A comparison of the RTS & ISS scores on prediction of survival chances in multitrauma patients of Fatemi trauma center in Ardabil 2006-2007

Abstract

Introduction: Trauma represents the third cause of death cardiovascular disease and tumors. Also in Iran, road accidents are main cause of death. Also rapid evaluation of trauma severity and prediction of prognosis and mortality rate and probability of survival and rapid treatment of patients is necessary. One of the useful and effective instrument for this is ISS & RTS scoring systems. This study evaluated 70 multitrauma patients in Fatemi trauma center affiliated to Ardabil university of medical science.

Materials and methods: This study was Antrospective study populations were 70 trauma patients addmited in Fatemi trauma center during the II month, ( From july 2006 to september 2007 ). And patients data was collected by clinical evaluating of patients and follow up them and arranged as a questionnaire then related findings were evaluated by SPSS software.

Results: The average age of patients was 37/6 ± 23/5 years and minimum and maximum age was 1 and 85 years. The most common involved group was 10-19 years (13 men & 1 woman). 81/4% of patients ( 57 cases were male) and 18/6% were female (13cases). The most common causes of trauma was car accident with 64/2% frequency (43cases) and then motorcycle accident with 16/4% frequency (11cases) and all injured patient due to motorcycle accident compose the age group
less than 40 years old. also car accident had the highest frequency in both gender.

Other causes of trauma were fall down with 13/5% frequency (9 cases) and under debris 5/9% (4 cases). Also from 70 studied patient, 67 cases (95/7%) had blunt trauma and 3 cases (4/3%) had penetrating trauma. the most penetrating trauma occurred in ages less than 50 years and was in the range of 30-50 years. The average RTS & ISS was 10/67±1/45 and 18/11±8/64 high and law scores of Iss existed in all age groups but law score of RTS was highest in children age group. The average length of ICU stay was 12/14±11/11. Overall mortality was 15/7 (11 cases). In this study, by the ISS increasing, the mortality rate also increased. But there is no relation between the mortality rate and RTS ratio.

Conclusion: The ISS scoring system performed better than the RTS in predicting of mortality and probability of survival and the length of ICU stay and had high accuracy and would can predict patients outcome better by ISS measuring

Keywords: Multiple trauma, RTS, ISS, Ardabil.