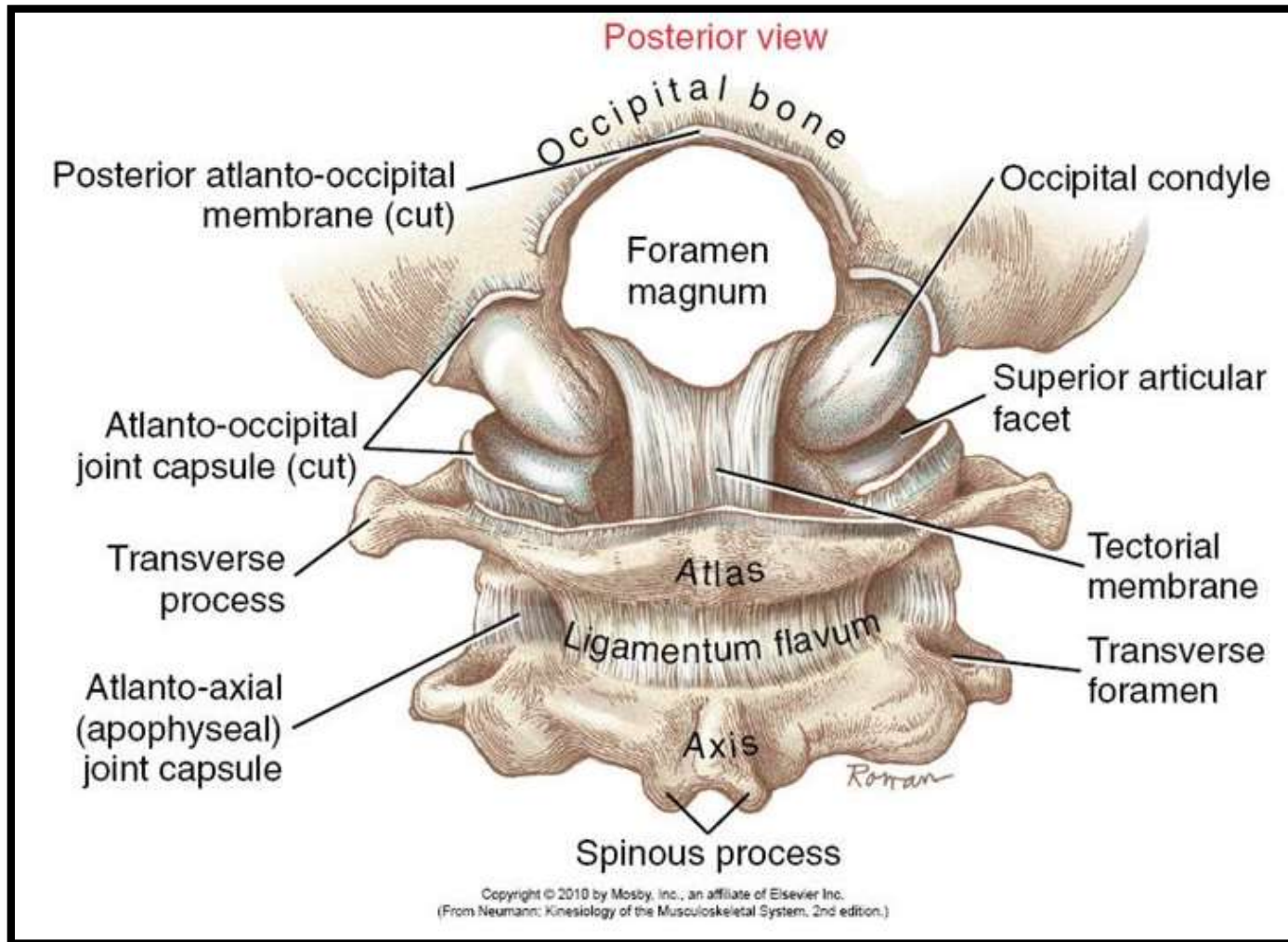


Craniovertebral Joints & Joints of Cervical Vertebral Column

Presented by :- Dr. Sushma Tomar
Associate Professor
Department of Anatomy

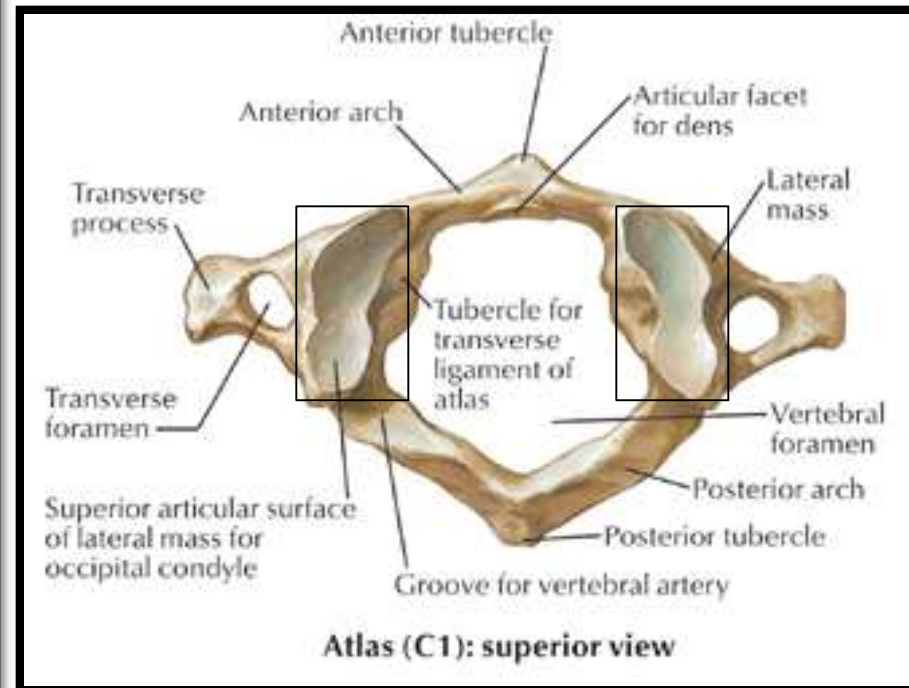
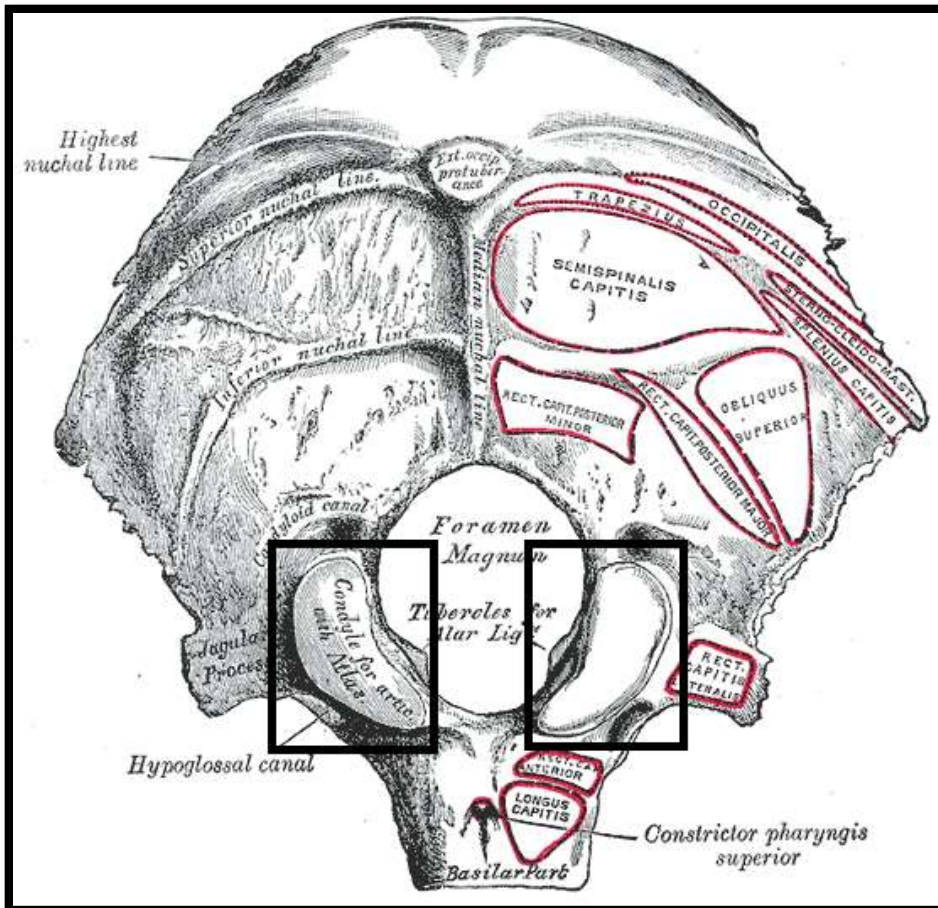
Craniovertebral Joints

- Atlanto-occipital joints.
- Atlanto-axial joints.

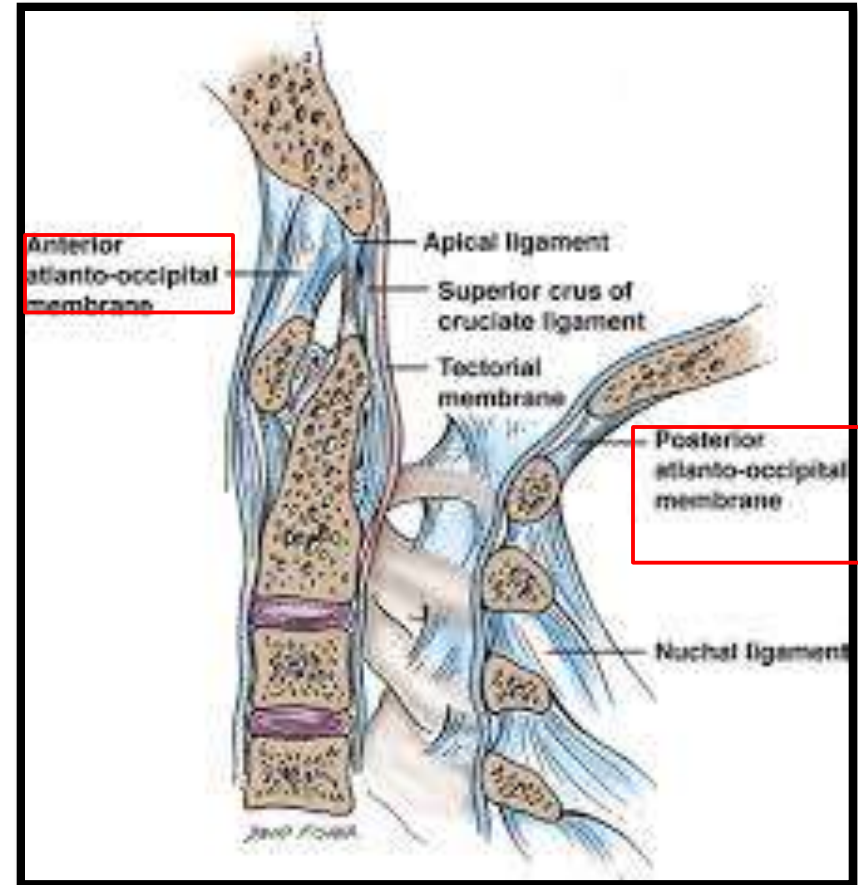
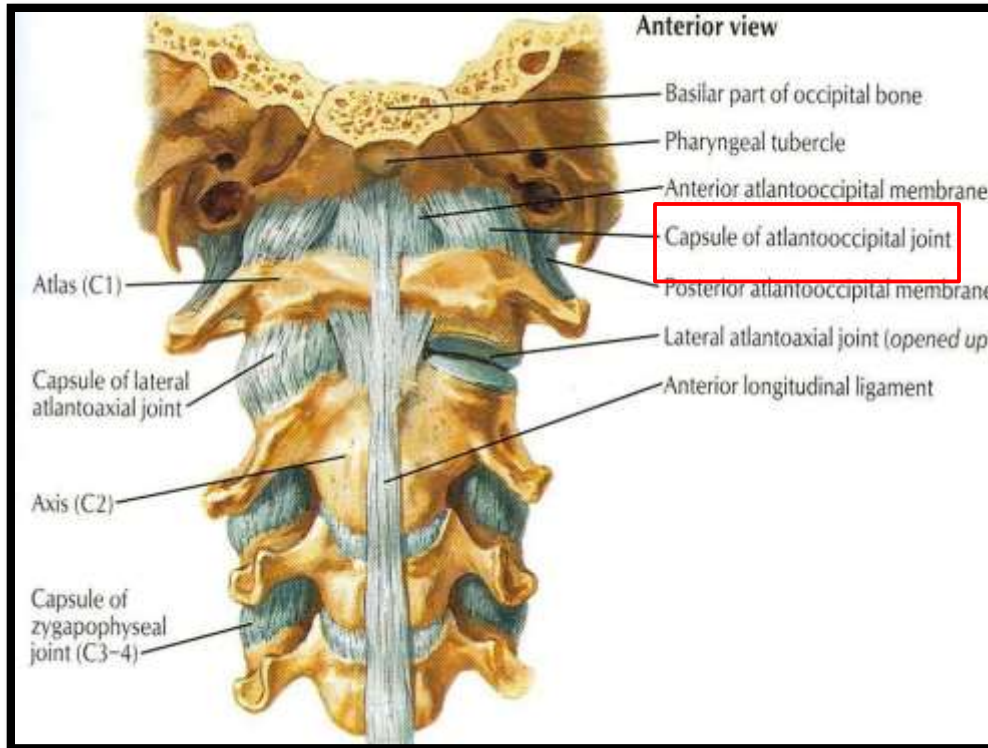


