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Poster Presentation

Incidence of Spinal Cord Injury Caused by Road Traffic Crash in Tehran

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Abstract

Spinal cord injury (SCI) is a devastating condition with enormous personal and social costs. To develop preventive strategies, the determination of epidemiological features and causes is required. Due to Iran's high incidence of road traffic crash (RTC) injuries, epidemiologic data concerning specific causes of SCI may assist in reducing this national health dilemma. In a retrospective study in Tehran hospitals, the records of traumatic SCI patients, admitted between March 2010 and July 2011 were surveyed. A total of 138 traumatic SCI patients were admitted, of which 56 (40.6%) were due to RTC that the majority of them were male (78.6%) and the mean age was 32 ± 15 years. The most common spinal fractures/dislocations due to RTC among SCI patients were related to the thoraco-lumbar region. However, RTC was the most frequent cause of tetraplegia (cervical SCI)-(56%) and also hospital death (OR=3.2, CI=0.9-11.5). Each SCI-RTC patient paid averagely $79,000,000 \pm 56,000,000$ Iranian Rials. Whereas the cervical SCI is the most frequently hospitalized SCI in the developed countries, here, most of cervical SCI patients are passed away in the scene of accident due to inadequate emergency medical services. On the other hand, based on an approved national policy, all medical services are free-of-charge for RTC victims. But the payment of above mentioned huge sums by patients could be related to law breaking in hospitals or weak law enforcement. More studies are suggested to evaluate the incidence of severe RTC injuries which lead to pre-hospital deaths were not considered in our study.

Keywords: Incidence, Spinal Cord Injury, Traffic Accidents.

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