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## C0500 - INTENSIVE THERAPY UNIT BED OCCUPANCY BY NEUROSURGICAL PATIENTS AT A MAJOR TRAUMA CENTRE

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### Resumen

**Objectives:** The lack of intensive therapy unit (ITU) beds is a growing problem. We aimed to investigate the occupancy of ITU beds by patients admitted with acute neurosurgical diagnoses. We also compared the length of ITU stay and GCS on admission of neurosurgical patients with head injury versus non-head injury.

**Methods:** We retrospectively reviewed all neurosurgical patients admitted consecutively to ITU in a major trauma centre hospital over a one-year period. We recorded diagnoses, initial GCS, age, other injuries and duration of ITU stay for all patients. We then compared the presenting GCS (parametric; student's *t* test) and ITU stay (non-parametric: Mann-Whitney *U* test) between head and non-head injury patients.

**Results:** Total ITU bed occupancy was 629 days for 86 patients admitted consecutively over one year. Head injury patients ( $n = 47$ ) occupied it for 60% (381 days; median 6 days, mean 8 days), and non-head injury patients ( $n = 39$ ) for 40% (248 days; median 6 days, mean 6.4 days) of the time. There was no significant difference in admission GCS and in length of ITU stay (LOS) between them. We also compared the LOS of patients with isolated head injury to the LOS in patients with head injury associated with other systems injuries (median 8 days and mean 8.5 days in isolated head injury group; median 5.5 days, mean 6 days in a group with other systems involvement).

**Conclusions:** Non traumatic intracranial pathologies are as much of a burden as traumatic head injuries regarding ITU bed occupancy in our major trauma centre. This aspect has to be considered when planning ITU bed numbers in major trauma centre. Surprisingly the trauma patients with multisystem involvement stayed shorter compared to isolated head injury patients. We are looking forward to analyse the data for a longer time period and in more details to make study more relevant.