Atlanto-occipital joints- Articular Surfaces

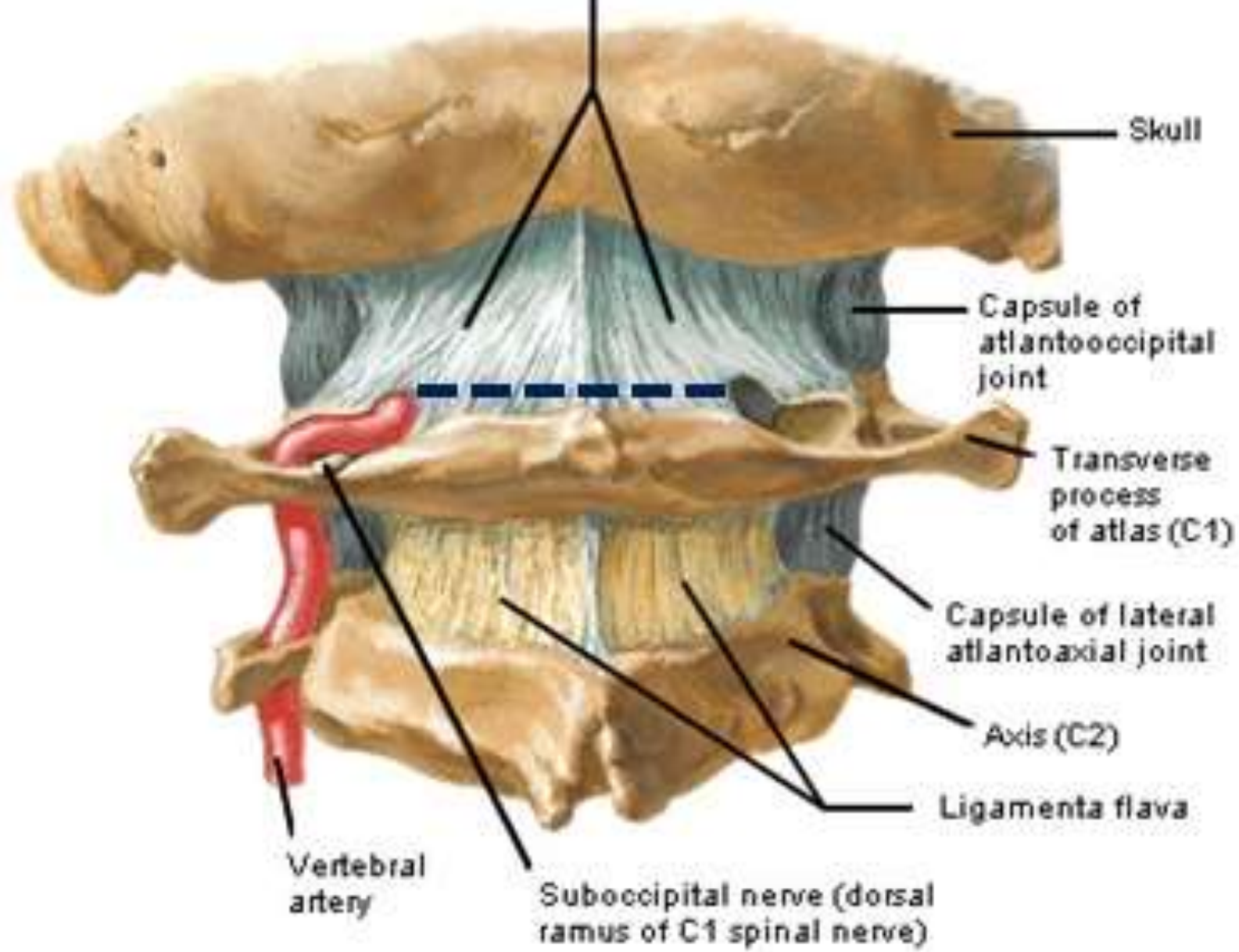
❖ Synovial joints of **ellipsoid** variety



