Evaluation of Chest and Abdominal Injuries in Trauma Patients Hospitalized in the Surgery Ward of Poursina Teaching Hospital, Guilan, Iran


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Abstract

Background: Trauma, especially chest and abdominal trauma are increasing due to the growing number of vehicles on the roads, which leads to an increased incidence of road accidents. Urbanization, industrialization and additional problems are the other associated factors which accelerate this phenomenon. A better understanding of the etiology and pattern of such injuries can help to improve the management and ultimate the outcomes of these patients.

Objectives: This study aimed to evaluate the patients with chest and abdominal trauma hospitalized in the surgery ward of Poursina teaching hospital, Guilan, Iran.

Patients and Methods: In this cross-sectional study, the data of all chest and abdominal trauma patients hospitalized in the surgery ward of Poursina teaching hospital were collected from March 2011 to March 2012. Information about age, gender, injured areas, type of injury (penetrating or blunt), etiology of the injury, accident location (urban or rural) and patients' discharge outcomes were collected by a questionnaire.
Results: In total, 211 patients with a mean age of 34.1 ± 1.68 years was entered into the study. The most common cause of trauma was traffic accidents (51.7%). Among patients with chest trauma, 45 cases (35.4%) had penetrating injuries and 82 cases (64.6%) blunt lesions. The prevalence of chest injuries was 35.5% and rib fractures 26.5%. In chest injuries, the prevalence of hemothorax was 65.3%, pneumothorax 2.7%, lung contusion 4% and emphysema 1.3%, respectively. There were 24 cases (27.9%) with abdominal trauma which had penetrating lesions and 62 cases (72.1%) with blunt lesions. The most common lesions in patients with penetrating abdominal injuries were spleen (24.2%) and liver (12.1%) lesions. The outcomes of the patients were as follow: 95.7% recovery and 4.3% death. The majority of deaths were observed among road traffic victims (77.7%).

Conclusions: Considering the fact that road-related accidents are quite predictable and controllable; therefore, the quality promotion of traumatic patients' care, and the road safety should be noted as problems associated with public health.

Keywords: Abdomen; Chest; Traffic Accident; Wounds and Injuries