

FP04 CORRELATION AND PREDICTIVE ABILITY OF GAP TRAUMA SCORE WITH THE OUTCOME OF TRAUMA PATIENTS

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BACKGROUND

The trauma scoring system (TSS) is one of the important tool in trauma research to evaluate the severity and to predict the outcome of trauma.

OBJECTIVE

This study aims to find the correlation and the predictive ability of the GAP score with clinical outcomes of trauma patients

PATIENTS AND METHOD

This retrospective, cross-sectional observational study which data is extracted from the NTrD 2009. Patients were classified with their GAP score and categorized according to their risk of mortality (low, intermittent risk and high mortality risk). The correlation and predictive power of GAP score were compared with their outcomes (hospital mortality, need for ICU admission, need for surgery)

RESULTS

A total of 2347 trauma patients in year 2009 were included; 393 (16.8%) died. Mean (SD) age was 35.85 (15.75) years, median GCS score was 12 (interquartile range, 8), and mean systolic blood pressure (SD) was 130 (25), (interquartile range, 29). Mean (SD) GAP score is 18 (4) IQR 7. Total number of patients died in the low, medium, and high GAP risk categories (percentage within risk) were 33 (3.3%), 35 (28.5%), and 325 (72.2%) patients respectively. The area under the curve (AUC) on receiver-operating characteristic (ROC) analysis for the GAP score (95% CI: 0.80 to 1, p <0.001) is 0.805 to predict mortality, 0.846 to predict ICU admission and 0.566 to predict need for surgery.

DISCUSSION

GAP score is a useful tool to stratify of hospital trauma patient mortality and the need for ICU admission. GAP risk categories also have good correlation with mortality, ICU admission and s need for operative intervention (<24h). GAP have good predictive ability for mortality and ICU admission but not in early surgical intervention(<24hours)