

POSTER PRESENTATION

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Pre-hospital management of severe traumatic brain injury- compliance with guidelines

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Background

Traumatic brain injury (TBI) is a major cause of death and disability. Guidelines for pre-hospital management of severe TBI have been published but research has shown that pre-hospital management often differs from that recommended in guidelines.

Aim

To assess compliance with guidelines in the pre-hospital management of severe TBI in Stockholm, in assessment and/or treatment of airway, ventilation, oxygenation, blood pressure, fluid resuscitation, GCS, and pupil properties.

Method

The study was a cross sectional observational study based on data from trauma registry and ambulance records. Included patients (n=101) were adult (age > 15 years), with Injury Severity Score > 9 and GCS 3-8 (severe TBI caused by blunt trauma), transported by ambulance or helicopter and admitted to the trauma center at Karolinska University Hospital in Stockholm between January 1st and December 31st, 2008. TBI were confirmed by computer tomography and with a corresponding ICD-10 diagnosis (s06.0-06.91). The pre-hospital management considered compliant with guidelines only if the assessment or the treatment was documented in the ambulance journal. A 65% criterion was used as a lower limit for acceptable compliance.

Results

Compliance with guidelines was; oxygenation assessment 90.1%, hypoxia treatment 100.0 %, blood pressure assessment 88.1%, hypotension treatment 90.0%,

Glasgow Coma Scale 76.2% and pupil properties assessment 93.1%.

Conclusion

The pre-hospital management of severe TBI was to a large extent compliant with the guidelines in Stockholm and compliance was higher compared with that of previous studies.

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