AO Spine Upper Cervical Injury Classification System

I. Occipital Condyle and Craniocervical junction

Type A
- Isolated bony injury (condyle)

Type B
- Non-displaced ligamentous injury (craniocervical)

Type C
- Any injury with displacement on spinal imaging

II. C1 Ring and C1-2 Joint

Type A
- Isolated bony only (arch)

Type B
- Ligamentous injury (transverse atlantal ligament)

Type C
- Atlantoaxial instability / Translation in any plane

III. C2 and C2-3 Joint

Type A
- Bony injury only without ligamentous, tension band, discal injury

Type B
- Tension band / Ligamentous injury with or without bony injury

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

Upper Cervical Spine Fractures Overview

Type A
- Bony injury only
  - Without significant ligamentous, tension band, discal injury
  - 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
- Any injury with displacement on spinal imaging

Neurology

Type
- Neurological
  - N0: Neurological intact
  - N1: Transient neurologic deficits
  - N2: Radicular symptoms
  - N3: Incomplete spinal cord injury or any degree of cauda equina injury
  - N4: Complete spinal cord injury
  - NX: Cannot be examined
  - N: Transient neurologic deficit

Classification Nomenclature

Atlanto-occipital dissociation with a complete spinal cord injury.

Type: OC Type C1, N4

Further information:
www.aospine.org/classification