



Improved Mortality Rates in Elderly Patients Undergoing Craniotomy for Evacuation of Acute Subdural Hematomas

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Introduction

Acute traumatic subdural hematomas have been reported to carry mortality rates of 80% in patients older than 55 years of age with functional survival rates quoted as low as 9% in patients older than 65 years.¹ One early study cited a good recovery (GOS 4 or 5) rate as low as 8.9% for elderly patients suffering from traumatic acute subdural hematomas.² Some studies have even cited 100% mortality rates for patients older than 80 years of age with acute subdural hematomas.¹ We reviewed our experience with evacuation of traumatic acute subdural hematomas in patients older than 65 years of age from 2000-2010 as we had experienced different results than that widely reported in the literature.

Methods

The authors retrospectively reviewed the cases of all elderly patients with traumatic acute subdural hematoma (ASDH) treated surgically at the University of Utah between 2000-2010. Patients were located using the OpCoder database and subsequently their demographic information, clinical presentation with Glasgow Coma Score (GCS), and Glasgow Outcome Scale (GOS) at time of discharge were recorded and analyzed.

Results

Twenty-nine patients with an average age of 76.6 years old (ranging 65-88 years old) went to the operating room for evacuation of a traumatic acute subdural hematoma from 2000-2010 at the University of Utah Hospital. Fifteen patients (51.7%) survived with meaningful outcome (GOS >3) at the time of discharge. Over half (8/15) were completely independent at discharge (GOS 5) while the other survivors (7/15) needed rehabilitation or further nursing care at discharge for recovery. Fourteen patients (48.3%) died as a result of their injuries. The patients with meaningful outcome had an initial GCS of 10.8 while the average GCS of the patients with a poor outcome was 6.5.

Conclusions

Although increasing age has been demonstrated to be associated with worse outcomes in the evacuation of traumatic acute subdural hematomas in the elderly, there is often a misconception about the prognosis for these patients. We provide evidence for aggressively evacuating acute subdural hematomas in the elderly based partially upon initial GCS (>50% of patients with GOS 3,4, or 5).

Learning Objectives

By the conclusion of this session, participants should be able to: 1) Describe the reported survival rates for evacuation of traumatic acute subdural hematomas in the elderly, 2) discuss the history of reported survival rates, 3) Educate other physicians with respect to prognosis for elderly patients with traumatic acute subdural hematomas based on presenting GCS.

References

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2. Howard MA 3rd, Gross AS, Dacey RG Jr, Winn HR. Acute subdural hematomas: an age-dependent clinical entity. *Journal of Neurosurgery*. 1989 Dec;71(6):858-63.