

Pediatric cervical spine injury management

- [A Review of Sports-Related, Life-Threatening Injuries Presenting to Emergency Departments, 2009-18](#)
- [Reducing Computed Tomography in Pediatric Cervical Spine Clearance: A Quality Improvement Study](#)
- [Pediatric Halo Use: Indications, Application, and Potential Complications](#)
- [Current clinical characteristics and Management of Pediatric Traumatic Atlantoaxial Rotatory Subluxation: An American College of Surgeons Trauma Quality Improvement Program analysis](#)
- [Can we do less? A review of imaging practices for evaluating cervical spine injuries in pediatric blunt trauma patients](#)
- [Prospective observational study to assess the performance accuracy of clinical decision rules in children presenting to emergency departments with possible cervical spine injuries: the Study of Neck Injuries in Children \(SONIC\)](#)
- [Pediatric Cervical Spine Injuries: Lessons From a Rare Case of C5/C6 Facet Dislocation in an Adolescent With a Systematic Literature Review](#)
- [Gallie technique in the treatment of odontoid fracture in pediatric: A case report](#)

In pediatric populations, there are no well-established guidelines for cervical spine trauma evaluation and treatment. Currently, there is virtually no literature regarding imaging and management of symptomatic pediatric patients who present with cervical spine trauma without a high-impact mechanism.

Booth 2012 reviewed the current literature as it relates to imaging of the child suspected to have cervical spine injury (CSI) and the imaging findings of pediatric CSI, focusing on strategies to minimize radiation dose while maximizing diagnostic yield.

Although CSI is uncommon in children, the clinical implications of failure to correctly diagnose CSI are significant. Clinical decision rules proven effective in predicting CSI in adults cannot be uniformly applied to children ¹⁾.

Diagnosis

Children injured during sports and recreational activities, focal neurologic findings, neck pain, axial loading impacts, and the possibility of spinal cord injury without radiographic abnormality should guide the diagnostic evaluation for potential cervical spine injuries ²⁾.

The optimal imaging modality for evaluating cervical spine trauma and optimizing management in the pediatric population is controversial.

Cervical Spine Radiography

[Cervical Spine Radiography in Pediatric cervical spine injury.](#)

Cervical spine computed tomography

[Cervical spine computed tomography in Pediatric cervical spine injury.](#)

Cervical Spine Magnetic Resonance Imaging

[Cervical Spine Magnetic Resonance Imaging in Pediatric cervical spine injury.](#)

Transport

Emergency Medical Services (EMS) providers believe that rigid cervical collars and long backboards with soft conforming surfaces provide optimal spinal precautions. There were no consensus beliefs, however, for use of particular precautions based on age and risk factors ³⁾.

¹⁾

Booth TN. Cervical spine evaluation in pediatric trauma. AJR Am J Roentgenol. 2012 May;198(5):W417-25. doi: 10.2214/AJR.11.8150. Review. PubMed PMID: 22528922.

²⁾

Babcock L, Olsen CS, Jaffe DM, Leonard JC; Cervical Spine Study Group for the Pediatric Emergency Care Applied Research Network (PECARN).. Cervical Spine Injuries in Children Associated With Sports and Recreational Activities. Pediatr Emerg Care. 2016 Sep 30. [Epub ahead of print] PubMed PMID: 27749628.

³⁾

Chang CD, Crowe RP, Bentley MA, Janezic AR, Leonard JC. EMS Providers' Beliefs Regarding Spinal Precautions for Pediatric Trauma Transport. Prehosp Emerg Care. 2016 Dec 5:1-10. [Epub ahead of print] PubMed PMID: 27918863.

From:
<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:
https://neurosurgerywiki.com/wiki/doku.php?id=pediatric_cervical_spine_injury_management

Last update: **2024/06/07 02:54**

