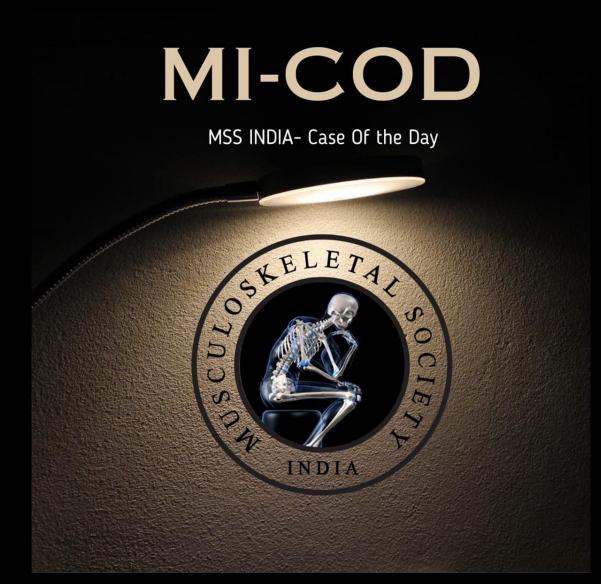
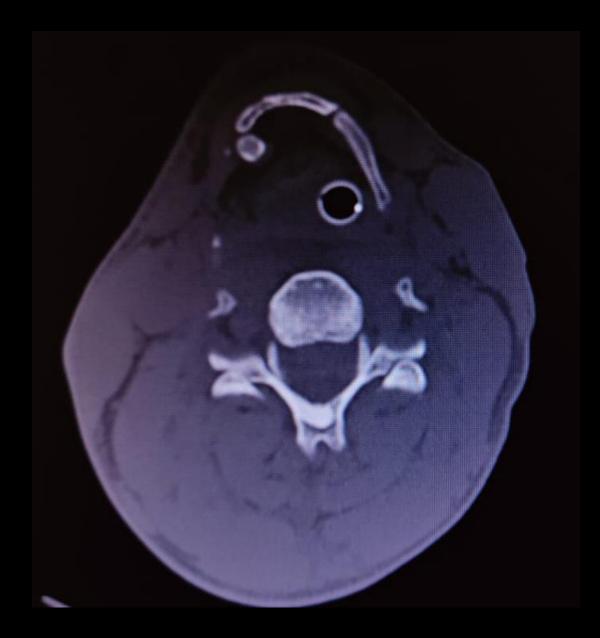
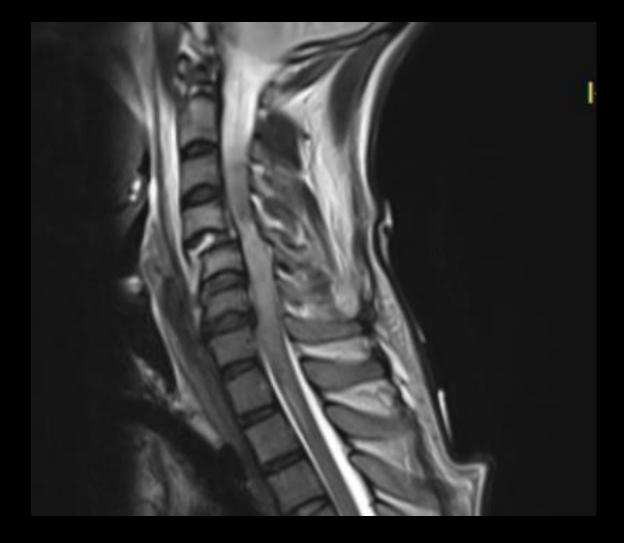
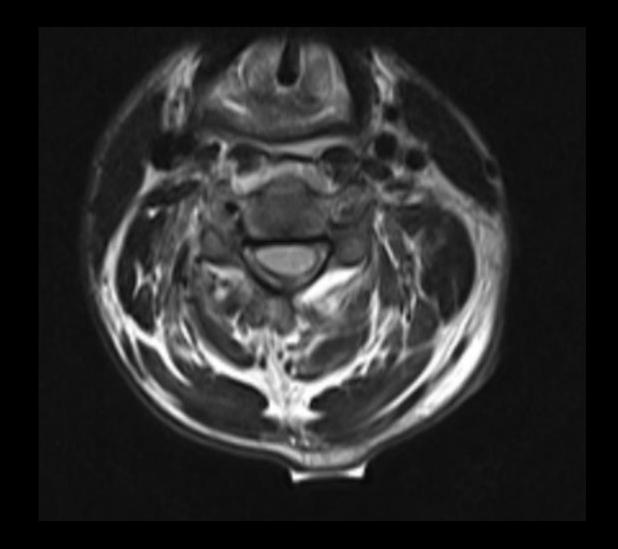
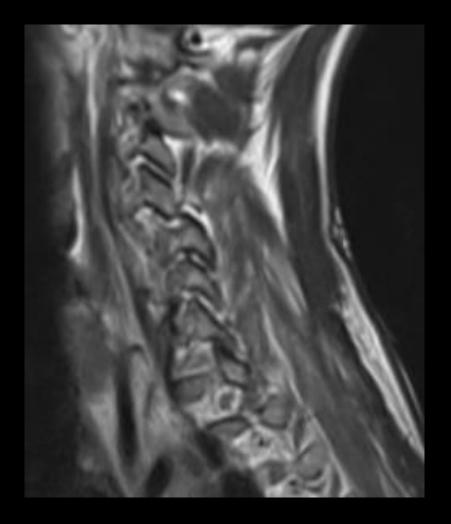
### MICOD –01/07/2024 Case contributor – Dr. Sonal Saran

