Outcome of “unknown” head injury patients at a tertiary care neurosurgical centre

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Context: A large number of patients are admitted to hospitals in large cities without any identification. These “unknown” patients represent a unique problem in developing countries. There is no systematic study in world literature on this subgroup of patients. Aims: To elucidate the natural history and outcome of traumatic brain injury patients admitted in the department of neurosurgery as “unknowns”. Settings and Design: Retrospective analysis of all traumatic brain injury patients admitted to the department of neurosurgery as “unknown”, between January 2002 and March 2005. Results: Three hundred and twenty five patients were admitted as unknowns over a 3 year and 3 months period. Most of the patients were young males and became known during their hospital stay. Overall, 33 patients stayed for longer than one month, with 4 of them staying for longer than 6 months. Mortality in mild, moderate and severe head injury group was 1%, 6% and 46% respectively. Conclusions: Unknown patients represent a unique subgroup in metropolitan cities like Delhi. Managing them raises several medico-legal issues. Many of them occupy hospital beds for longer duration than required. There is an acute shortage of rehabilitation homes in Delhi for long term care and rehabilitation of such patients.

Key words: Head injury, unknown, trauma, unidentified patients.

Introduction

Delhi has a large population, which crosses an exorbitant 17 million in the day time. The city alone witnessed 9,083 road accidents and 1,832 accident deaths in the year 2004. In such a scenario, many patients are admitted to hospitals as unknowns, after having met with accidents. What happens to these patients after admission is not reported in world literature.

Materials and Methods

We conducted a retrospective analysis of the departmental case records from January 2002 through March 2005. During the study period, 325 head injury patients were admitted to the department of neurosurgery as ‘unknown’. We analyzed the mode of presentation, demographic profile, CT scan findings, hospital course and outcome at discharge. No patient was deprived of any medicine, ICU care, CT scan or surgery because of his unknown identity.

Results

Out of 325 patients, there were 9 patients in the paediatric age group and 16 patients were more than 60 years of age. Eighteen percent of minor head injury patients were operated. Approximately one third of patients with moderate head injury and half of patients with severe head injury were operated, most of them being for cerebral contusions and/or subdural hematomas.

The mortality in mild, moderate and severe head injury groups was 1%, 6% and 46% respectively.

We analyzed the final outcome at discharge of patients admitted between January 2002 and December 2004. Out of 298 patients admitted during this period, 193 could be identified during the hospital stay. An additional 40 patients were sent home after they regained memory of their addresses. Forty seven patients expired as unknown. Seventeen patients remained unknown and were sent to rehabilitation/poor homes with the help of medical social worker. All paediatric patients were identified. The one patient who absconded from our ward could not be traced and his outcome is not known.

Discussion

The fact that only a small minority of our patients were brought by CATS ambulance reflects the poor pre-hospital care for these
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![Figure 1: Outcome at discharge of unknown head injured patients admitted from January 2002 to December 2004](image)

patients. We did not face any major legal issues as regards the treatment in any case. This was perhaps because we followed a specific treatment protocol for all patients irrespective of their identity. A written consent was taken from the medical superintendent for any surgical procedure that was required on these patients.

Unknown patients pose special problems in management. They have unknown co-morbidities at admission, which can complicate/delay proper management. They stay in the hospital for longer periods than required. Post-traumatic memory disturbances and altered behavioural patterns are of special importance in the context of unknown patients.

One patient with minor head injury died. He had a small temporal contusion with no significant mass effect and was being managed with serial CT scans and decongestive drugs. The overall mortality in patients with moderate and severe head injury was 6% and 46% respectively, which is commensurate with the outcome published in world literature.

There is lack of adequate pre-hospital care and a shortage of rehabilitation homes. Through our paper, we wish to highlight this issue, so that efforts are taken to tackle this problem.

References


Accepted on 03-12-2005