

Subaxial Cervical Spine Injury Classification

- [Comprehensive Review of Multidetector Computed Tomography \(MDCT\) in the Assessment of Blunt Cervical Spine Trauma in Adults](#)
- [Surgical Management of Facet Fracture Dislocations of the Subaxial Spine: A Retrospective Cohort Study](#)
- [Treatment Strategy for Subaxial Minimal Facet/Lateral Mass Fractures: A Comprehensive Clinical Review](#)
- [Anterior cervical discectomy and fusion for subaxial cervical spine injuries; management challenges and early outcome in a neurosurgical center](#)
- [Pediatric Cervical Spine Trauma: A Narrative Review](#)
- [Validation of the Subaxial Cervical Spine Injury Classification score in children: a single-institution experience at a level 1 pediatric trauma center](#)
- [Safety of tranexamic acid in surgically treated isolated spine trauma](#)
- [Outcome and complications of operatively treated subaxial cervical spine injuries: A population-based retrospective cohort study](#)

[Subaxial cervical AO Spine Injury Score.](#)

see also [Subaxial cervical spine dislocation.](#)

see [Pediatric Subaxial Cervical Spine Injury](#)

Allen-Ferguson, Harris, Argenson, AOSpine, [Subaxial Cervical Spine Injury Classification \(SLIC\)](#), Subaxial Cervical Spine Injury Classification (CISISS)

The AOSpine classification was the most teachable. Among numeric scales, SLIC demonstrated better results. The successful application of these classifications by residents and junior neurosurgeons was possible after a short educational course. The use of these scales in educational cycles at the stage of residency can significantly simplify the communication between specialists, especially at the stage of patient admission ¹⁾

Previously, the most commonly used classifications of [cervical fractures](#) were those of Allen-Ferguson ²⁾ and AO. More recently, the [Subaxial Injury Classification \(SLIC\)](#) ³⁾ has added neurological status as another factor to consider.

The Allen-Ferguson classification was one of the first classifications to be used, but its importance today is only historical. It divides injuries into six types ⁴⁾.

Compression-flexion, vertical compression, distraction-flexion, compression-extension, distraction-extension, and lateral flexion ⁵⁾.

AOSpine subaxial cervical spine injury classification system

see [AOSpine subaxial cervical spine injury classification system](#).

Subaxial Injury Classification (SLIC)

see [Subaxial Injury Classification](#) (SLIC).

The Scale was created to remedy the lack of consensus among classification groups.

Subaxial Cervical Spine Injury Classification (CSISS)

Allen and Ferguson classification of subaxial cervical spine injury

see [Allen and Ferguson classification of subaxial cervical spine injury](#).

Few classifications have been proposed to describe injuries of the cervical spine for several reasons. First, to delineate the best treatment in each case; second, to determinate an accurate neurological prognosis, and third, to establish a standard way to communicate and describe specific characteristics of cervical injuries patterns. Classical systems are primarily descriptive and no single system has gained widespread use, largely because of restrictions in clinical relevance and its complexity ⁶⁾.

A study of 165 cases demonstrates the various spectra of injury, called phylogenies, and develops a classification based on the mechanism of injury. The common groups are compressive flexion, vertical compression, distractive flexion, compressive extension, distractive extension, and lateral flexion. The probability of an associated neurologic lesion relates directly to the type and severity of cervical spine injury. With use of the classification, it is possible to formulate a rational treatment plan for injuries to the cervical spine ⁷⁾.

Cervical locked facet

[Cervical locked facet](#).

Subaxial isolated anterior osteophyte fracture

Subaxial isolated anterior osteophyte fracture

1)

Grin A, Lvov I, Talypov A, Kordonskiy A, Khushnazarov U, Krylov V. Teachability of lower cervical spine injury classifications. Neurocirugia (Astur : Engl Ed). 2023 Mar-Apr;34(2):80-86. doi: 10.1016/j.neucie.2022.02.010. Epub 2023 Feb 6. PMID: 36754758.

2) 5)

Allen BL, Jr, Fergusson RL, Lehmann TR, O'Brien RP. A mechanistic classification of closed, indirect fractures and dislocations of the lower cervical spine. Spine (Phila Pa 1976) 1982;7(1):1-27.

3)

Dvorak MF, Fisher CG, Fehlings MG, Rampersaud YR, Oner FC, Aarabi B, et al. The surgical approach to subaxial cervical spine injuries: an evidence-based algorithm based on the SLIC classification system. Spine (Phila Pa 1976) 2007;32(23):2620-9.

4)

Ferro FP, Borgo GD, Letaif OB, Cristante AF, Marcon RM, Iutaka AS. Espondilolistese traumática do eixo: epidemiologia, conduta e evolução [Traumatic spondylolisthesis of the axis: epidemiology, management and outcome] Acta Ortop Bras. 2012;20(2):84-7.

6)

Martínez-Pérez R, Fuentes F, Alemany VS. Subaxial cervical spine injury classification system: is it most appropriate for classifying cervical injury? Neural Regen Res. 2015 Sep;10(9):1416-7. doi: 10.4103/1673-5374.165508. PubMed PMID: 26604900; PubMed Central PMCID: PMC4625505.

7)

Allen BL Jr, Ferguson RL, Lehmann TR, O'Brien RP. A mechanistic classification of closed, indirect fractures and dislocations of the lower cervical spine. Spine (Phila Pa 1976). 1982 Jan-Feb;7(1):1-27. PubMed PMID: 7071658.

From:

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

Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=subaxial_cervical_spine_injury_classification

Last update: **2024/06/07 02:56**