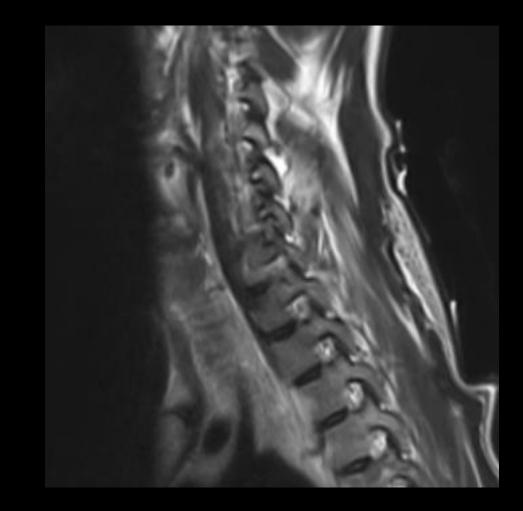


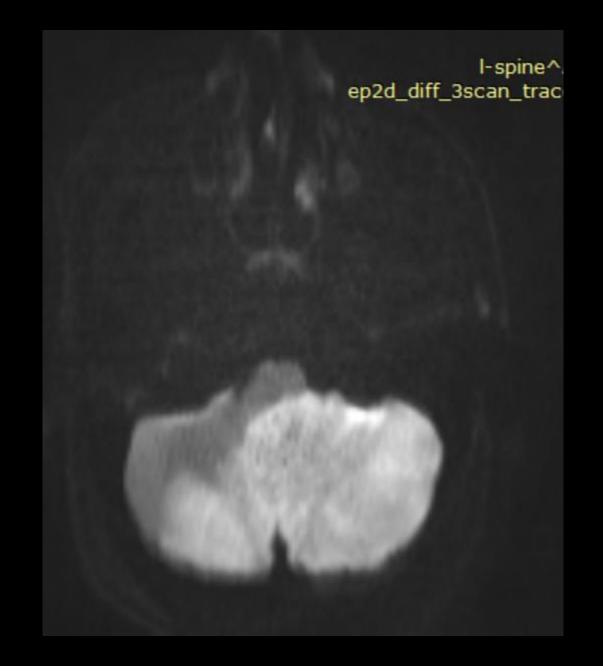












# Diagnosis??

- Transition injury of C4 over C5 vertebra with compressive myelopathy and disrupted disco-ligamentous complex. B/l dislocated facet joints at C4-5 level.
  - -loss of flow in It vertebral artery.
  - -infarcts in b/l cerebellar hemispheres, dorsal medulla and cervicomedullary junction.
  - -#of ivd, all/pll, interspinous and supraspinous ligament at C5.

**CLINICALLY** : AO TYPE C fracture at C4-5 with ASIA A neurology.

## **Bilateral Perched Facets**

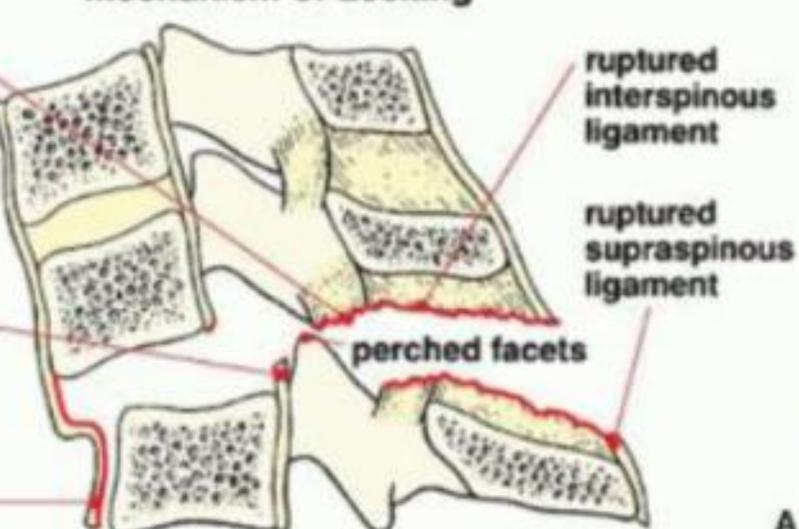
- This type of vertebral subluxation occurs as a result of a flexion injury.
- There is disruption of the posterior ligamentous complex, and the inferior and superior articular processes of the involved vertebrae are in apposition.
- The shingled appearance of the facet joints is changed to a configuration in which the laminar cortices intersect at one point.

