

The Utility of the Predictive Scores in Polytrauma with Abdomino-pelvic Injuries: A Series of 38 Patients

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Abstract

Trauma is the principal cause of mortality among the population under 40 years. The aim of our study was to compare predictive trauma scores and demonstrate their utility in the evaluation of the quality of care in polytrauma.

Material and methods: A retrospective study was performed between 2000-2011 including polytrauma patients with abdominal lesions and pelvic fracture who underwent emergency laparotomy. We calculated ISS, GCS, RTS, TRISS, ASCOT trauma scores and W score for evaluation of treatment quality.

Results: We obtained the necessary data to calculate the predictive scores in 38 cases. Comparing the scores of the survivals and non-survivals we noted the following regarding mortality predictive scores: GCS 13.74 vs. 6.13 ($p < 0.0001$), ISS 28.52 vs. 35 ($p = 0.0169$), RTS 6.96 vs. 3.07 ($p < 0.0001$), TRISS 84.67% vs. 28.7% ($p < 0.0001$), ASCOT 10.34% vs. 64.32% ($p < 0.0001$). The W score in TRISS and ASCOT methodology was -2.05 ($p = 0.7997$) and -7.81 ($p = 0.336$), respectively. There was no statistically significant difference between actual and predicted mortality, the former being 39.47%.

Conclusion: We did not observe differences between the two methodologies TRISS and ASCOT in mortality prediction ($p = 0.5401$). Both of them can be used to predict polytrauma patient evolution. The W score is useful in treatment quality assessment.

Key words: abdominal injuries, pelvic fracture, predictive scores

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