

# Spine Case Review

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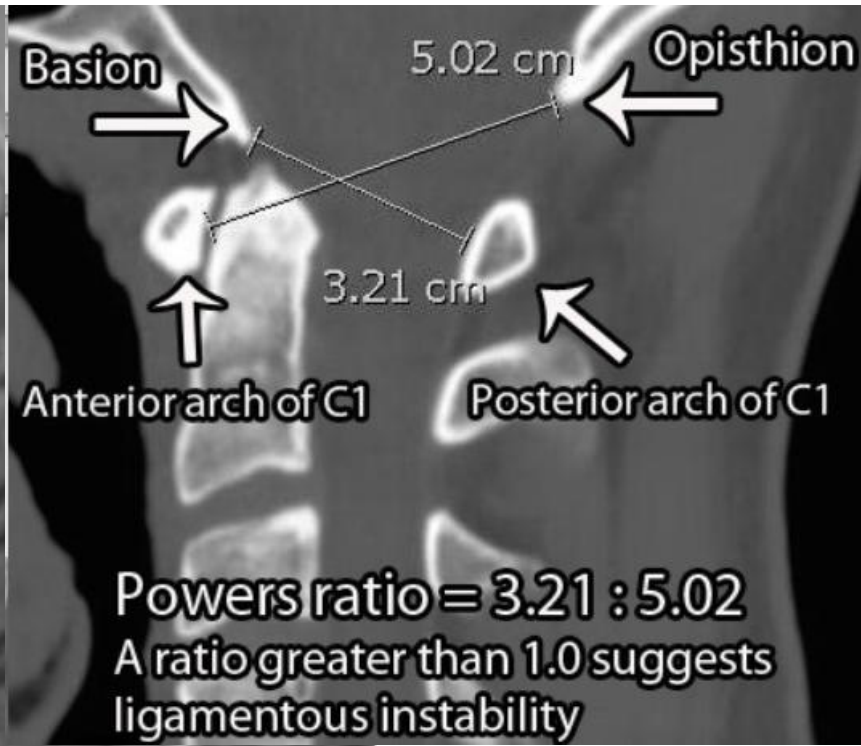


# Case

- 4 year old F
- No pmh
- Ejected from vehicle after an MVC
- C collar placed in the field and intubated for altered mental status
- Vitals:
  - HR 60, SBP 50/30 Vented

# Case

- Neurological Examination - quadriplegia

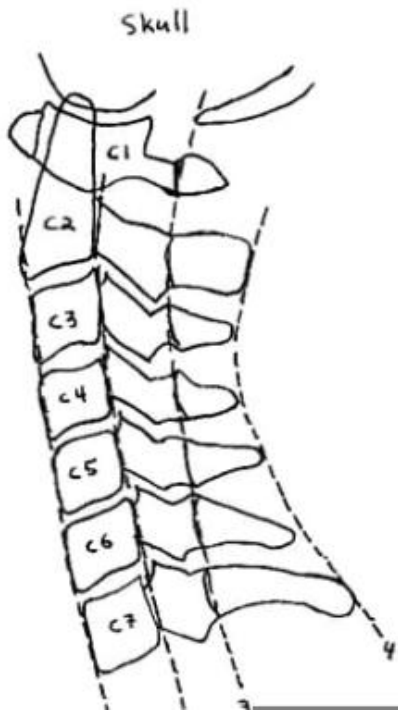


# Case

- 10 year old F
- No pmh
- Involved in auto vs ped
- C collar placed in the field
- Vitals wnl

# Case



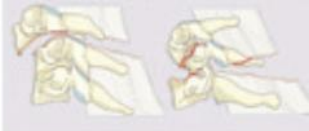






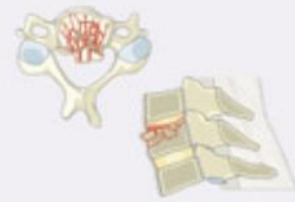

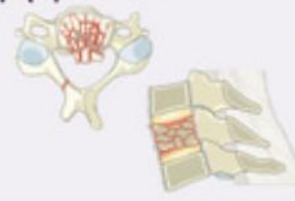


- Neurological examination:
  - Midline neck pain, + tingling in the right posterior arm into the forearm



VS.



# Case

Type A Compression Injuries	Type B Tension Band Injuries	Type C Translation Injuries
<b>A0</b> Minor, nonstructural fractures 	<b>B1</b> Posterior tension band injury (bony) 	<b>C</b> Translational injury in any axis-displacement or translation of one vertebral body relative to another in any direction 
<b>A1</b> Wedge-compression 	<b>B2</b> Posterior tension band injury (bony capsuloligamentous, ligamentous) 	<b>Type F Facet Injuries</b> <b>F1</b> Nondisplaced facet fracture 
<b>A2</b> Split 	<b>B3</b> Anterior tension band injury 	<b>F2</b> Facet fracture with potential for instability 
<b>A3</b> Incomplete burst 		<b>F3</b> Floating lateral mass 
<b>A4</b> Complete burst 	<b>BL Bilateral Injuries</b> <b>BL</b> Bilateral injury 	<b>F4</b> Pathologic subluxation or perched/dislocated facet 

