

Mortality and complications in trauma patients admitted to Shariati Hospital

Sima Sheikh Ghomi^{1*}, Vafa Rahimi Movaghar², Saba Jafarpour³, Soheil Saadat⁴

¹ Iran University of medical sciences, Tehran, Iran

² Department of Neurosurgery, Shariati Hospital, Tehran University of Medical Sciences, Tehran, Iran

³ Department of Neurology, Boston Children's Hospital, Harvard Medical School, United states

⁴ Sina Trauma and Surgery Research Center, Tehran University Medical Sciences, Tehran, Iran

*sshaikhghomi@yahoo.com

Background: Trauma is an inevitable part of every country's healthcare burden. Preventive and rehabilitative aspects of the traumatic injuries are expensive. Since most of the injuries happen in low- and middle-income developing countries, a judicious allocation of the limited resources to the most cost-efficient strategies is necessary.

Objectives: The present study was designed to report the causes of trauma, injured body regions, trauma severity scores, and the one-year survival rate of a randomly selected sample of trauma patients in a major referral hospital in Tehran, Iran.

Materials and Methods: We chose and analyzed a random subgroup of trauma patients admitted during the one-year period from May 2012 to May 2013 to Shariati Hospital, Trauma patients who stayed at the hospital for less than 24 hours were not included.

Results: In total, 73 trauma patients were registered. The mean age was 40.19 (SD 20.34) years and 67.1% of the patients were male. In general, the most common cause of injury was falls (47.9%), followed by road traffic injury (40.8%). Assault and exposure to inanimate mechanical forces each were associated with 5.6% of all injuries.

Our study showed that the most commonly injured body region was the head (23.8%) followed by the elbow and forearm (19%), hip and thigh (15.9%), and multiple body regions (14.3%). The mean injury severity index (ISS) was 7.26 (SD 7.06) and the mean revised trauma score (RTS) was 7.84, calculated for 38 patients. The only cause of injury in ages of more than 65 years was falls. The most common cause of injury in ages 15–45 years was road traffic injury. During the study, 2 deaths occurred with one in the ICU and the other at home.

Conclusion: Our study emphasizes the importance of the preventive strategies for falls in the old age group and road traffic injuries in young males.

Keywords: Body regions, complications, injury, injury severity score, mortality, road traffic crashes