Atlanto-occipital joints-Ligaments

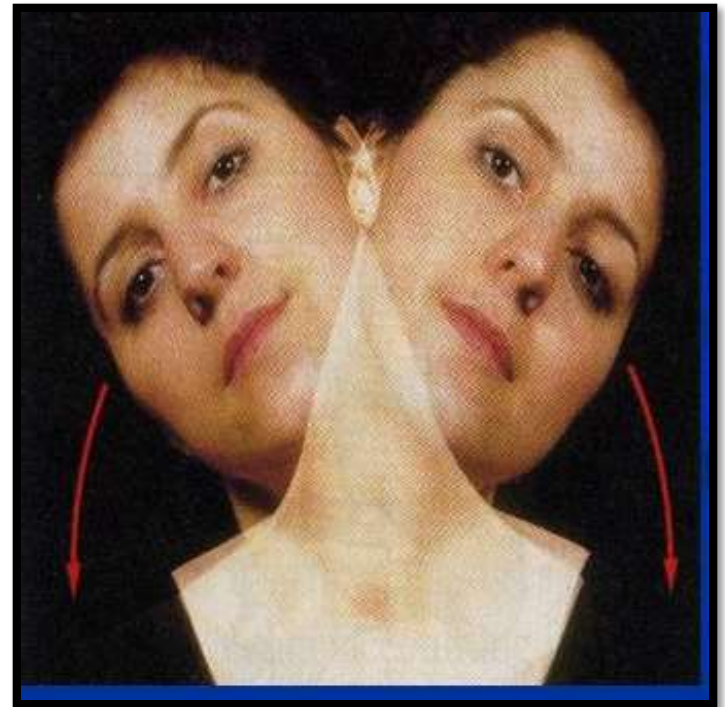


Posterior atlantooccipital membrane



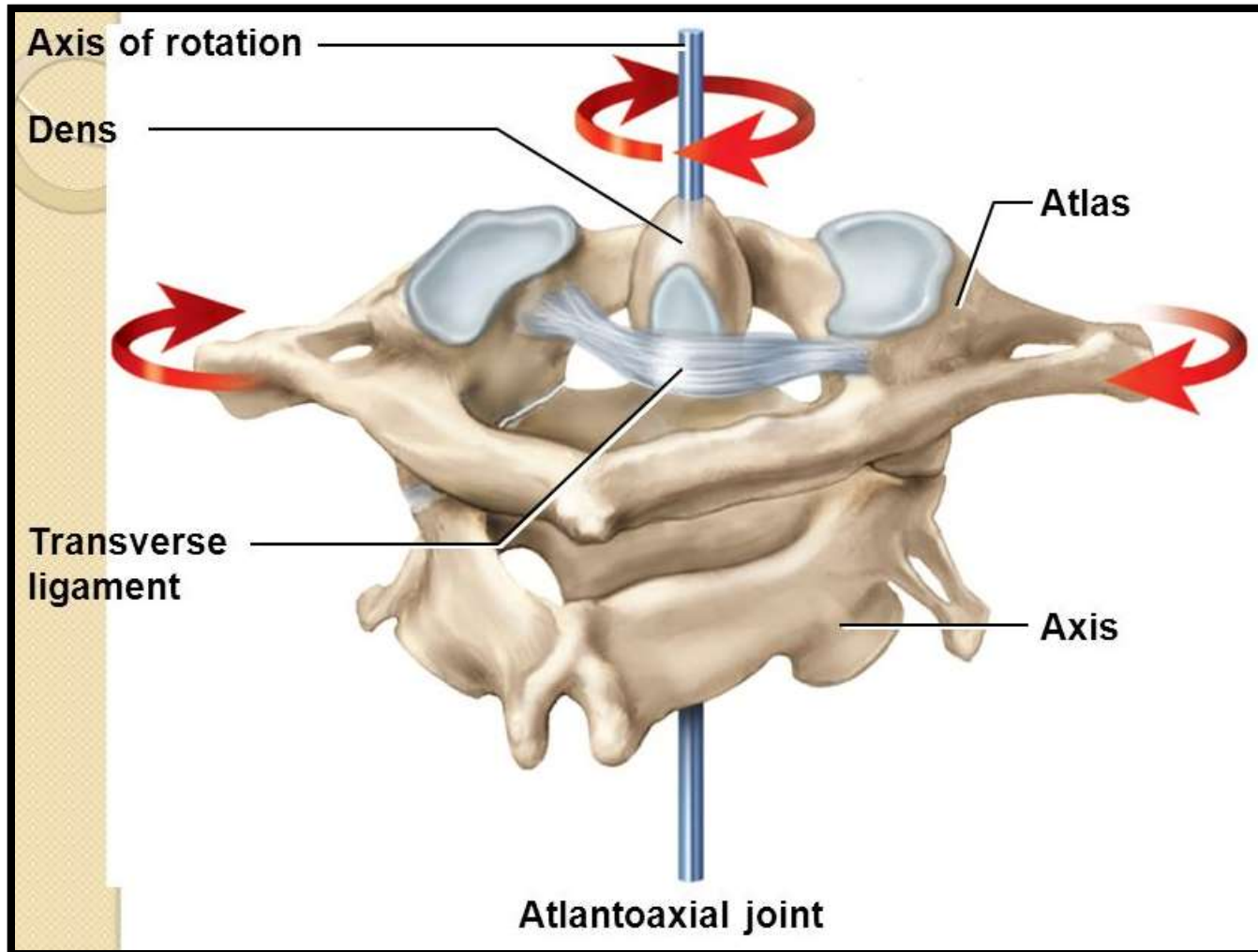
Movements at Atlanto-occipital joints

- Flexion & Extension (**Nodding** or **'YES'** movements).
- Lateral Flexion



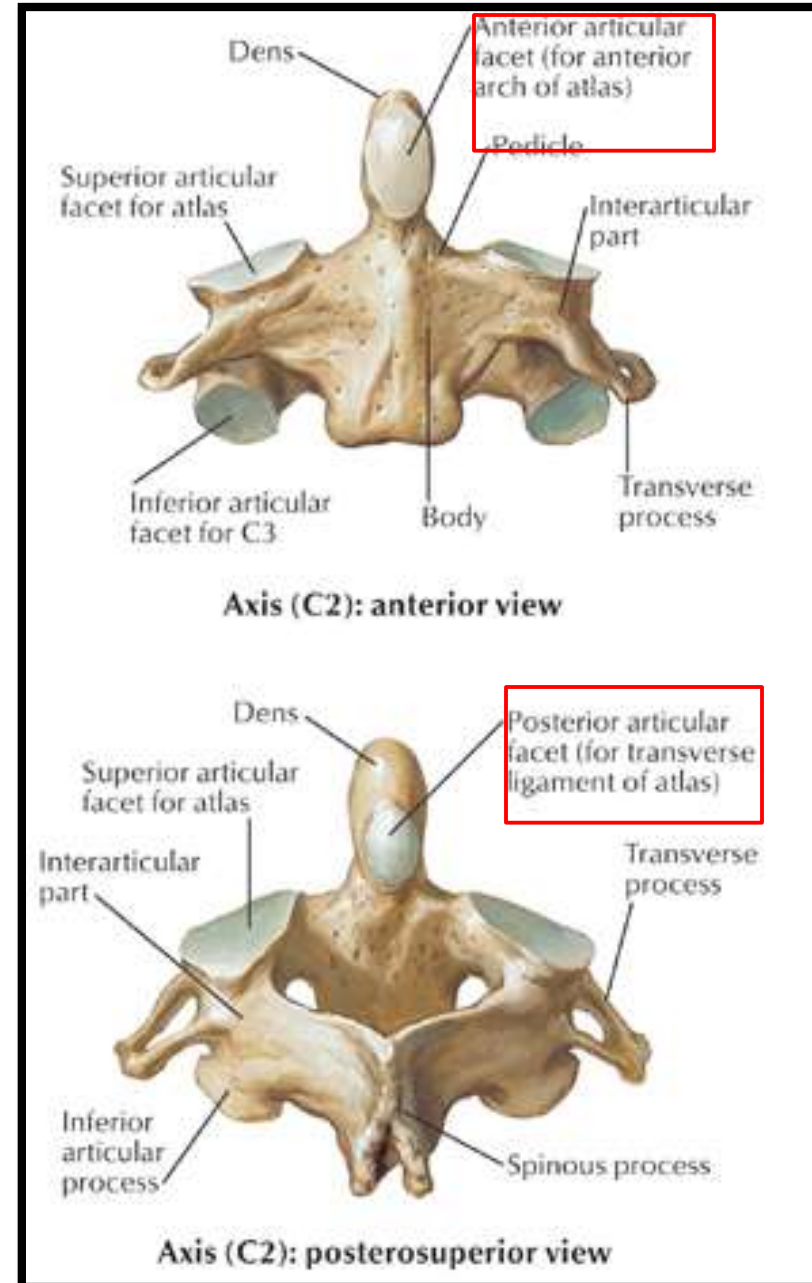
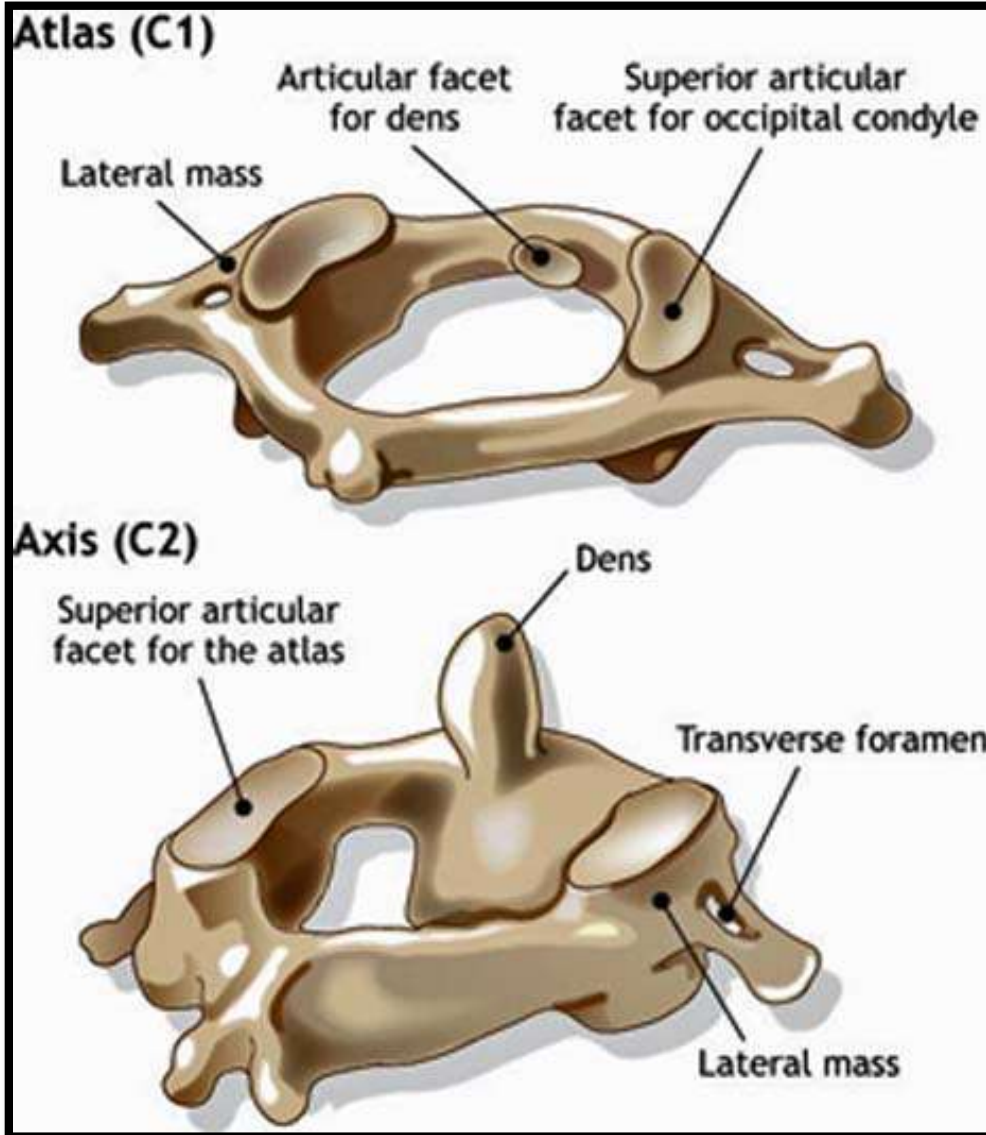
Atlanto-axial joints

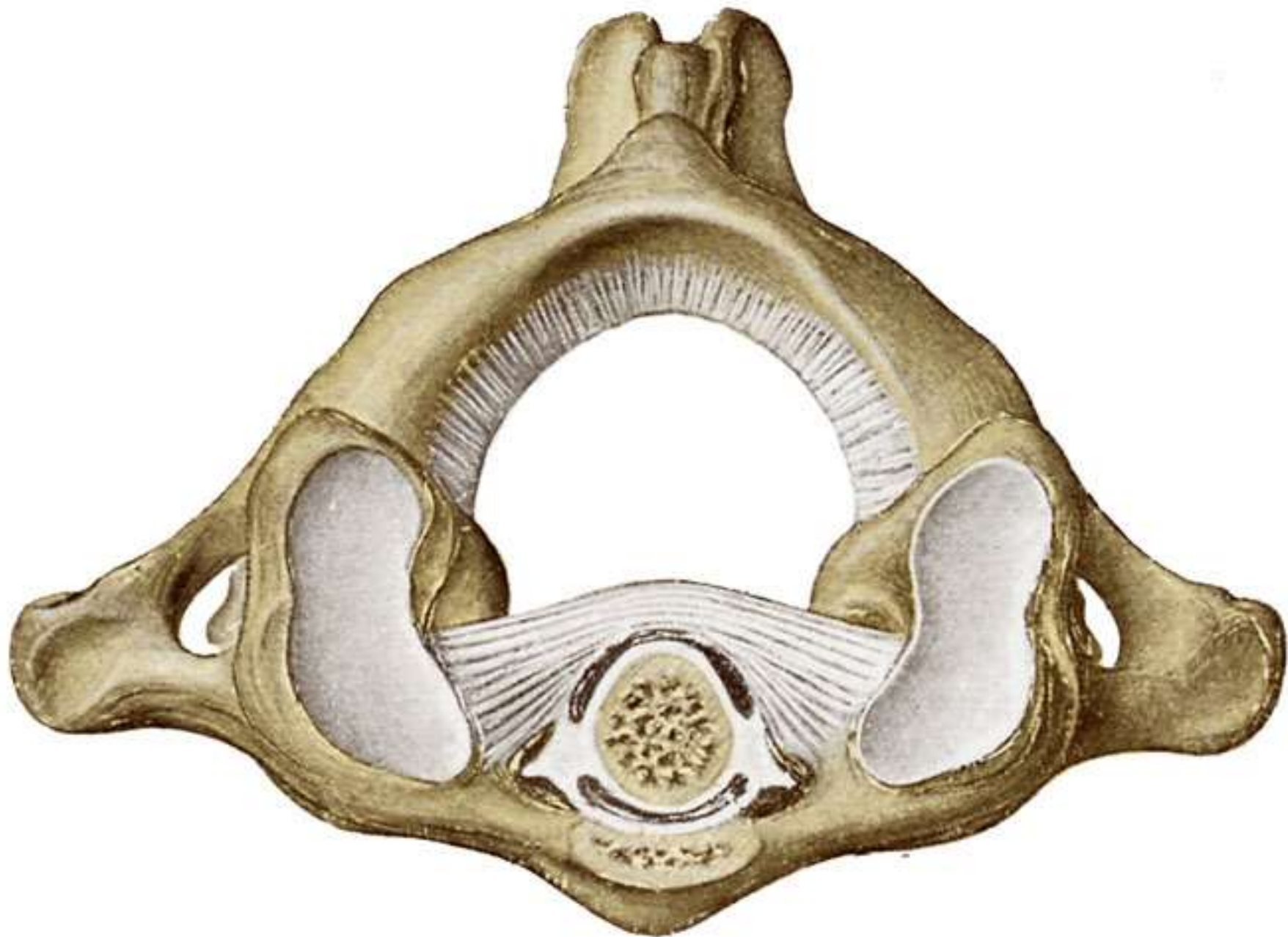
- Median atlantoaxial joint.
- Two lateral atlantoaxial joints.



Median Atlanto-axial joint- Articular surfaces

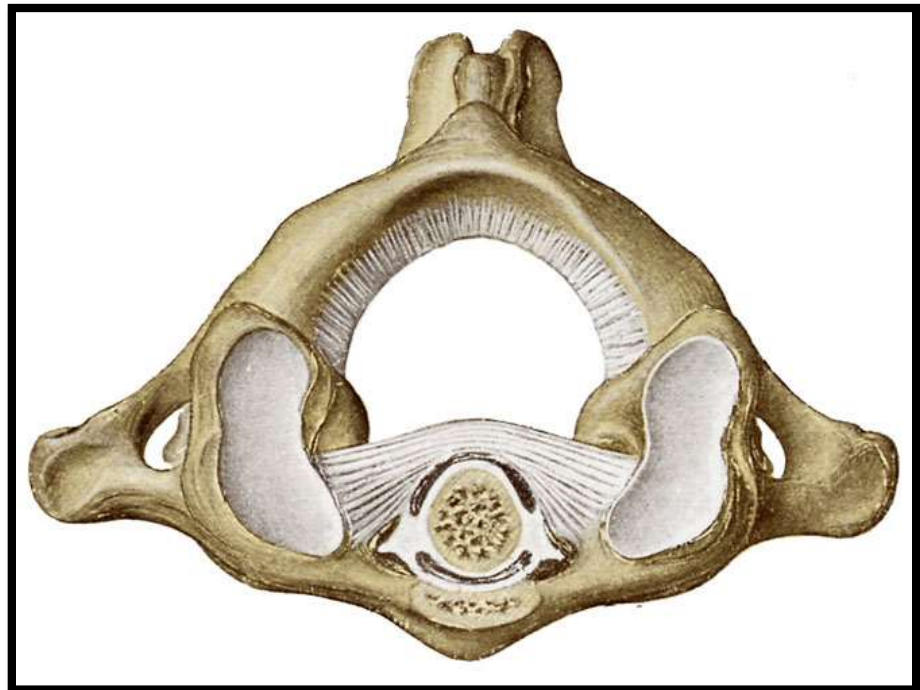
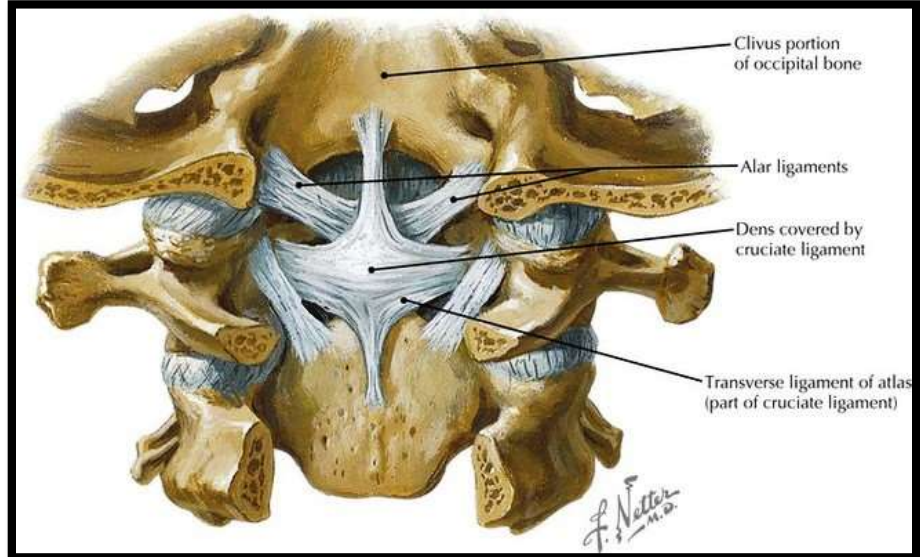
❖ Synovial joint of **pivot** variety