Subaxial Injury Classification (SLIC) and Severity Score			
Category	Parameter	Description	Points
1	Injury morphology	Compression	1
		Burst	2
		Distraction	3
		Rotation/translation	4
2	DLC* integrity	Intact	0
		Suspected disruption	1
		Disruption	2
3	Neurological status	Intact	0
		Nerve root injury	1
		Complete cord injury	2
		Incomplete cord injury	3
		Persistence cord injury <sup>#</sup>	+1
Total points		Management	
1-3		Non-surgical	
4		Surgical or non-surgical	
5-10		Surgical	

\* DLC = discoligamentous complex

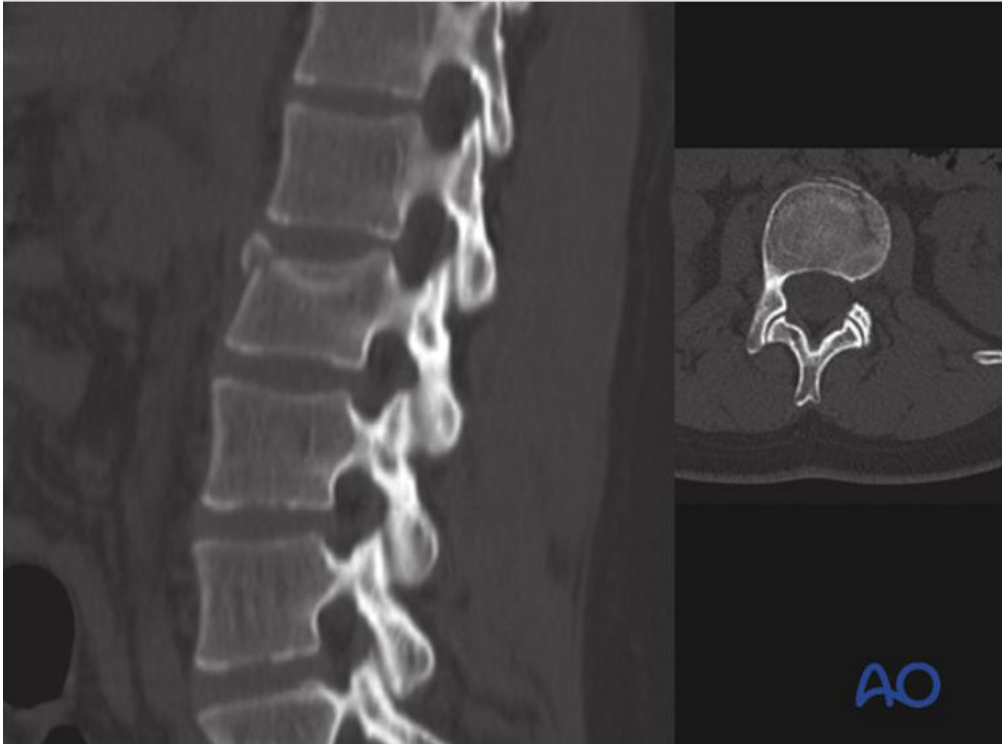
<sup>#</sup> Neuro modifier = continuous cord compression in the setting of a neurologic deficit

# Case

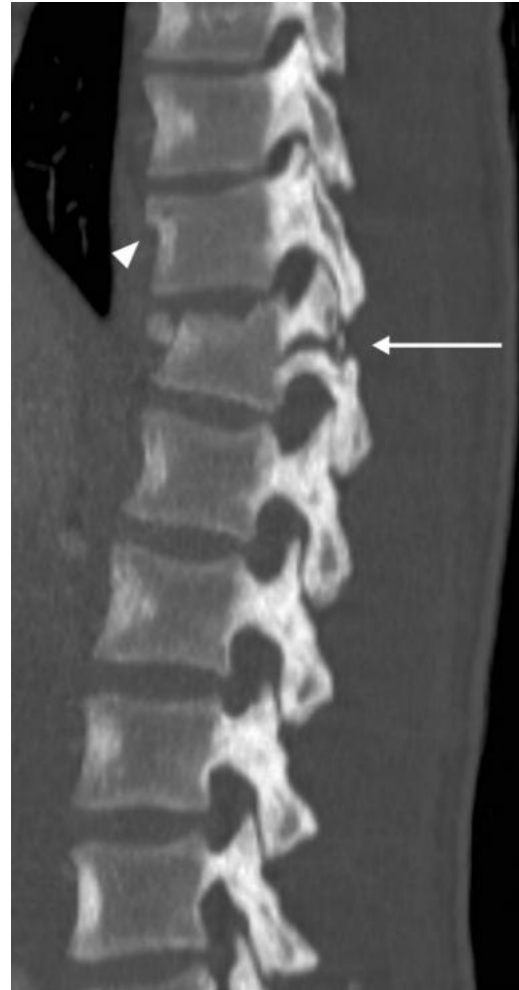
- 15 year old M
- No pmh
- Fell off a car while car surfing, no LOC
- Neurological exam: persistent LBP, otherwise had transient lower extremity weakness that has since resolved with persistent numbness.



