Severe head injuries and intracranial pressure monitoring outcome in Southern Iran

Majid Reza Farrokhi, Mousa Taghipour

Abstract

BACKGROUND: Head injury is still a major cause of death and disability. Despite advances in intensive monitoring and clinical practice, little data is available to show the predictive value of intracranial pressure monitoring in assessment of the outcome of head injuries. This study was undertaken to evaluate this predictive value and is the first Iranian study in which ICP monitoring has been included.

METHODS: In a prospective study from September 1999 to September 2003, all head-injured patients (53 patients) with GCS of 4-8 who were admitted to Nemazee Hospital of Shiraz University of Medical Sciences were included in this study. Subarachnoid screw method or ventricular catheter via ventriculostomy was used to determine intracranial pressure. Patients were monitored for 3 days and were followed for two years at 6-month intervals.

RESULTS: Car accidents were the most common cause of head injury (43.3%) and 43.3% of patients had GCS of 8. Sixty percent of patients had abnormal intracranial pressure. The patients were most commonly in their first decade of life (18.8%) and 81% of patients were male. Controlling increased intracranial pressure was successful in 60% of patients and resulted in a decrease of mortality rate from 60% to 15%.

CONCLUSIONS: Early treatment of increased intracranial pressure in head injury patients would be beneficial in reducing mortality and morbidity rates.

KEY WORDS: Southern Iran, head injury, outcome, intracranial pressure.