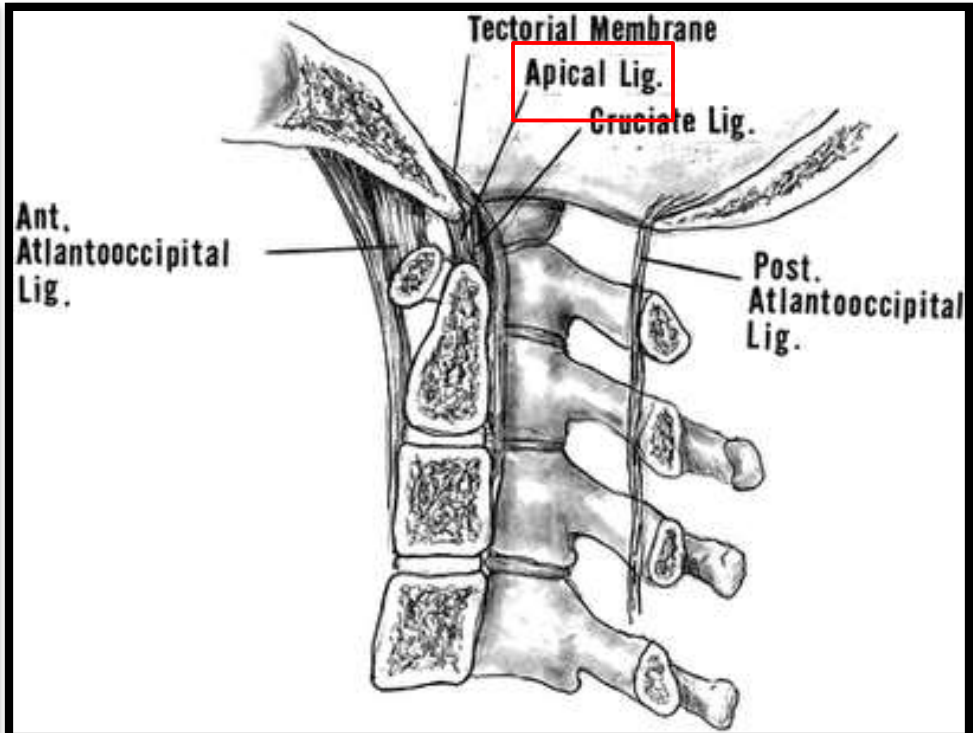
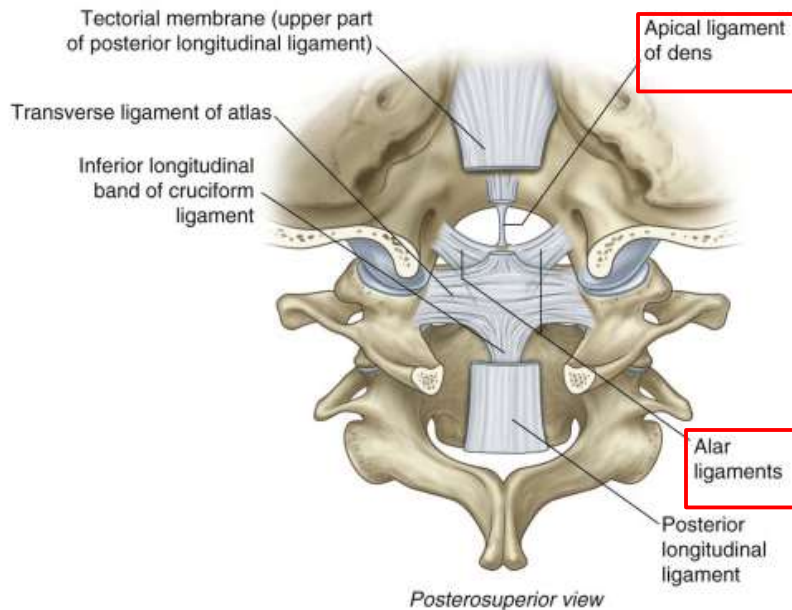
Median Atlanto-axial joint- Ligaments

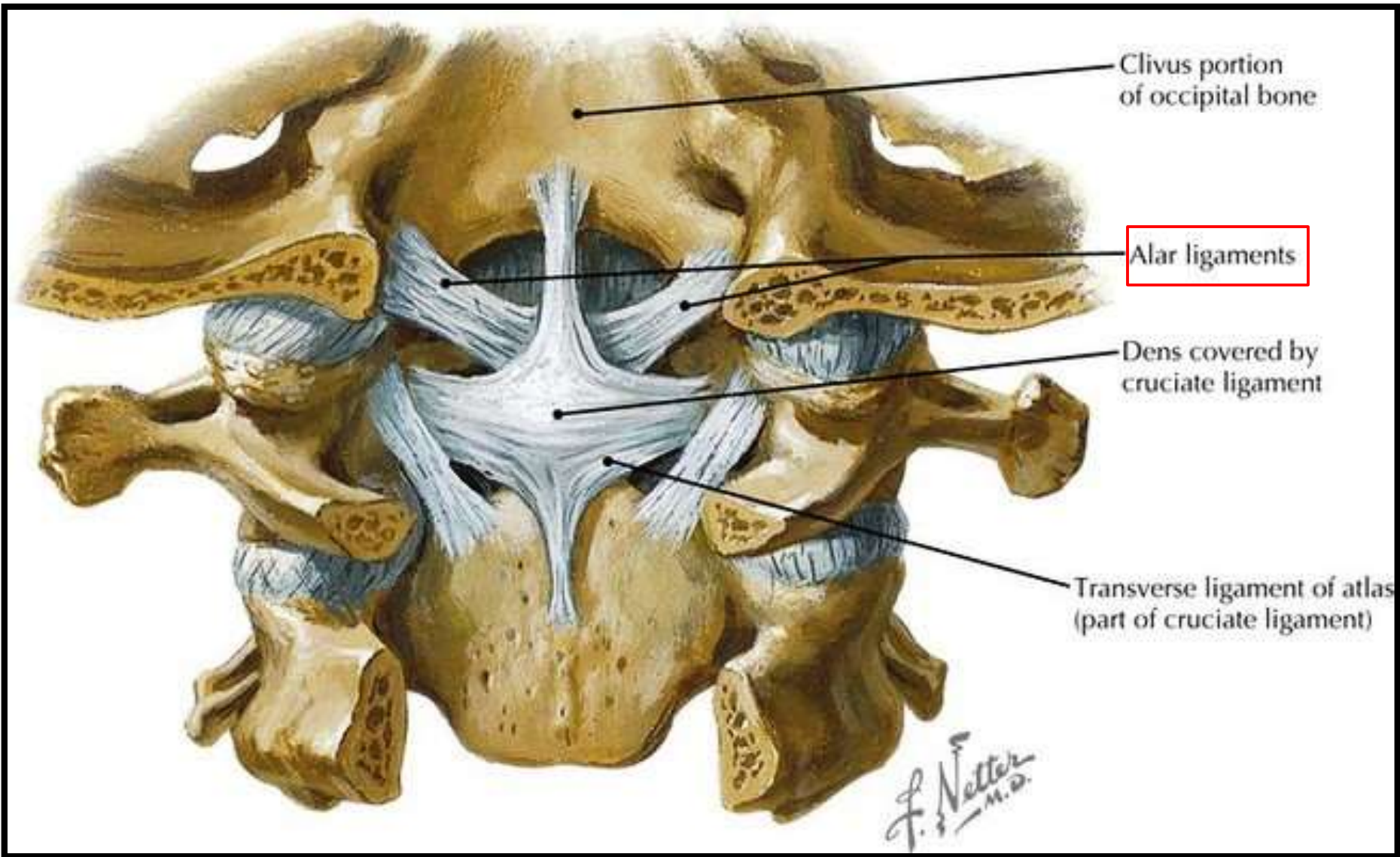
- Fibrous capsule.
- Transverse ligament.
- Apical ligament of dens (Morphologically, it represents the **remnant of notochord**).
- Alar ligaments (check ligaments).
- Membrana tectoria.



Apical Ligament of Dens & Membrana Tectoria

Atlas (C1 vertebra) and Axis (C2 vertebra) and base of skull





Clivus portion of occipital bone

Alar ligaments

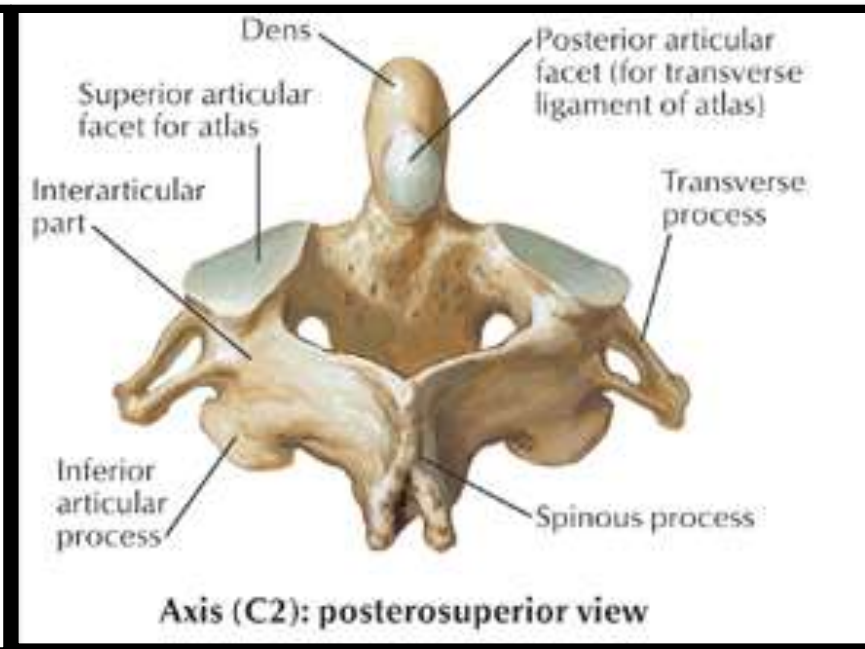
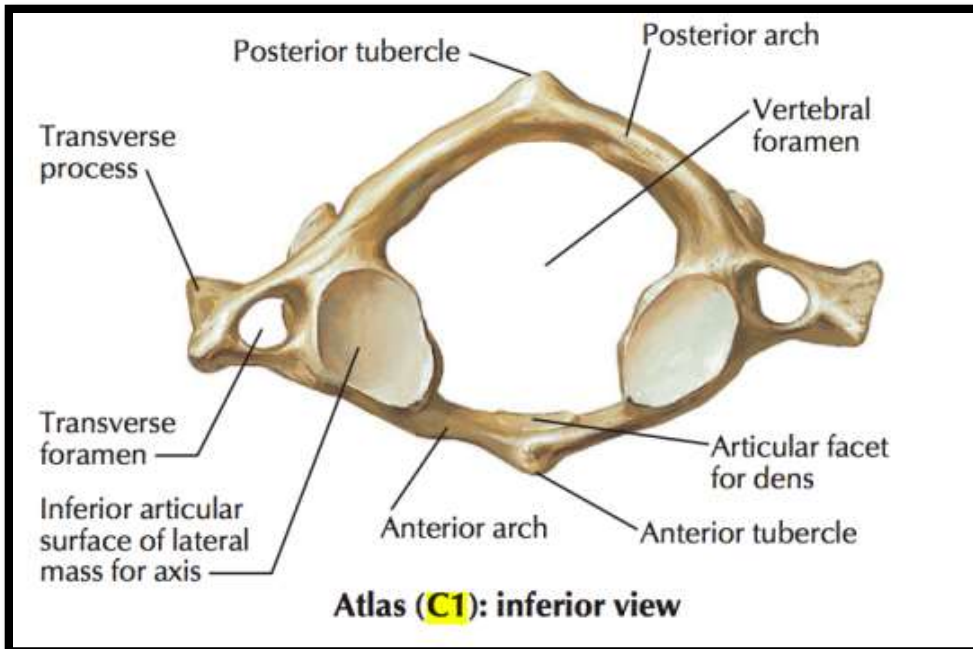
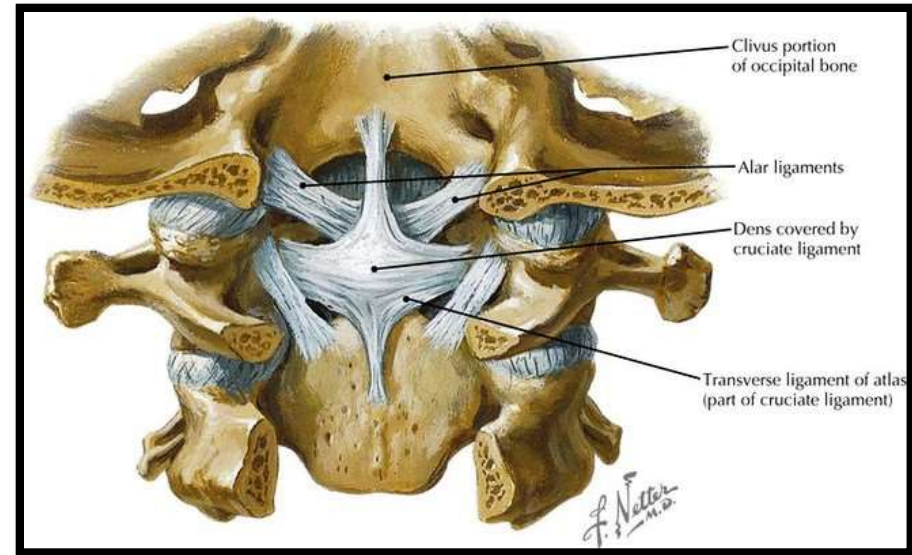
Dens covered by cruciate ligament