#### Mechanism of Locking

ruptured ligamentum flavum

ruptured posterior longitudinal ligament

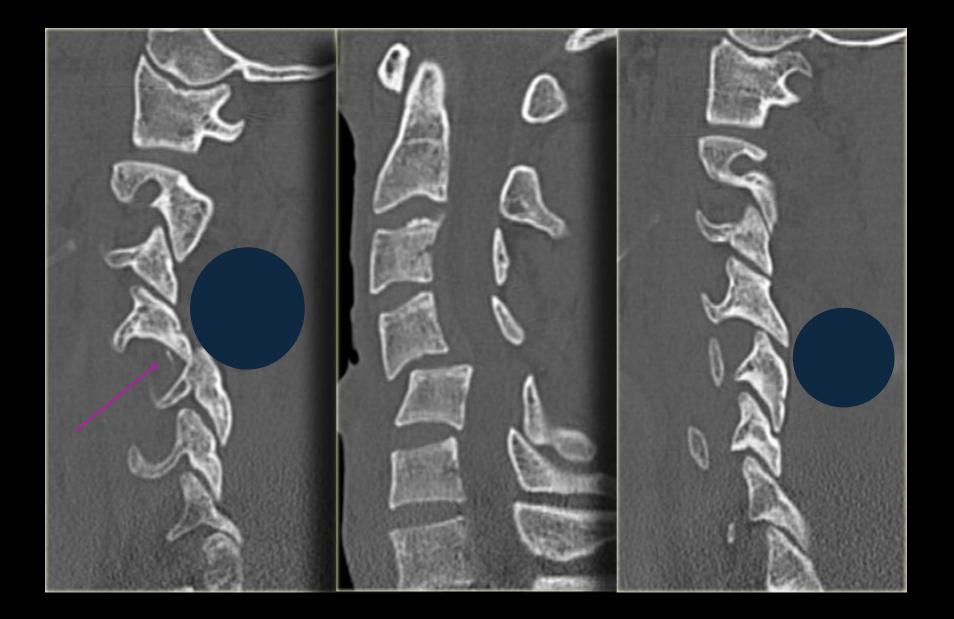
detached anterior longitudinal ligament



## Facet joint

## **Unilateral Locked Facets**

- This type of injury is secondary to the flexion-rotation force with subsequent *tearing of the joint capsule of one facet and posterior ligamentous complex.*
- In the absence of disc space widening or subluxation, unilateral facet locking is a relatively stable injury.
- Frequently, however, there is approximately 25% anterior subluxation sustaining nerve root injury , rarely, a Brown-Sequard type spinal cord injury.

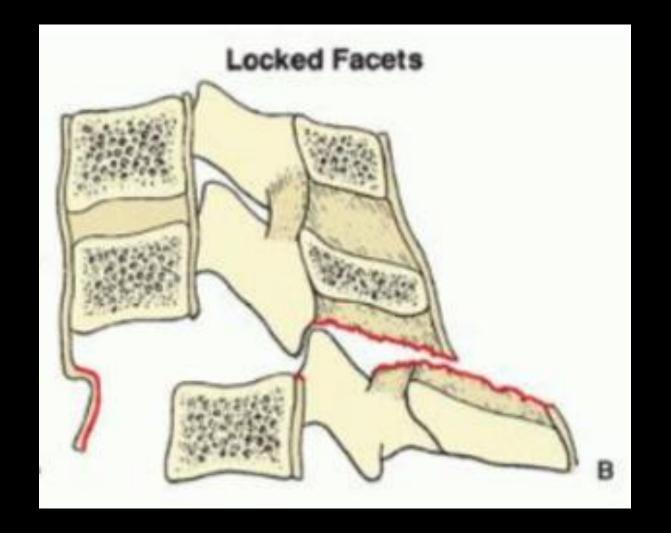




## **Bilateral Locked Facets**

- Bilateral dislocation of the cervical spine in the facet joints is the result of extreme flexion unstable -extensive disruption of the posterior ligament complex.
- Interlocking of the articular facets is initiated by the forward movement of the inferior articular facet of the upper vertebra over the superior articular facet of the underlying vertebra.
- This causes the lamina and spinous process of the two adjacent vertebrae to spread apart and the <u>vertebral bodies to sublux.</u>

- Later, inferior articular facet of the upper vertebra locks in front of the superior articular facet of the lower vertebra, which results in complete anterior dislocation.
- The configuration of this injury leads to complete disruption of the posterior ligament complex, the posterior longitudinal ligament, the annulus fibrosus, and anterior longitudinal ligament.
- It is also associated with a high incidence of cervical spinal cord damage.



## THANKYOU