Evaluation of the maxillofacial fracture patterns in patients referred to department of maxillofacial surgery at DR Fatemi hospital of Ardabil in 2013 to 2016

Abstract

Background and Objectives: In Iran, trauma is the second leading cause of death after cardiovascular events. A large number of emergency injured are patients with head and neck trauma. The human face is considered to be the most vulnerable parts of the body, and in the event of an accident, due to adjacent vital organs, in addition to physiological, emotional and psychological problems, serious complications can occur. Despite the significant importance of this issue, there is no new statistical information about these injuries in Ardabil city. Therefore, the Objective of this study was to determine the prevalence of jaw and facial fractures and associated injuries among patients referring to Fatemi Hospital in Ardebil from 2013 to 2016

Methods: This study is a retrospective cross-sectional study. The medical records of all patients with jaw and facial trauma between 2013 and 2016 were selected by sequential sampling and extracted cases such as age, sex, trauma location, trauma, and patient imaging examinations. Inside the pre-designed checklists. The extracted data entered the computer and analyzed. The statistical descriptive statistics were analyzed by SPSS 22 software.

Results: The mean age of patients was 25.06 ± 11.06 years, with an age range of 6 months-81 years. There is no significant relationship between age and fracture patterns of the jaw and face. In the study of the etiology of jaw and facial fractures, the results showed that 75.4% of patients due to vehicle accidents, 15.2% due to fights, 1.4% due to fall, 3.1% during exercise and 2.2% due to occupational accidents, they suffered damage to the jaw and bones area.

Conclusion: A number of patients had more than one fracture in the maxillofacial area. The most common site of fracture was mandibular trauma. The results show a statistically significant difference between different fracture patterns. Considering that the most common cause of jaw fractures in Iran is accidental accidents including motorcycle accident, strict observance of traffic regulations, and the mandatory wearing of belt and helmets, as well as increasing road safety can greatly reduce the incidence of jaw and facial fractures.

Keywords: Fracture patterns, jaw, face