Transverse ligament of atlas (part of cruciate ligament)

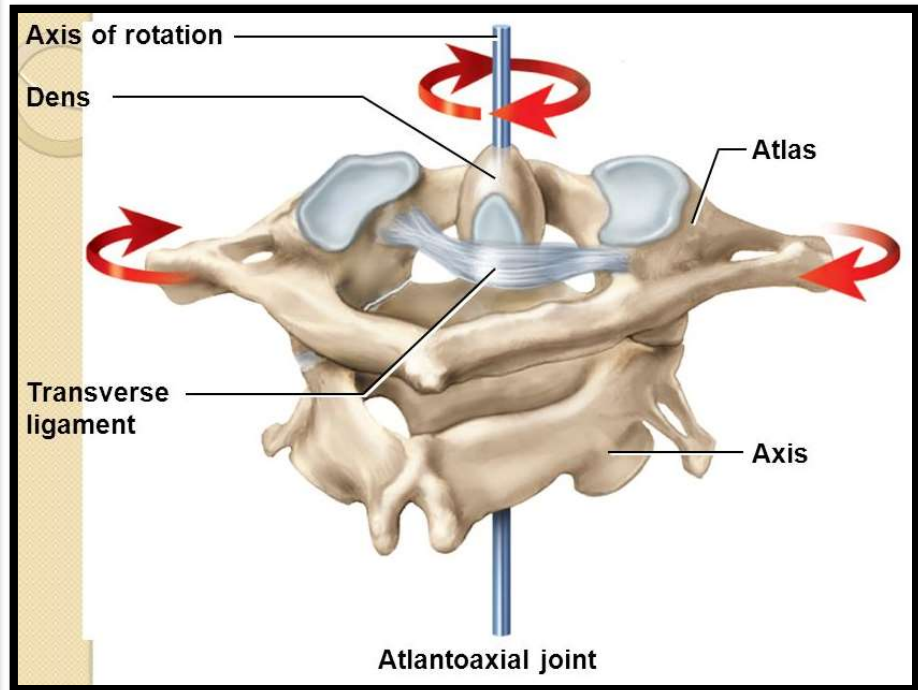
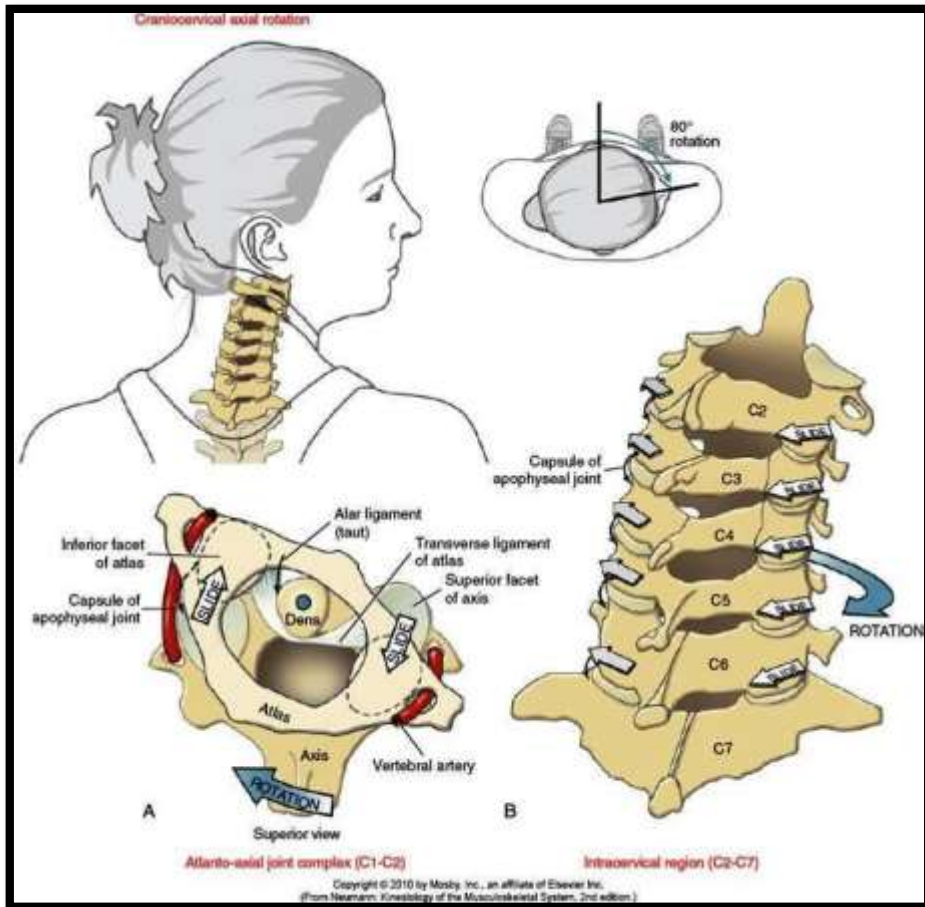
F. Netter M.D.

Lateral Atlanto-axial joints- Articular surfaces

❖ Synovial joint of **plane** variety



Movements at Median Atlanto-axial joint ('NO' Movements)



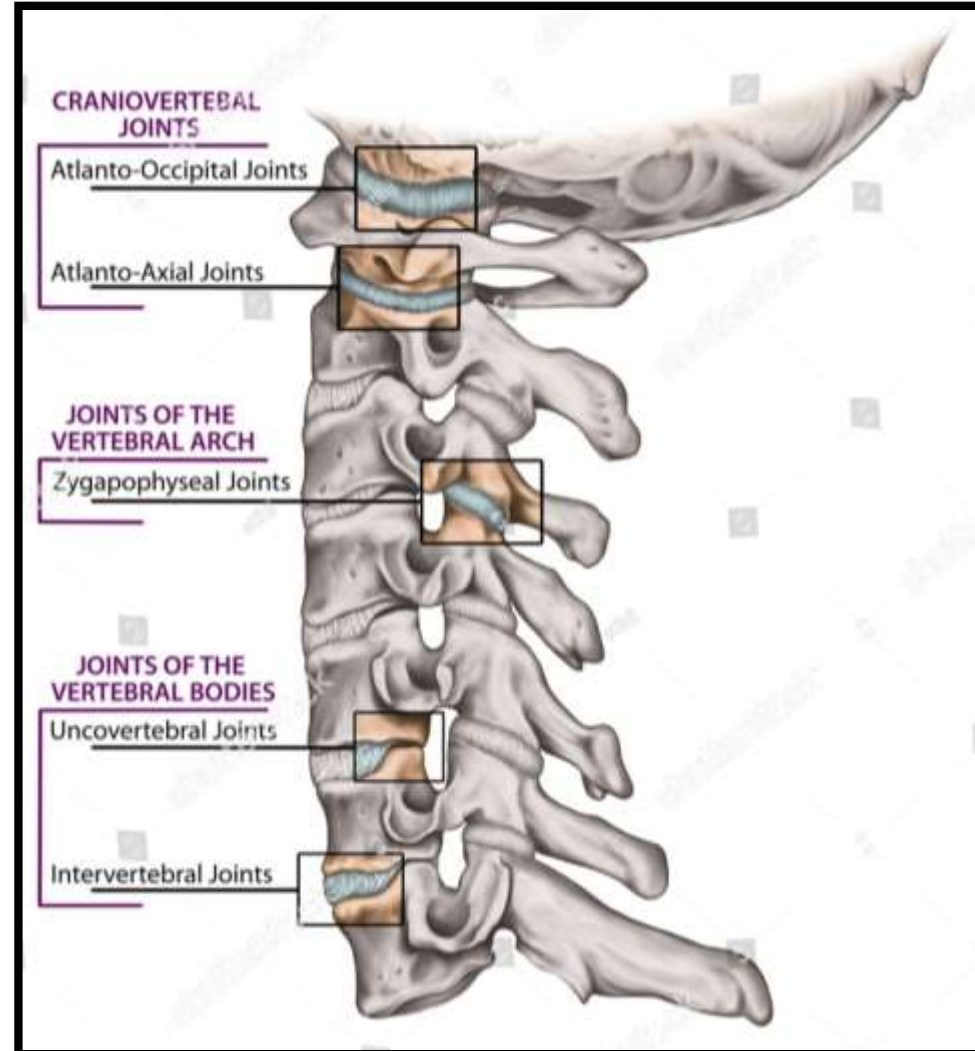
Joints of Cervical Spinal Column

❖ Joints between vertebral bodies-

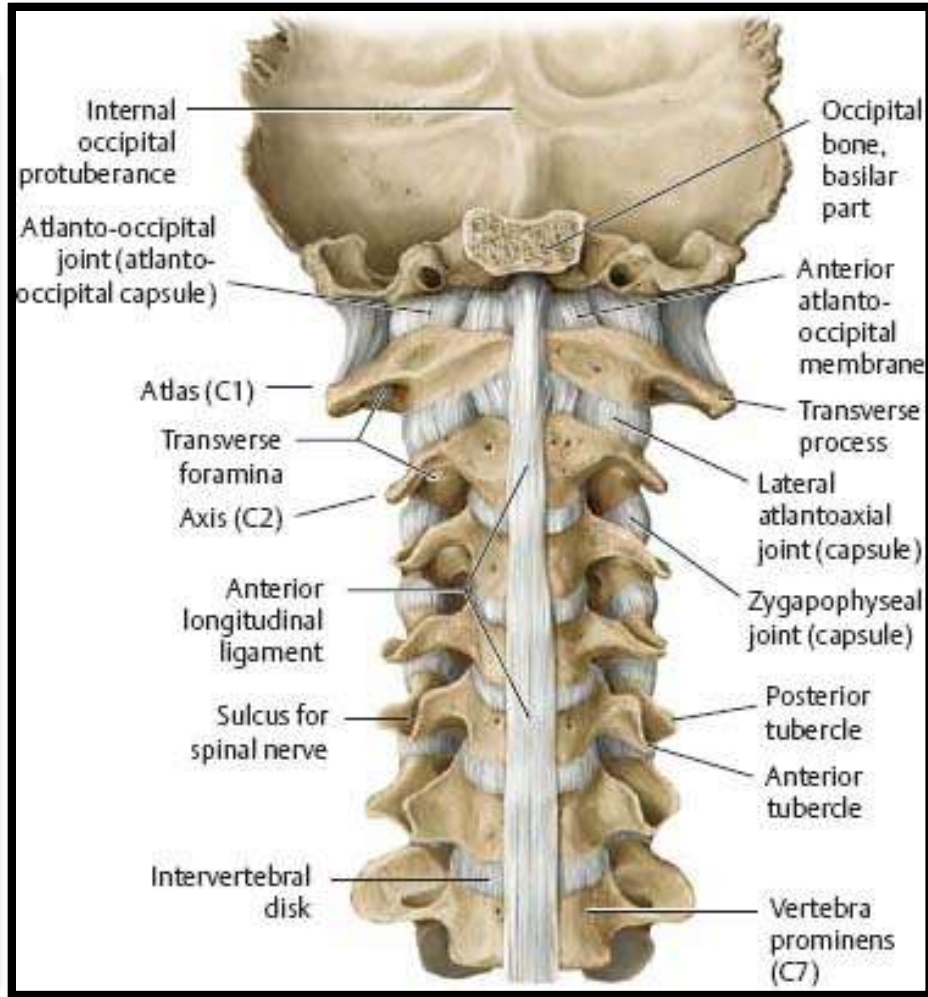
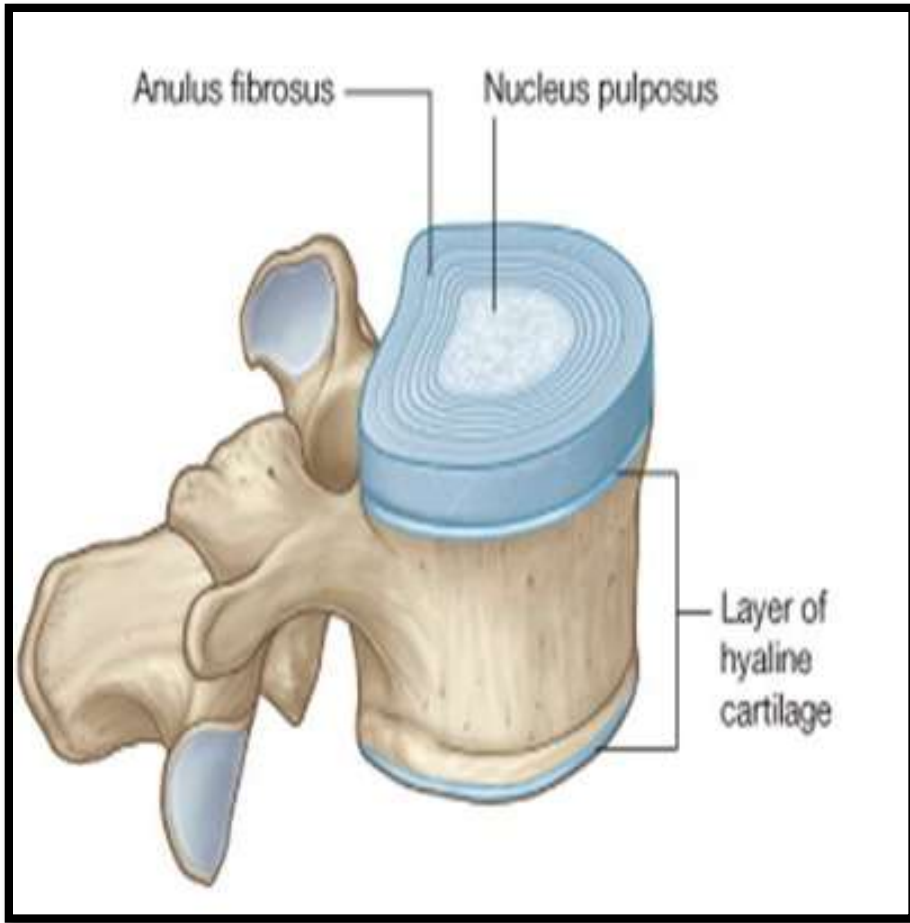
- Secondary cartilaginous (intervertebral disc).
- Synovial [Joints of **Luschka** (**Uncovertebral** Joints)].

