

# **AO Spine Upper Cervical Injury Classification System**

#### I. Occipital Condyle and Craniocervical junction

II. C1 Ring and C1-2 Joint

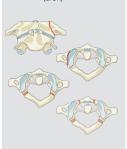
## III. C2 and C2-3 Joint

Type A

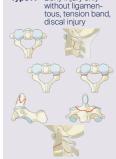
Type A Isolated bony injury (condyle)



Type A Isolated bony only (arch)



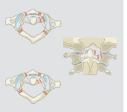
Bony injury only



Type B Non-displaced ligamentous injury (craniocervical)



Type B Ligamentous injury (transverse atlantal ligament)



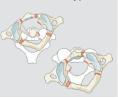
Type B Tension band / Ligamentous injury with or without bony



Type C Any injury with displacement on spinal imaging



Type C Atlantoaxial instability / Translation in any plane



Type C Any injury that leads to vertebral body translation in any directional plané



# AO Spine Upper Cervical Injury Classification System

## **Upper Cervical Spine Fractures Overview**

 I. Occipital condyle and occipital cervical joint complex injuries

II. C1 ring and C1-2 joint complex injuries

III. C2 and C2-3 joint complex injuries

### Type A

#### Bony injury only

- Without significant ligamentous, tension band, discal injury

  Stable injuries
- · Stable injuries

## Type B

Tension band/ ligamentous injury

- With or without bony injury
- No complete separation of
- anatomic integrity
- Stable or unstable depending on injury specifics

#### Type C

Translation injury

- Any injury with significant translation in any directional plane and separation of anatomic integrity
- · Unstable injuries

## Neurology

rveurology		
Туре	Neurological	
N0	Neurology intact	
N1	Transient neurologic deficit	
N2	Radicular symptoms	
N3	Incomplete spinal cord injury or any degree of cauda equina injury	
N4	Complete spinal cord injury	
NX	Cannot be examined	
+	Continued spinal cord compression	

## Modifiers

Туре	Description	
M1	Injuries at High Risk of Non-Union with Nonoperative Tx	
M2	Injury with significant potential for instability	
МЗ	Patient Specific Factors Affecting Tx	
M4	Vascular Injury or Abnormality Affecting Tx	

# Classification Nomenclature

Atlanto-occipital dissociation with a complete spinal cord injury.



