Outcomes Analysis of Poor Grade Subarachnoid Hemorrhages

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Introduction

Subarachnoid hemorrhage (SAH) presenting with poor clinical grade (Hunt and Hess 4 and 5) have known to have poor clinical outcomes. In order to determine to continue care vs withdrawing care in such grim situations, it is necessary to base decisions on clinical evidence. Retrospective analysis of outcomes in this population can help identify factors predicting outcome in this group.

Methods

A retrospective chart review was performed of all patients treated between 2007 and 2013 and the population of poor grade SAH was collected. The clinical course, treatment choice, comorbidities, and clinical outcome (short term and long-term) were analyzed along with patient variables such as age, comorbidities, and extent of hemorrhage.

Results

Of the total 62 patients, treatment was attempted in 36 patients of which on 6 patients had a good outcome - modified rankin score (mRs 1-3). Patient variables such as age, comorbidities, and extent of hemorrhage were significantly predictive of both short-term and long-term clinical outcome in univariate logistic regression analysis. Treatment choice was not predictive of outcome. All six patients who had good clinical outcome improvement in GCS score before 8 days of ICU stay.

Conclusions

A small minority of the poor grade SAH recover to have good clinical outcome (mRS 1-3). Patient factors such as age, comorbidities and extent of hemorrhage are predictive of outcome and need to be considered for plan of care decision-making.

Learning Objectives

To determine the variables predictive of outcome in poor grade SAH.

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