❖ Joints between vertebral arches-

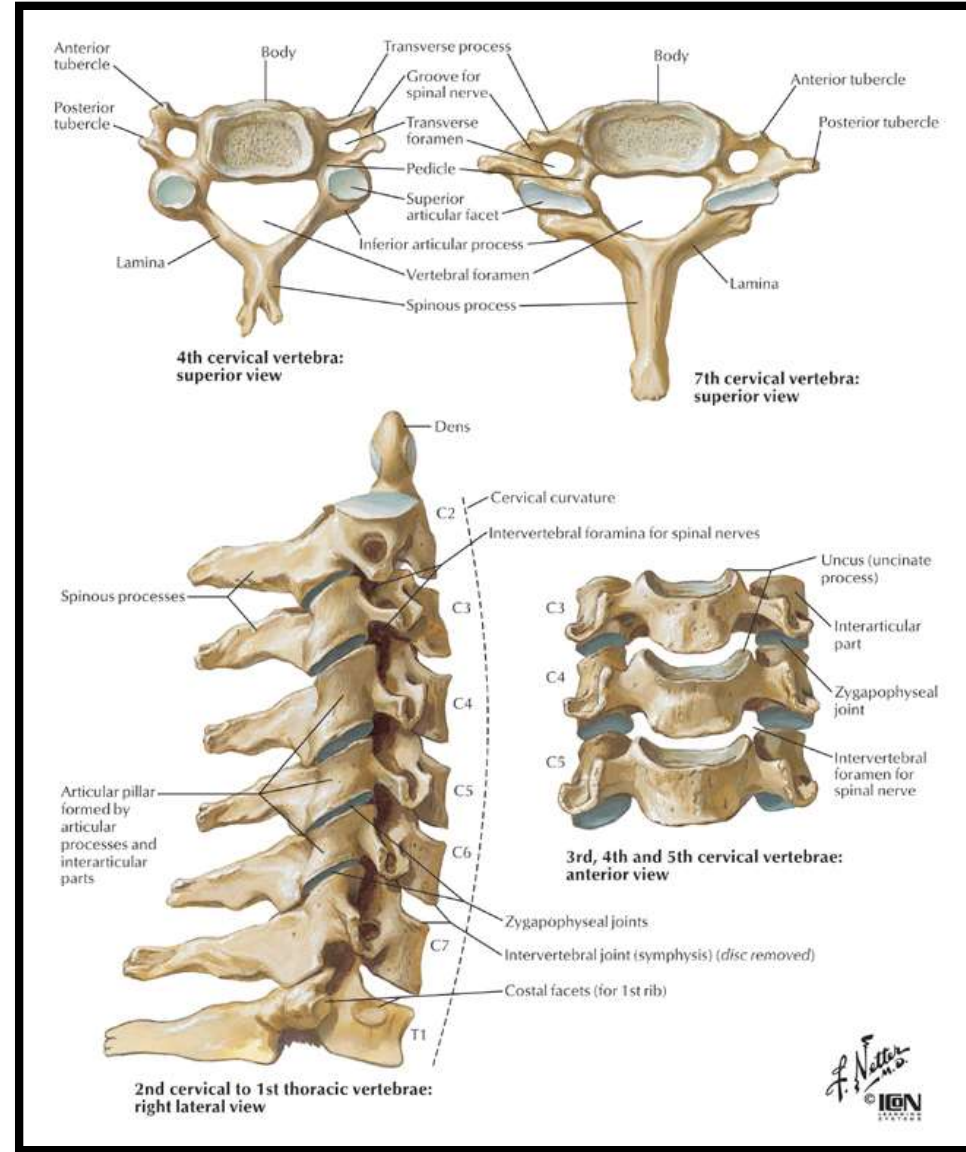
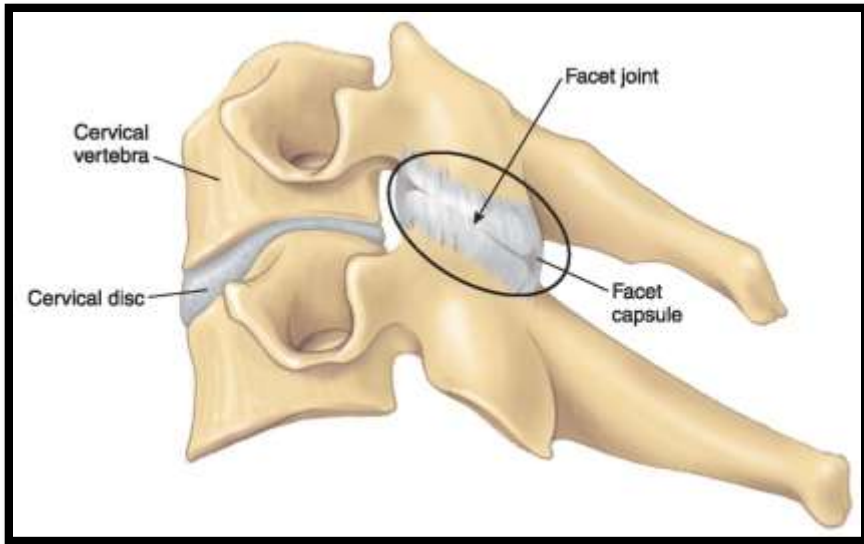
- Joints between articular processes of vertebrae [**Zyghypophyseal** joints (**Facet joints**)].
- Intervertebral syndesmoses between laminae, spines and transverse processes.



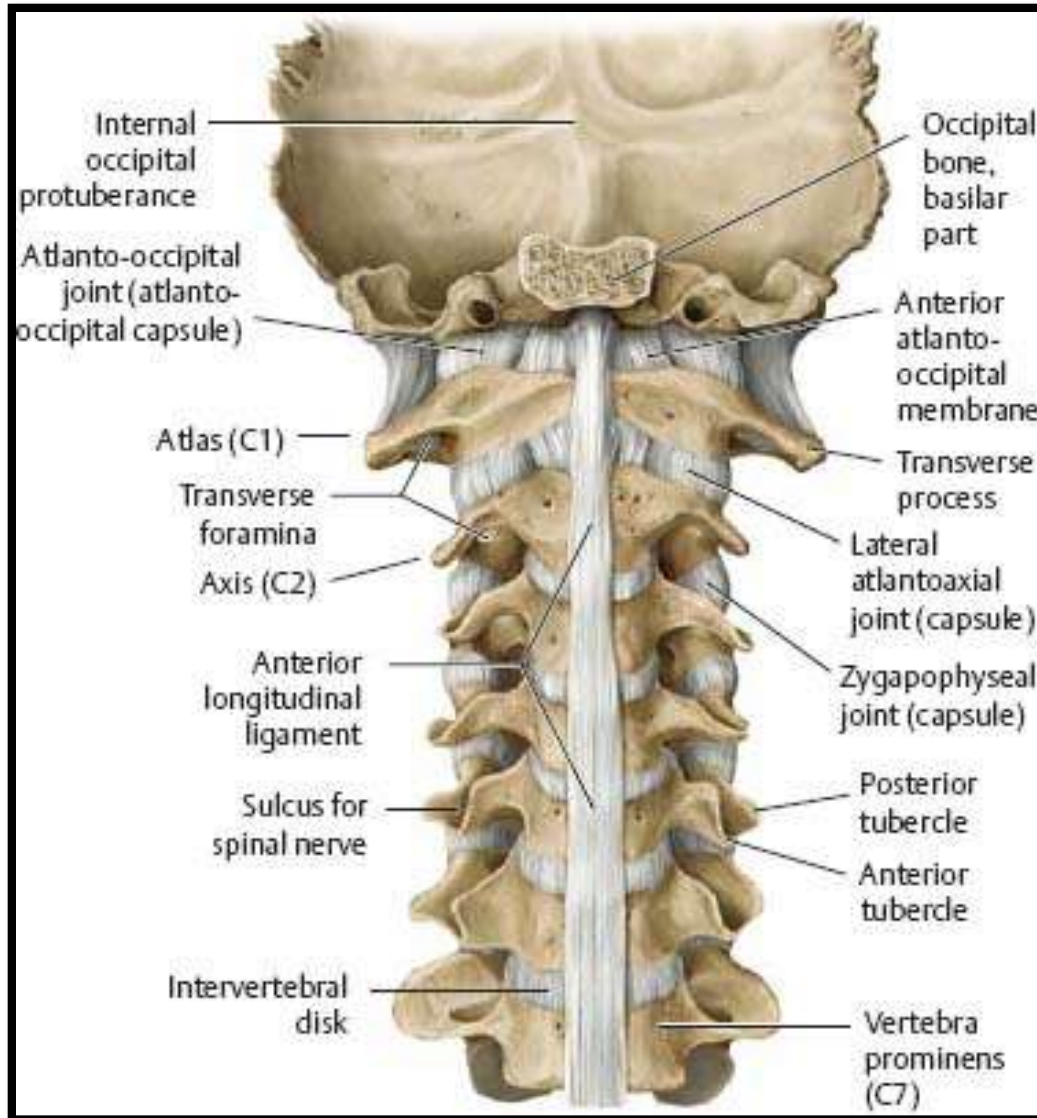
Secondary cartilaginous Joints (Symphysis)



