

## **Epidemiology of patients with the traumatic brain injury who were admitted to surgical intensive care unit in the year of 2010**

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### **Introduction**

Traumatic brain injury is a leading cause of morbidity and mortality among the young population in the northern region. The aim of this study was to analyze the major patterns of traumatic brain injury in patients admitted to SICU, Teaching hospital Jaffna. The analysis was according to the type of injury, age, sex and the functional outcome.

### **Methodolgy**

Data collection was done retrospectively for a period of one year from the relevant records. 110 patients' details were analysed

### **Results**

A total of 110 patients with traumatic brain injury were admitted during the study period. Majority of the victims were men (78.2%), non alcoholic (76%), in the age group of 17 to 49 (53%), and male to female ratio of 3.58:1. Road traffic accident was the main mode for traumatic brain injury (70%). A bimodal pattern of incidence of admission with traumatic brain injury was noted during the 8am-10am and 6pm-8pm. Haemorrhagic contusions (52%) and skull fractures (56.4%) were the most common finding in computerized tomography. Mean duration of stay of a patient in SICU was 5.35 days. 56 patients were intubated and ventilated in the study period and average duration of ventilator usage was 5.99 days. Glasgow Come Scale at the time of admission and mortality rate were not correlating. Mortality rate of this study was 28.2%(n=31).

### **Conclusion**

Traumatic brain injury was mainly due to road traffic accidents and affects the young adult male population. Admission GCS was not a good prognostic index in the outcome of the patient

### **Recommendation**

Social awareness to prevent unnecessary mortality by road traffic accidents, especially in the young age group is mandatory in all parts of Jaffna. Permanent disability due to head injury and other injuries are still a blind spot which needs to be highlighted with improvement in the rehabilitation facilities in long term.