# Case



VS.

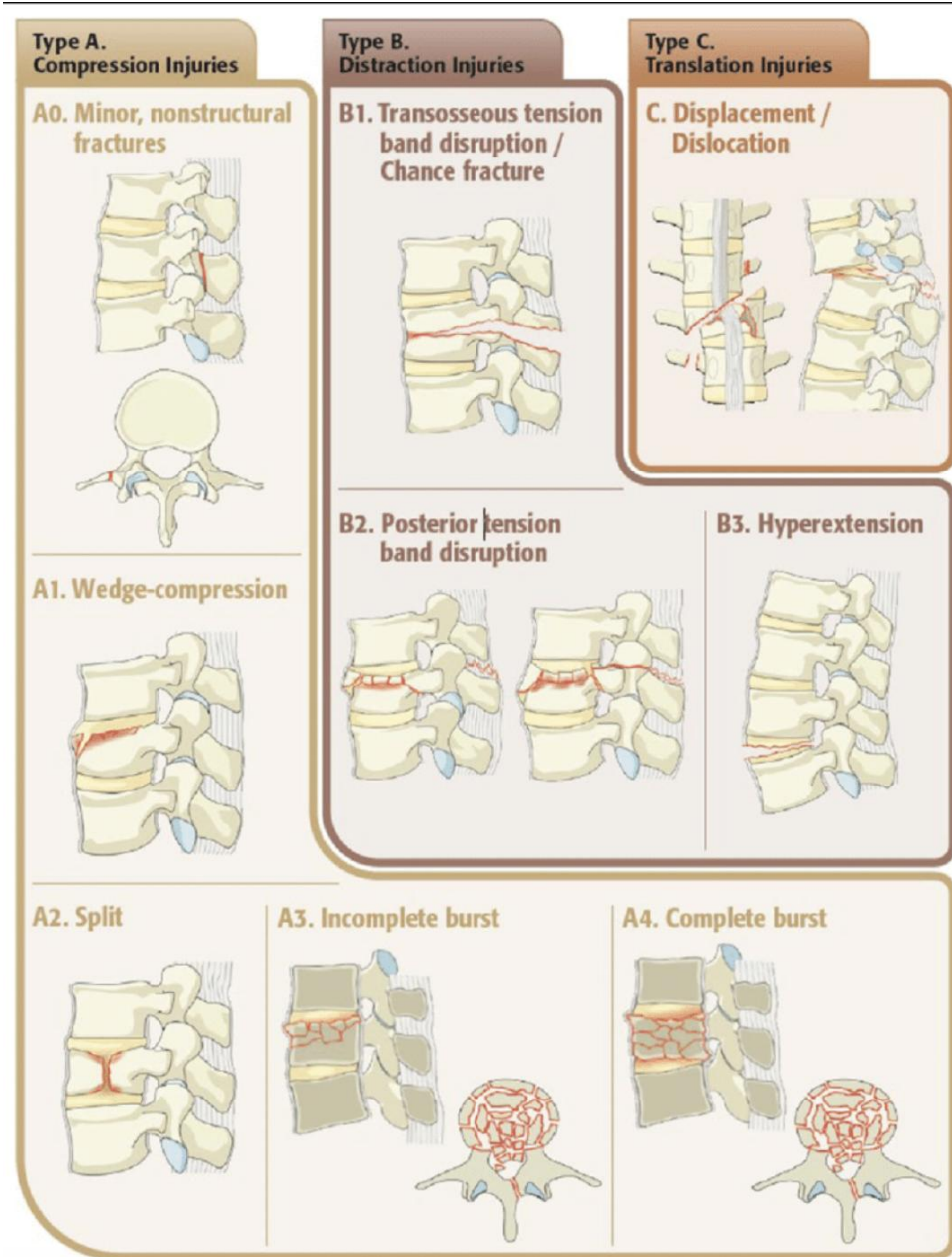


VS.





# Case



TLICS 3 independent predictors				
1	<b>Morphology</b> immediate stability	<ul style="list-style-type: none"> <li>- Compression</li> <li>- Burst</li> <li>- Translation/rotation</li> <li>- Distraction</li> </ul>	1 2 3 4	<ul style="list-style-type: none"> <li>- Radiographs</li> <li>- CT</li> </ul>
2	<b>Integrity of PLC</b> longterm stability	<ul style="list-style-type: none"> <li>- Intact</li> <li>- Suspected</li> <li>- Injured</li> </ul>	0 2 3	- MRI
3	<b>Neurological status</b>	<ul style="list-style-type: none"> <li>- Intact</li> <li>- Nerve root</li> <li>- Complete cord</li> <li>- Incomplete cord</li> <li>- Cauda equina</li> </ul>	0 2 2 3 3	- Physical examination
<b>Predicts</b>		<ul style="list-style-type: none"> <li>- Need for surgery</li> </ul>	0 – 3 4 > 4	<ul style="list-style-type: none"> <li>- nonsurgical</li> <li>- surgeon's choice</li> <li>- surgical</li> </ul>