عنوان مقاله:

An Update Review of Epidemiology, Anatomy, Classification, Management and Outcome of pediatric Thoracolumbar Spine Trauma

نویسندگان:

Kaveh Haddadi - *Department of Neurosurgery, Spine Fellowship Scholar of Boston University Medical Center, Orthopedic Research Center, Mazandaran University of Medical Sciences, Sari, Iran*

Abhijeet Kadam - *Department of Orthopedics Spine Surgery, Boston University Medical Center, Boston, USA*

Chadi Tannoury - *Department of Orthopedics Spine Surgery, Boston University Medical Center, Boston, USA*

Tony Tannoury - *Department of Orthopedics Spine Surgery, Boston University Medical Center, Boston, USA*

خلاصه مقاله:

Context: The incidence of vertebral column and spinal cord damage in children in the current century is greater than ever. Thoracolumbar fractures are extra numerous in teenagers, the most common reasons are falling from a height and motorcycle accidents. The current study aimed at designing a straightforward assessment of the epidemiology, anatomy, biomechanics, and clinical detection and managing plans for children with thoracolumbar traumas. Evidence Acquisition: Totally, ۸۵ articles conducted from ۱۹۷۰ to ۲۰۱۶ were studied. A total of ۶۳ articles were included in the current pediatric evaluation. But, based on the philosophy of the current study, just newly published studies from ۲۰۰۰ on spinal trauma epidemiology, classification, and management were included. Results: Spinal fractures in pediatrics characterize ۱% or ۲% of all pediatric fractures, and most of the damage comprise the cervical spinal column. The mainstream of thoracolumbar spinal column fractures in the children happen at the age of ۱۴ to ۱۶ years. The most common damaged zone of the spine is T۴ to T۱۲, followed by T۱۲ to L۲ based on the patients` age and type of radiologic classification of trauma, and conservative or surgery treatments may be used for the fractures. Conclusions: Forceful use of computed tomography (CT) scan and magnetic resonance imaging (MRI) can classify delicate thoracolumbar damages and involvement of neural components and offer prognostic data in children with possible neurologic recovery, especially in SCIWORA (spinal cord injury without radiographic abnormality) type of injury. Currently, classification of the thoracolumbar injury and severity scales (TLISS) is generally useful in the adults by means of trauma to define non-operative vs. operative management of spine fractures. This classification is newly considered in the pediatric population, and there are reports on the outstanding validity of this system, similar to adults. Usually, various stable fractures can be cured conservatively, while unstable fractures need surgical stabilization.

کلمات کلیدی:

Pediatric, Thoracolumbar, Spine, Trauma

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