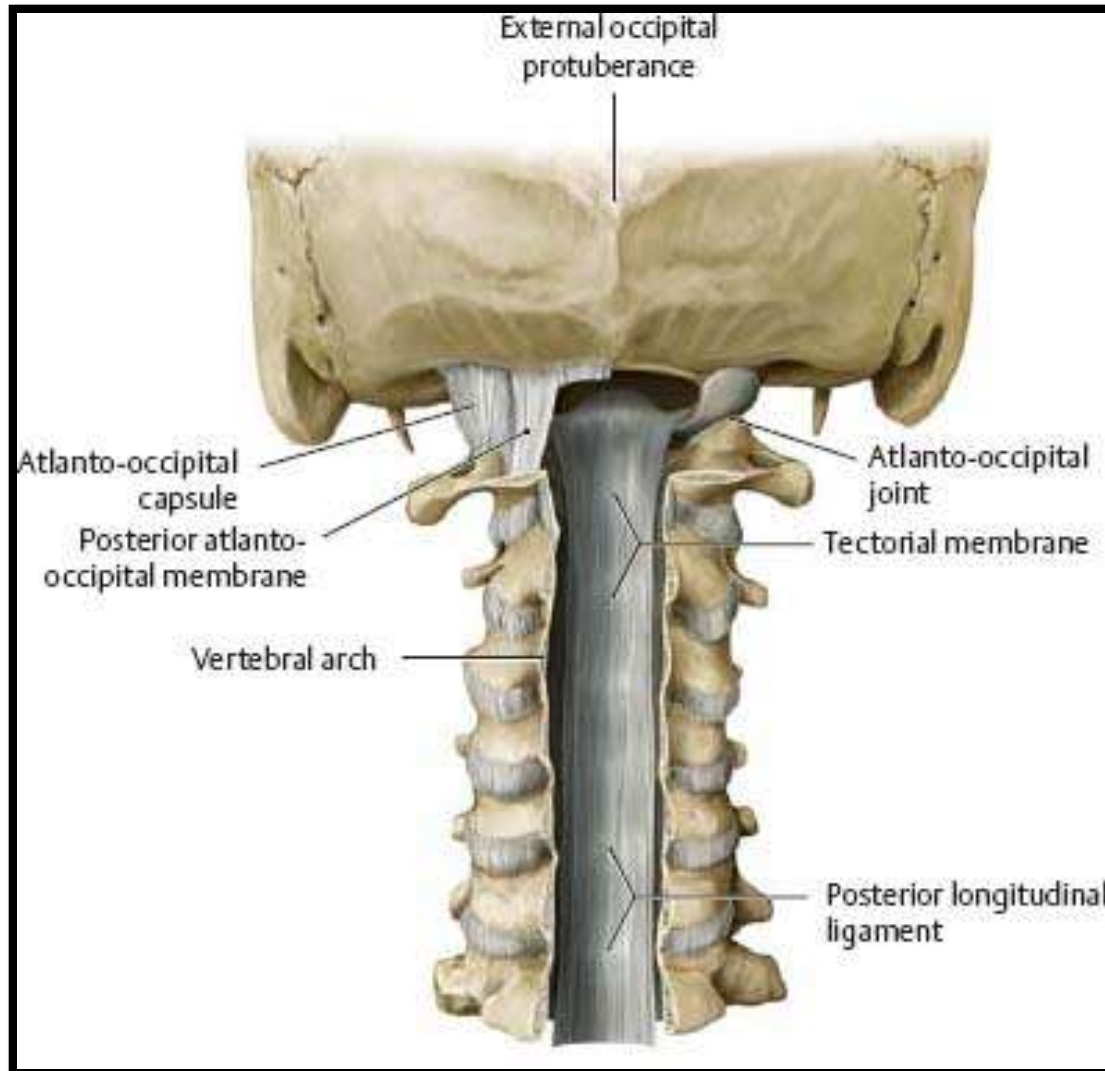
Curvature of Cervical Spinal Column



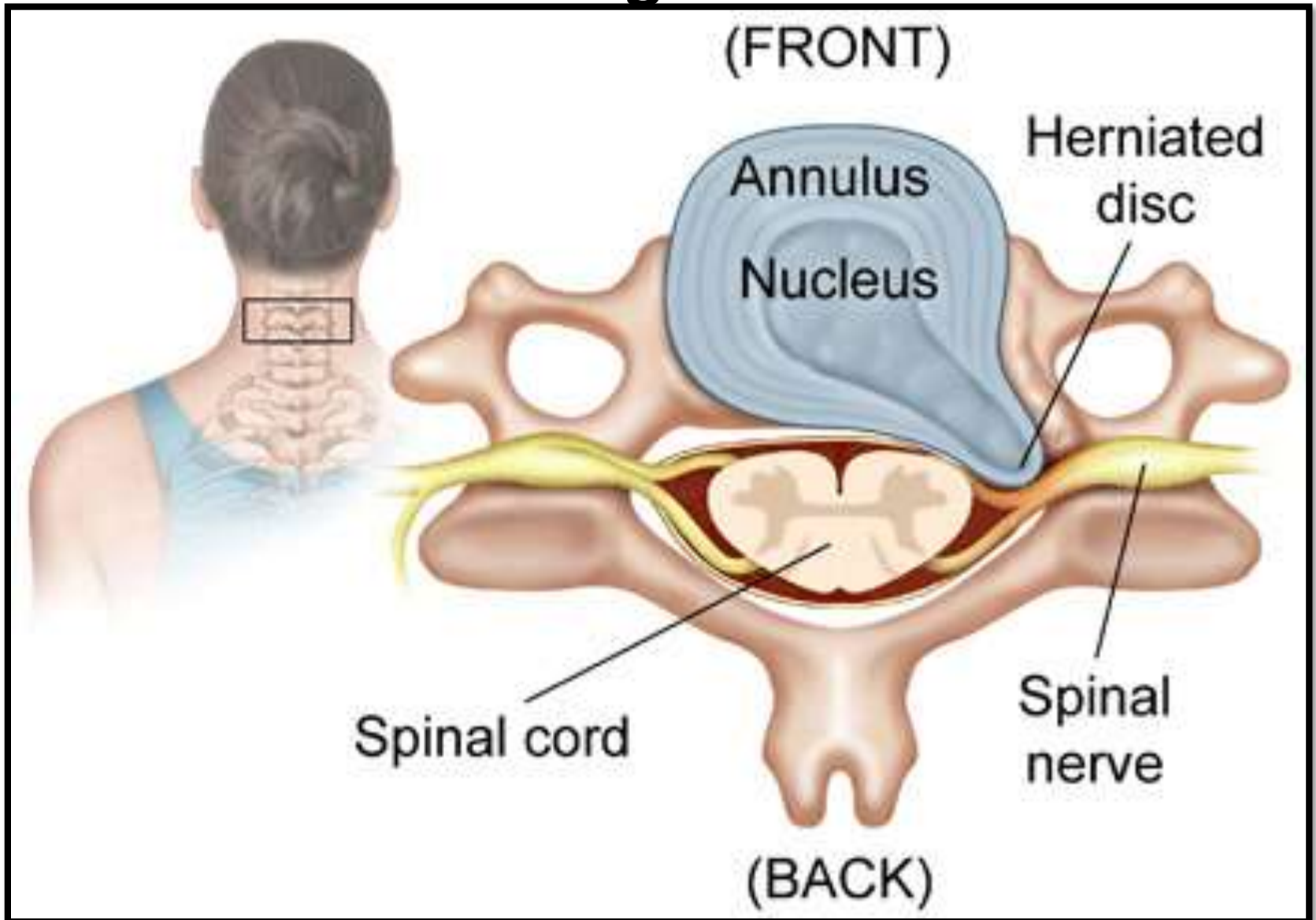
Secondary cartilaginous Joints- Anterior Longitudinal Ligament



