

ABSTRACT

Background: Traumatic Brain Injury (TBI) remains a life-threatening form of injury that affects all age categories, and negatively affects life. As well, TBI is associated with numerous factors, and there are limited exploratory studies that have reported on the outcomes of TBI in the western part of Uganda. This study aimed to determine the clinical characteristics and factors that predict the outcomes of patients with traumatic brain injuries at Fort Portal Regional Referral Hospital (FRRH).

Methods: This was a retrospective cross-sectional study conducted in western Uganda which analyzed hospital records of patients who were admitted at FRRH with TBI within a period of five years. Data was collected using data extraction form and analyzed using Stata version 17.0. Univariate, bivariate and multivariable logistic regression using a forward stepwise approach was used to determine the predictors of the outcome of TBI patients. The level of significance was set at 0.05 at 95% Confidence interval.

Results: The majority 143(58.37%) were age-range (18-34 years), majority 202(82.45%) were males. Road traffic accidents were reported as the most predominant 70.2% cause of TBI and the majority of the TBIs 141(57.55%) are focal. About 92(37.55%) of the participants had unfavorable outcomes. The predictors of outcome include among others; Loss of consciousness (AOR(95%CI): 5.68(1.77-18.17), P=0.003), Age (AOR(95%CI): 1.04(1.01-1.07), p=0.009), Having a GCS below 8 (AOR(95%CI): 5.20(1.60-16.88), p=0.006), Subarachnoid Hematoma (AOR(95%CI): 3.76(1.77-8.00), P=0.001), and Intracranial Hematoma (AOR(95%CI): 5.73(2.41-13.58),p<0.001).

Conclusion: The findings of this study demonstrated that patients presenting with traumatic brain injury at Fort Portal Regional Referral Hospital have several clinical characteristics including the majority having a focal brain injury. The outcome of patients remains poor with a significant number having unfavorable or poor outcomes. The predictors of unfavorable or poor outcomes among patients with TBI at Fortportal Regional Referral Hospital include Loss of consciousness and having a GCS below 8 among others.