CAN FOUR SCORE PREDICT MORTALITY AND ICU LENGTH OF STAY IN CRITICALLY ILL PEDIATRICS?

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Introduction: The FOUR score is a new coma scale developed addressing the limitations of the GCS. The aim of this prospective cohort study was to evaluate the performance of the FOUR score in predicting mortality and ICU length of stay in paediatrics admitted to medical ICU.

Methods and Material: This was an observational and prospective study of 24 consecutive patients admitted in the medical ICU during six month period. Demographic information recorded on a checklist, also information about Severity of disease Calculated based on FOUR score in the first admission 24 hours. Logistic regression, Hosmer-Lemeshow test and receiver operating characteristic (ROC) curves were used in statistical analysis (95% confidence interval .(

Results: Data analysis showed a significant statistical difference between outcomes and FOUR score (p<0/001) and FOUR score and ICU-LOS (p=0/04). The ROC-curve analysis suggested that the predictive ability of FOUR score is good. The area under the ROC curve was 86.2% (standard error [SE] 3.6%), and the Hosmer-Lemeshow statistic revealed that calibration for FOUR score ($\chi 2 = 5.331$, P = 0.531) is good too. Also Non survivors had higher FOUR scores than survivors (p<0/001.(

Conclusions: The FOUR score was a reliable tool in predicting outcomes and ICU-LOS in paediatrics who was admitted in medical ICU.

Key-words: FOUR score, Paediatrics, Medical ICU, Non survivors, Survivors

