Predictive Value of Coagulopathy in Patients with Isolated Blunt Traumatic Brain Injury: A Cohort of Pakistani Population

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Abstract: Objective: To determine the value of aPTT, platelets and INR as the predictor of unfavorable outcomes in patients with blunt isolated traumatic brain injury. Methods: This was an observational cohort study conducted in a tertiary care facility from 1st January 2008 to 31st December 2012. All the patients with isolated traumatic brain injury presenting within 24 hours of injury were included in the study. Coagulation parameters at presentation were recorded and Glasgow Outcome Scale calculated on last follow up. Outcomes were dichotomized into favorable and unfavorable outcomes. Relationship of coagulopathy with GOS and unfavorable outcomes was calculated using Spearman’s correlation and area under curve ROC analysis. Results: 121 patients were included in the study. The incidence of coagulopathy was found to be 6%. aPTT was found to be significantly associated with unfavorable outcomes with an AUC = 0.702 (95%CI = 0.602-0.802). Predictive value of platelets and INR was not found to be significant. Conclusion: Incidence of coagulopathy was found to be low in current population compared to data from the West. aPTT was found to be a good predictor of unfavorable outcomes compared with other parameters of coagulation.

Keywords: aPTT, coagulopathy, unfavorable outcomes, parameters

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