



COMPARISON OF GLASGOW COMA SCALE TO PREDICT GCS-MOTOR FUNCTIONAL OUTCOMES OF PATIENTS WITH TRAUMA

Emergency Medicine

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KEYWORDS

This study was done SMS Hospital Trauma Centre to compared the Glasgow Coma Scale (GCS) and the GCS-motor (GCS-M) for predictive accuracy of Functional outcome which is also give some clinical data base to see the mortality and disability using a large, multicenter population of trauma patients in Government hospitals. To compare the ability of the prehospital GCS and GCS-M to predict the mortality and disability in Government trauma Hospitals (SMS Hospital) We used the Pan Trauma Outcomes Study registry to enroll all trauma patients >18 years of age at SMS Trauma centre from January 2023 to December 2024. A total of 500 patients were included in the analysis of 30-day mortality and patients in the analysis of functional outcomes.

OUTCOME MEASURES AND ANALYSIS:-

The primary outcome was 30-day mortality after injury, and the secondary outcome was severe disability at discharge defined as a Modified Rankin Scale (MRS) score ≥ 4 . Areas under the receiver operating characteristic curve (AUROCs) were compared between GCS and GCS-M for these outcomes. The predictive discrimination ability of logistic regression models for outcomes between GCS and GCS-M is illustrated using AUROCs.

The primary outcome for 30-day mortality was 1.09% and the AUROCs and 95% confidence intervals for prediction were GCS: 0.817 (0.787-0.846) vs. GCS-M: 0.807 (0.775-0.830), $P = 0.150$. The secondary outcome for poor functional outcome (MRS ≥ 4) was 10.4% and the AUROCs and 95% confidence intervals for prediction were GCS: 0.516 (0.496-0.536) vs. GCS-M: 0.520 (0.590-0.620), $P = 0.515$. The subgroup analyses of patients with and without TBI demonstrated consistent discrimination ability between the GCS and GCS-M.

CONCLUSIONS:-

In the prehospital setting, along with glass comma scale on-scene GCS-M was comparable to GCS in predicting 30-day mortality and poor functional outcomes among patients with trauma. On-scene GCS-M is a more productive and informative to assess the outcome of patients with trauma.

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