THE UNIVERSITY OF ARIZONA
College of Medicine

Neurosurgery

Penetrating Spinal Cord Injury in civilians: analysis of a national database

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Disclosures

- none

Introduction

- Traumatic injuries are a major cause of morbidity and mortality in young patients.
- Spinal trauma is common in polytrauma.
  - Spinal cord injury (SCI) is present in a subset of these patients
- Penetrating spinal cord injury has not being extensively studied in civilian population.

Methods

- We queried the National Inpatient Sample (NIS) for data regarding penetrating spinal cord injury from the last 10 years (2006 to 2015).
- The NIS includes data of 20% of discharged patients from U. S. hospitals.
- We analyzed trends of penetrating SCI its diagnosis, surgical management, length of stay and hospital costs. The data was processed in a statistical software

Results

- Of the patients with penetrating SCI only 17% of them underwent surgery vs. 56% for non-penetrating SCI.
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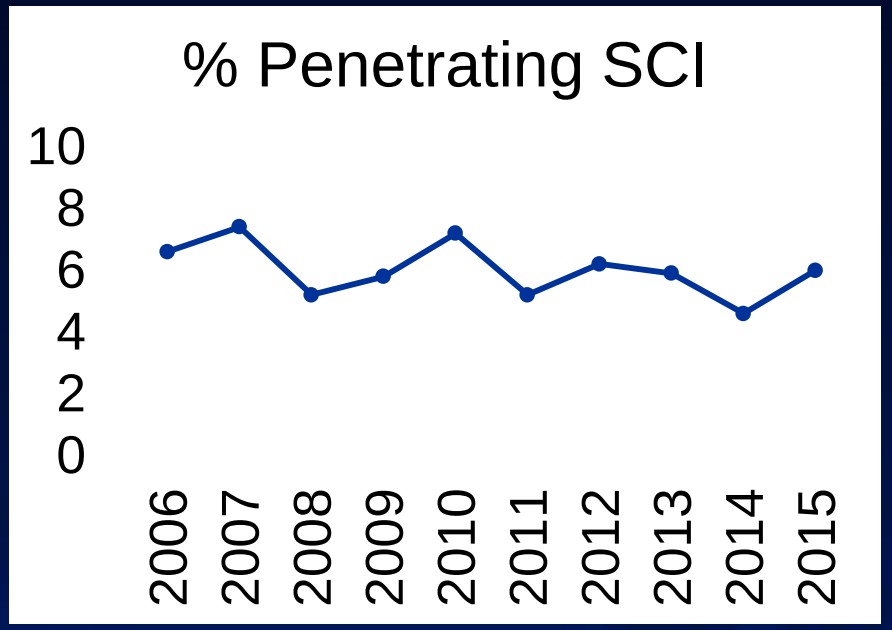
- Patients with penetrating SCI had a longer length of stay (mean 23 days) compared to SCI (mean of 15 days).

- Hospital costs were higher for penetrating SCI, $230,186 compared to $192,022 for closed SCI.



Conclusions

- Penetrating SCI represents 6% of all SCI patients in the NIS database. Patients who suffered a penetrating SCI have fewer surgical interventions for their injury however, their overall length of stay and hospital costs are larger compared to non-penetrating SCI.

- Further studies could help elucidate the difference in hospital costs between these two types of SCI.