "minicraniotomies" may be more effective. We performed a matched cohort analysis of patients of burrhole craniostomy versus craniotomy drainage of chronic subdural hematomas to evaluate efficacy of each approach.

Methods

A retrospective chart review of 200 cSDH that presented to University Hospitals Case Medical Center between 2006 and 2015 was performed. One hundred craniotomy and 100 burrhole craniostomy patients were identified and a matched cohort analysis was performed. Data on demographics, co-morbidities, coagulopathy, neurological status, radiographic findings, disposition, and mortality were collected. Primary endpoints were rehemorrhage, reoperation, and need for additional adhesolysis in during the second operation.

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