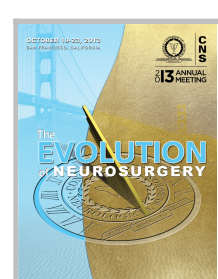


A Combined (SKIMS) Approach to Evacuate Acute Subdural Hemorrhage with Underlying Severe Traumatic Brain Edema

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Introduction

The conventional (open dural flap) procedure to remove the Acute Subdural Hemorrhage or clot proves dangerous in an acutely traumatic “vent-searching” brain with underlying severe edema, that is restricted in a rigid cranial vault. The new Combined-Approach, known as SKIMS-Approach i.e. “decompressive craniectomy with multi-dural stabs”, between the only decompressive craniectomy and craniectomy plus removal of acute subdural clot by open dural flap (conventional) method, proved much effective in increasing survival of low GCS and severe traumatic brain edema with acute subdural hematoma.

Methods

This study evaluated prospectively, under a uniform protocol, 225 patients of severe traumatic brain edema with acute subdural hematoma by a combination of wide decompressive craniectomy with multi-dural stabs in 119(cases) patients as against conventional dural opening (open dural flap) and removal of acute subdural hematoma in 106 (controls) patients during a period of 6 years from Jun. 2006 to Jun.2012.

Results

A free bone flap was elevated and preserved. All patients had GCS (Glasgow Coma Scale) score of 8 and less. The elective ventilation and ICP monitoring was carried out in all patients. Most patients were young and males with a mean age of 30 years in both groups. The overall survival of the Combined-Approach (case-study) was 77.31% (92/119) with good recovery in 42.02% (50/119) and a mortality of 22.69% (27/119) as compared to 46.23% (49/106) survival in open dural flap (control) group with 15.09% (16/106) good recovery and a mortality of 53.77% (57/106).

Conclusions

The decompressive craniectomy alone is not sufficient and craniectomy with open dural flap is full of risks in such patients. The new innovative and indigenous Combined-Approach is much favorable to the patient outcome.

Learning Objectives

*Decompressive craniectomy is not sufficient and open-dural flap method is dangerous

*Combined-Approach is the better-alternative

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