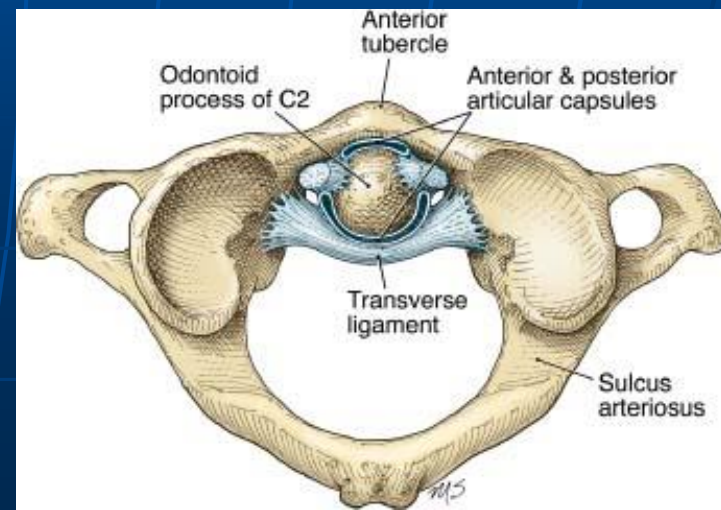


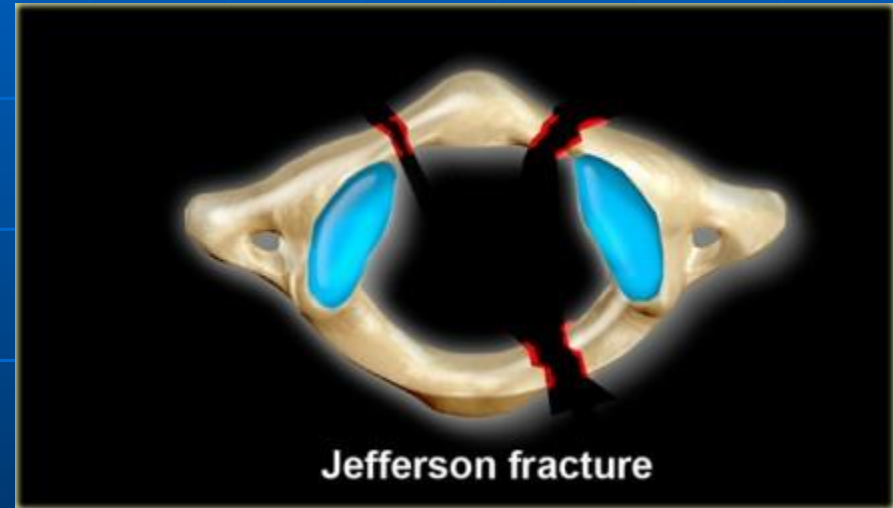
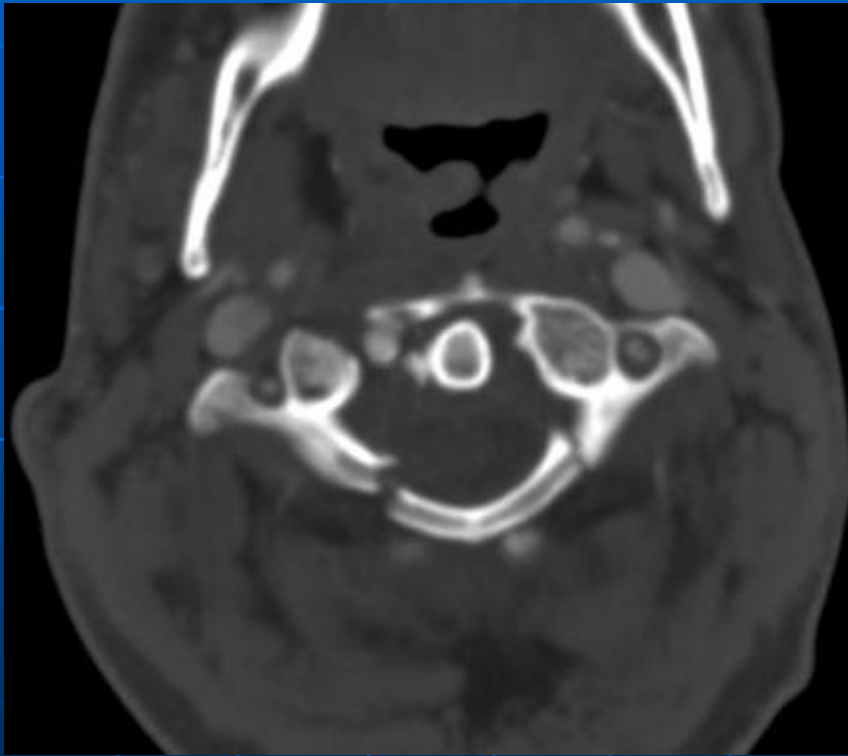
Jefferson fracture

- Compressive downward force that is transmitted evenly through the occipital condyles to the superior articular surfaces of the lateral masses of C1.
- This process displaces the masses laterally and causes fractures of the anterior and posterior arches, along with possible disruption of the **transverse ligament**.
- Radiographically the fracture is characterized by bilateral lateral displacement of the articular masses of C1.



Treatment

- Typically treated conservatively (hard collar immobilisation) provided the transverse atlantal ligament is considered intact (no widening of the atlanto-dens interval or intact ligament visualised on MRI).
- In cases where the ligament is thought to be disrupted, the injury is considered unstable and more aggressive management is usually required . This includes halo immobilisation, posterior C1-C2 lateral mass internal fixation or transoral internal fixation.



Jefferson Fracture

