ANALYSIS OF PATIENTS ATTENDING TO THE EMERGENCY DEPARTMENT WITH FIRE-GUN INJURIES

SUMMARY

Purpose and Hypothesis: To investigate the conditions that have an impact on the mortality of patients admitted to the emergency department due to high kinetic energy gunshot wounds. For this purpose; The aim of this study is to compare the demographic structure of the patients, injury site, surgical indications, laboratory values and trauma scores, and to discuss their differences with studies conducted in our country and around the world, and their reasons.

Method: Our study was carried out between 01 January 2016 and 31 December 2016. The patients were divided into two groups as living and deceased. Age, gender, occurrence of the event, vital signs, injury site, involving more than one anatomical area, surgical treatment requirement, whether fracture surgery was performed, chest tube insertion status, laboratory parameters were compared. ISS, RTS and TRISS scores were compared between groups with living and deceased patients. Cut of values were calculated by performing ROC analysis. How useful they are in estimating mortality was investigated. The research data were recorded in IBM SPSS Statistics for Windows, version 21.0 and statistical analysis was performed.

Finding: 127 patients over the age of 18 who applied to the emergency department due to high kinetic energy gun injury and were brought directly from the area were included. The patients were divided into two groups as living and deceased. When the laboratory findings of the patients were examined; Considering the trauma scores, it was seen that the ISS averages of the living individuals were lower than the deceased individuals, and the average of the RTS and TRISS scores of the surviving individuals was higher than the deceased individuals. The mean Systolic Blood Pressure of the living individuals is lower compared to the deceased individuals, the Respiratory Number of the deceased individuals is higher than the living individuals, and the GCS averages of the deceased individuals are significantly lower than the living individuals.

Conclusion: In patients brought to the emergency room with individual gunshot wounds, vital signs and laboratory tests should be evaluated quickly and trauma scores with proven effectiveness such as ISS, RTS and TRISS should be calculated. These trauma scores differed between deceased and surviving patients. It should be known that mortality is high in gunshot wounds with head, neck and spinal injuries. In

addition, patients with vascular injuries should be given priority. In cases of firearm injury, it is the most accurate method to make a decision with evidence-based findings obtained by utilizing the way the event occurred, the site of injury, vital signs, laboratory values and trauma scores.

Keywords: Firearm, Trauma Score, Mortality