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## Oral Presentation

### A Study on Vertebral Column Trauma Patients Presenting to the Trauma Center of North-West of Iran

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#### Abstract

Spinal traumatic injuries are the major damage which is associated with morbidity and mortality rates. In this study the epidemiological characteristics of spinal trauma and their outcome were investigated. In this cross sectional study, trauma patients who admitted to Imam Reza hospital were included. Their information such as age, sex, type of injury, severity of injury and site of injury was investigated since 1st April 2012 for a 2-year period. Chi-square test has been used to compare the types of injuries associated with outcome and regression methods. The spinal trauma was identified in 105 cases, of which 61.9% was male. Eighteen percent of patients had injury of spinal cord, however, 71.4% of them suffered from various types of spinal column injuries. Motor vehicle accidents are responsible in approximately 70% of cases (48.6% car related & 21.1% motorcycle); as well 14 cases (13.3%) were due to the falling, 10 cases (9.5%) related to pedestrian accidents. There were 5 patients (4.7%) with penetrating trauma to spine and the rest of 2.9% were due to other causes. Six patients died during a 30-day period after trauma. Type of injury, site of injury and injury severity was significantly associated with outcome. Motor vehicles accidents (cars and motorcycles) are the most common cause of spinal trauma in our country. The most effective factors on outcome are severity of primary injury to spine, stability of patient's vital signs and also the type of spinal fractures. According to the achievement of the emergency department in the early diagnosis, appropriate management such as surgery in preventing complications and may improve outcome.

**Keywords:** Trauma, Spine, Emergency department.

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