Secondary cartilaginous Joints- posterior longitudinal Ligament

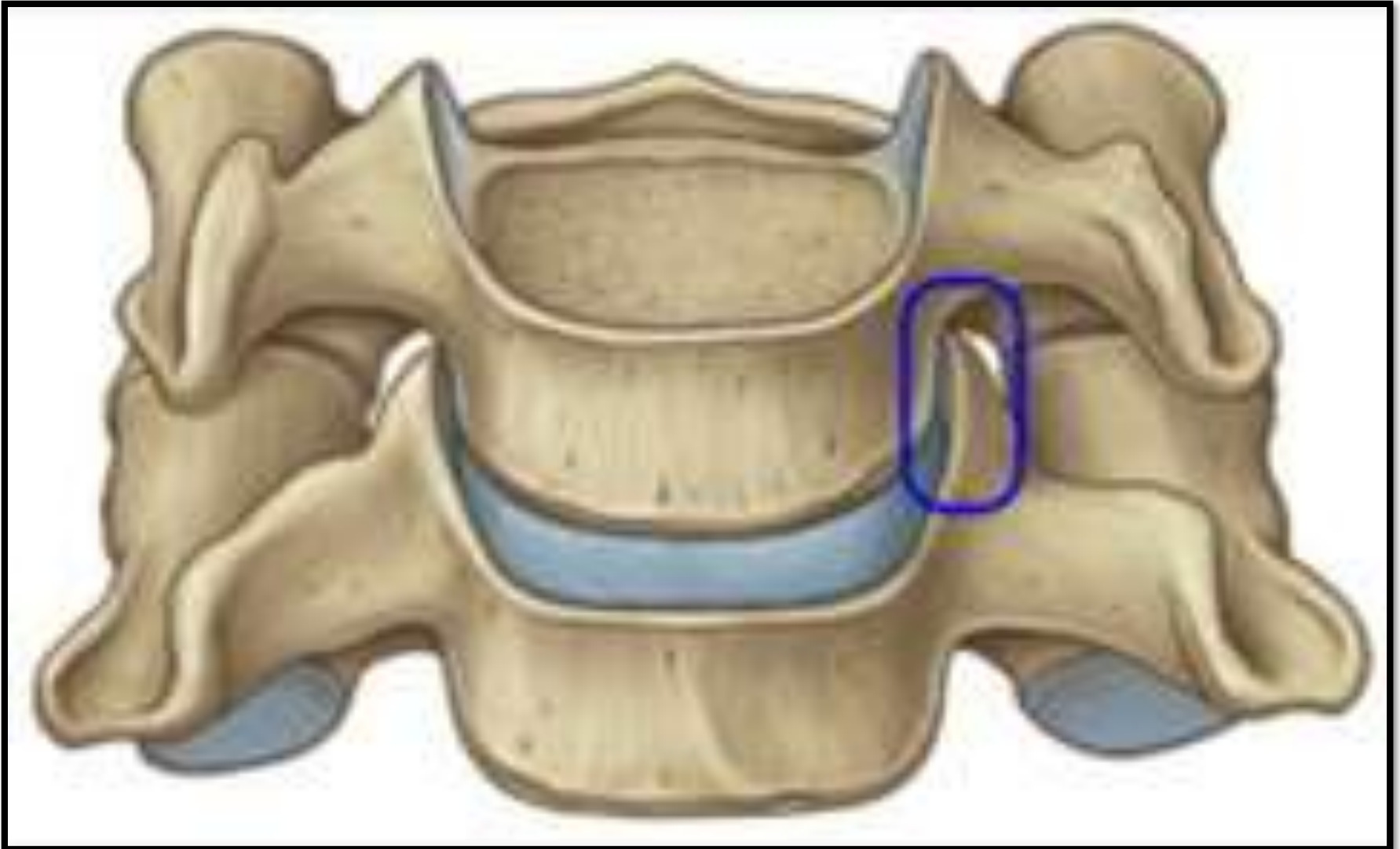


Prolapse of Intervertebral Disc in Cervical Region

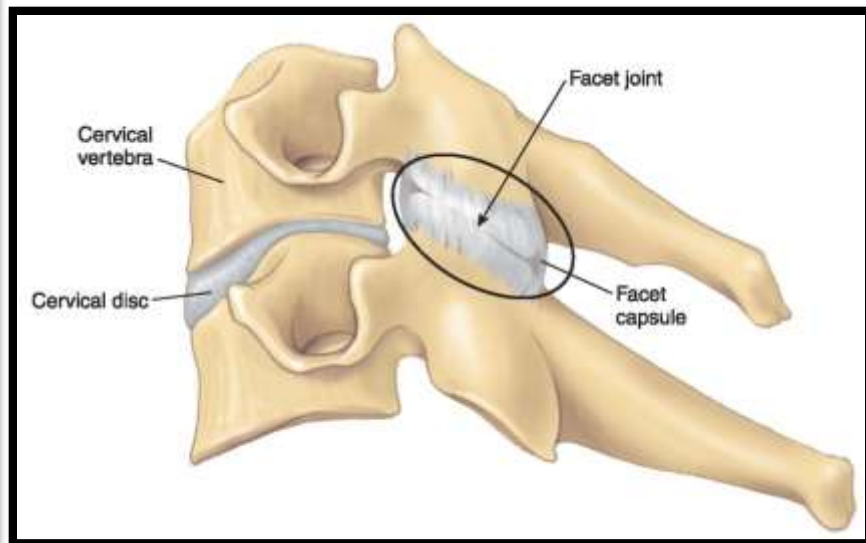
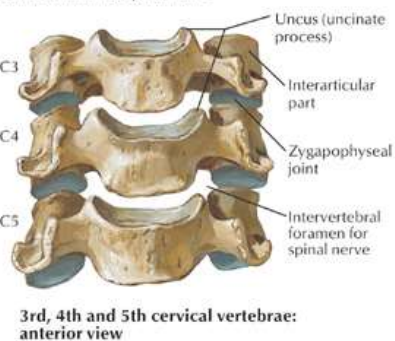
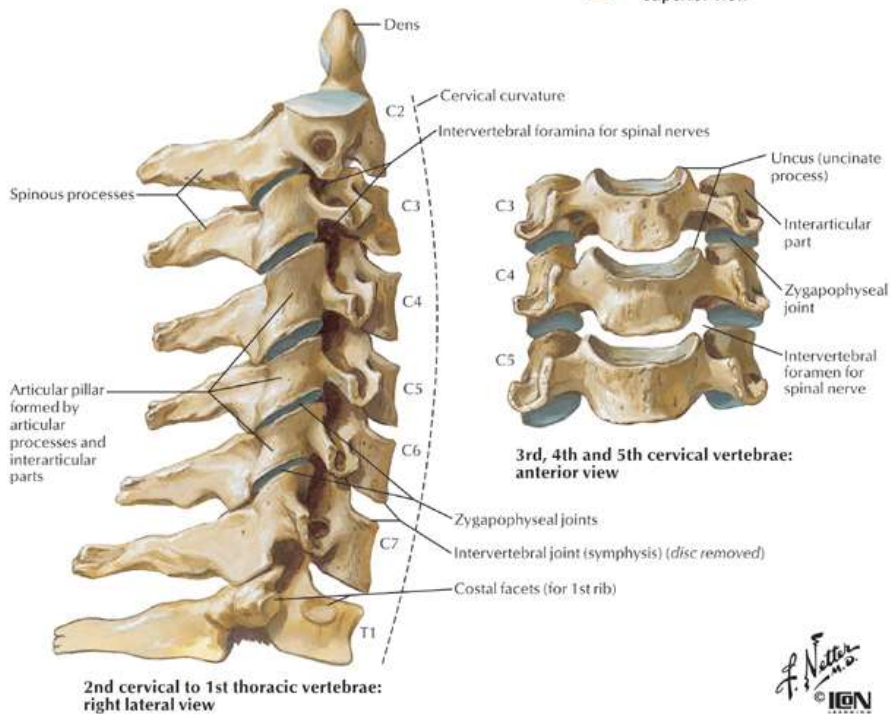
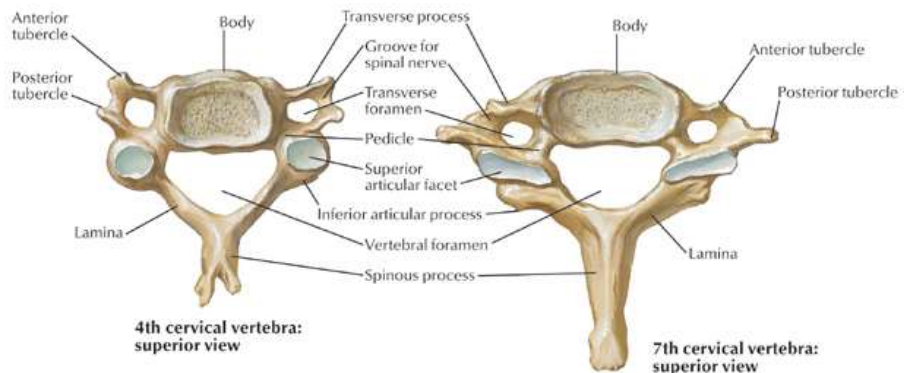


Joints of **Luschka** (**Uncovertebral Joints**)

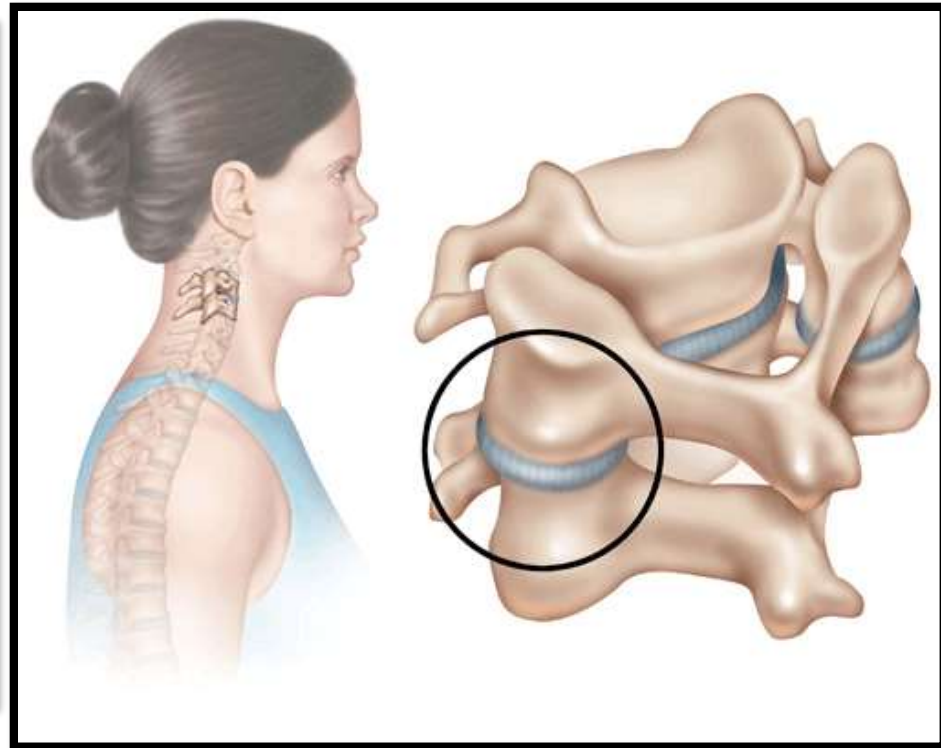
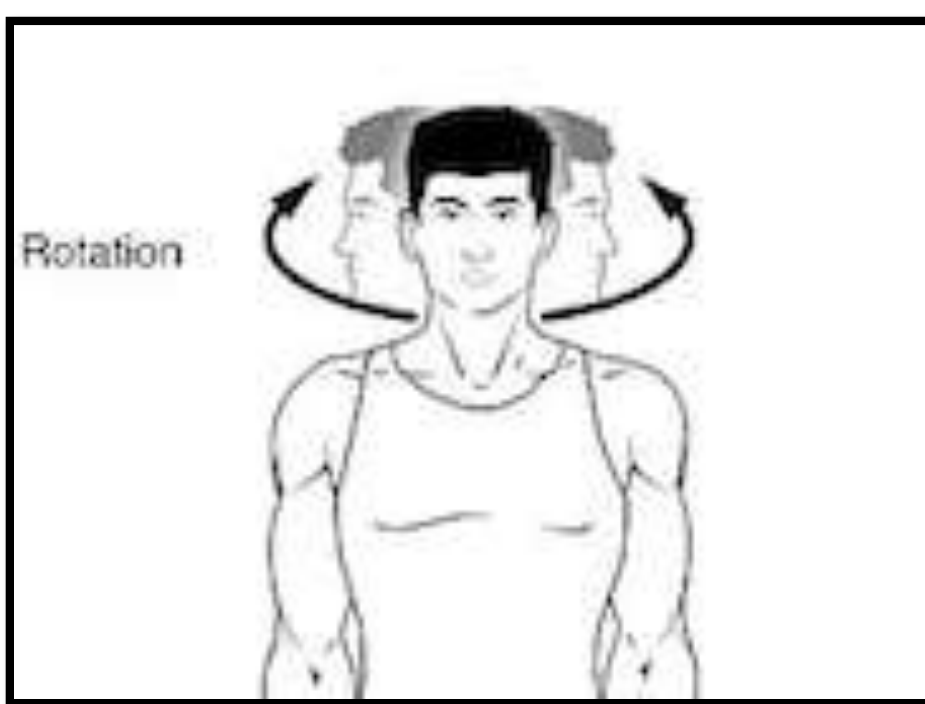
Synovial joints of **plane** variety



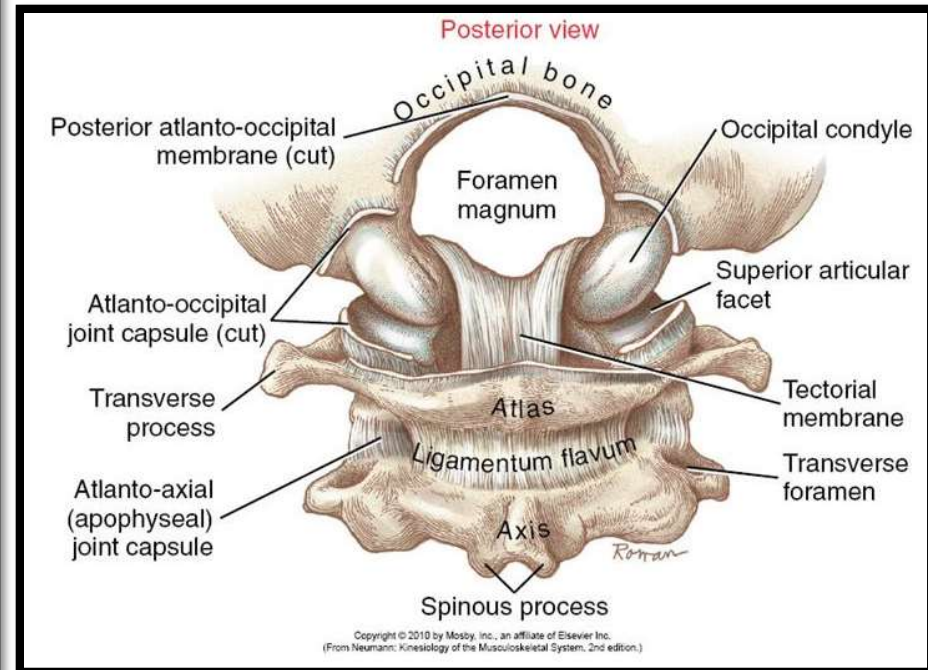
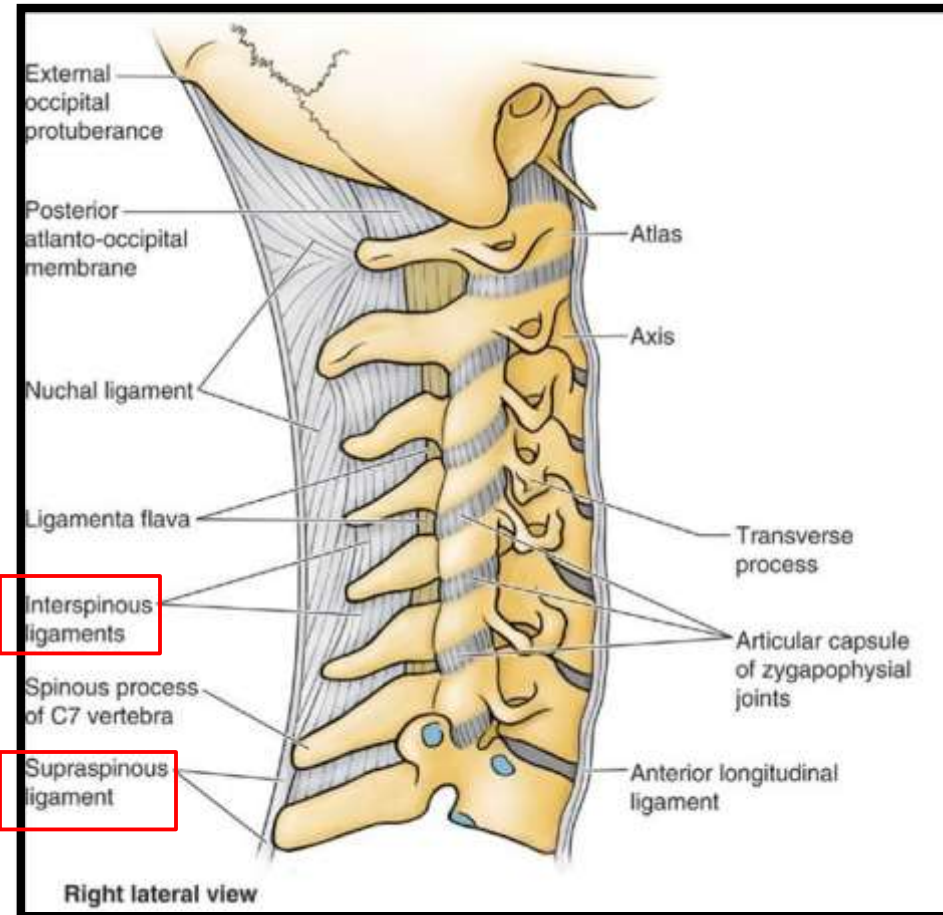
Zygochypophyseal Joints (Facet Joints)



Movements at Facet Joints



Intervertebral Syndesmosis



Thank
You

