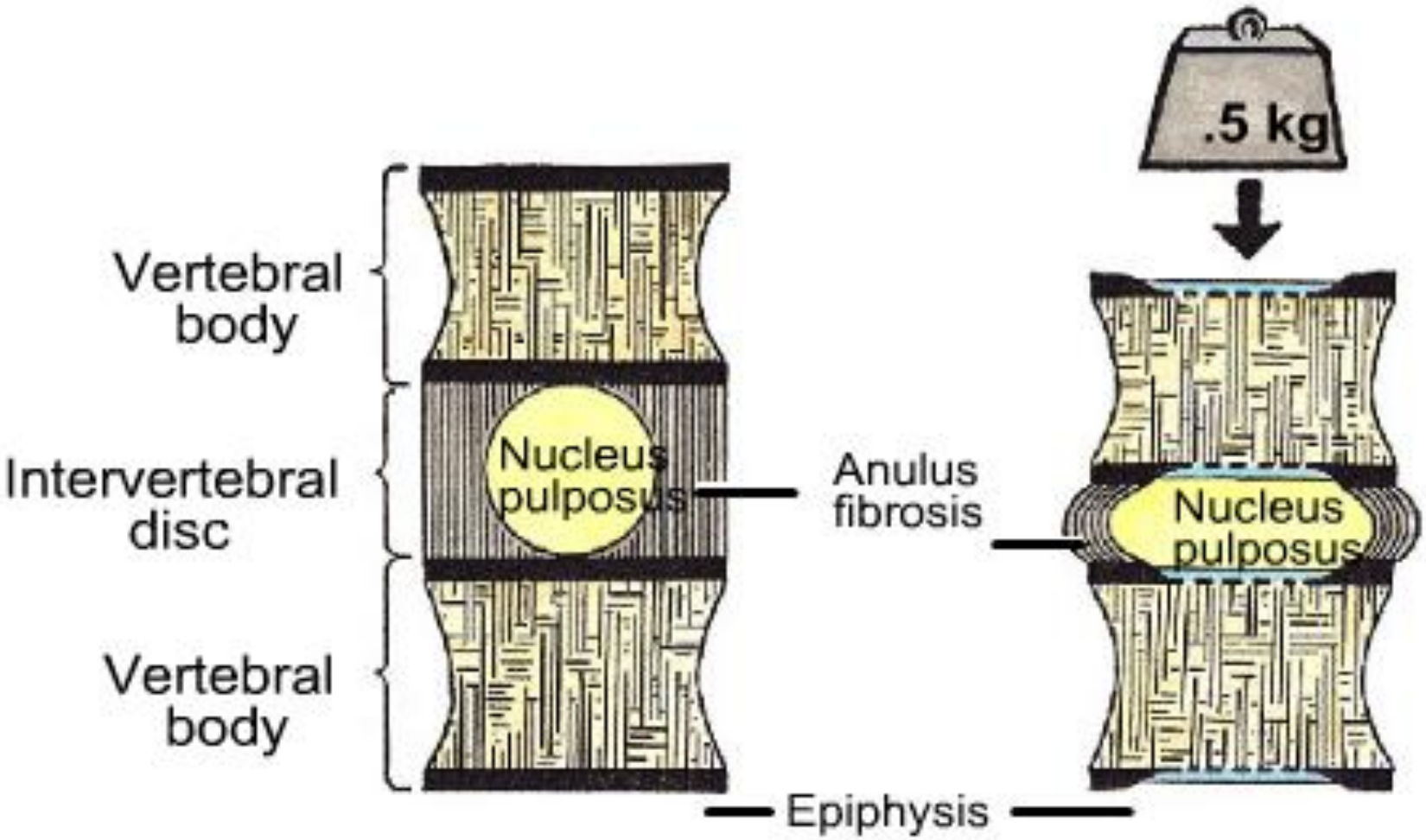
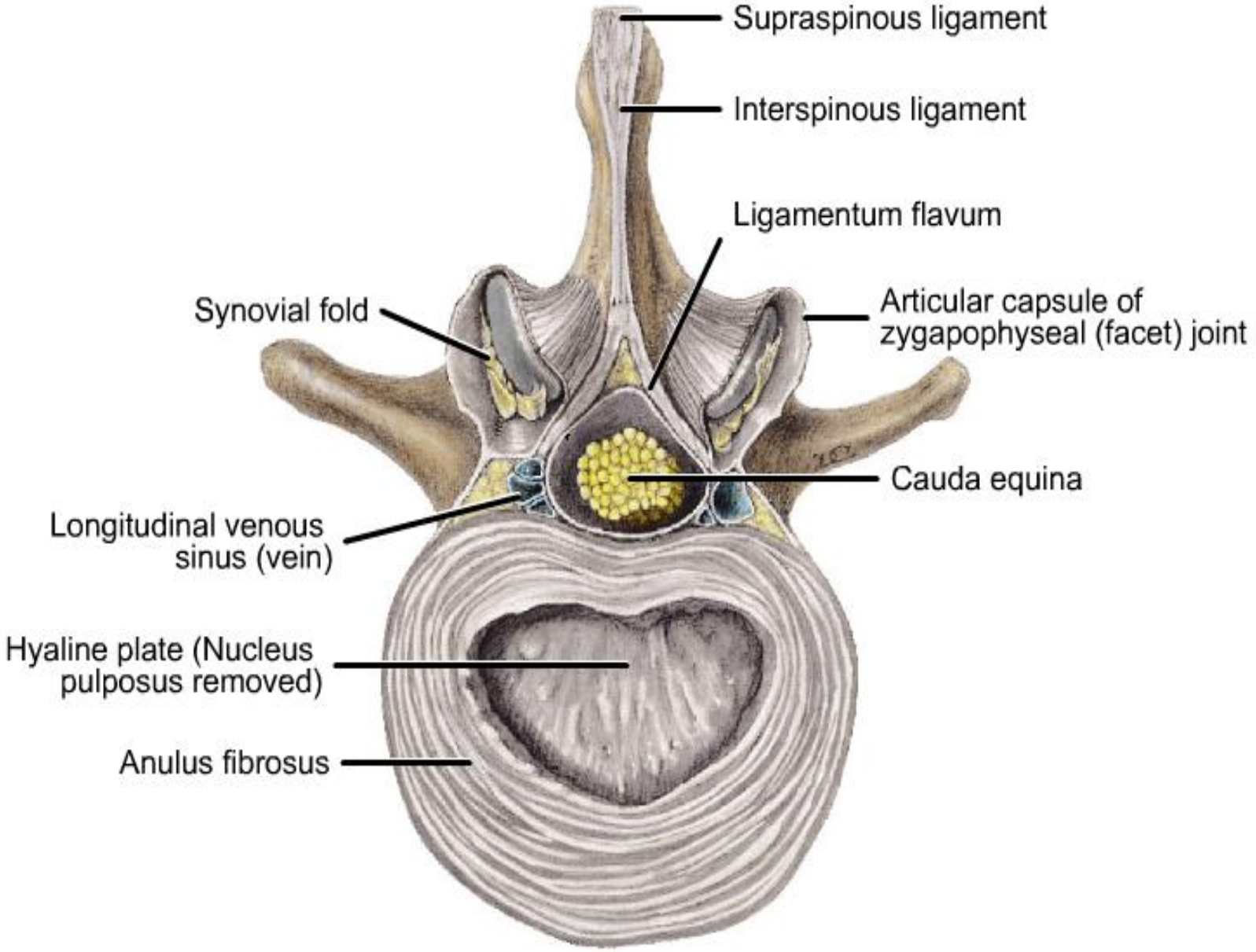
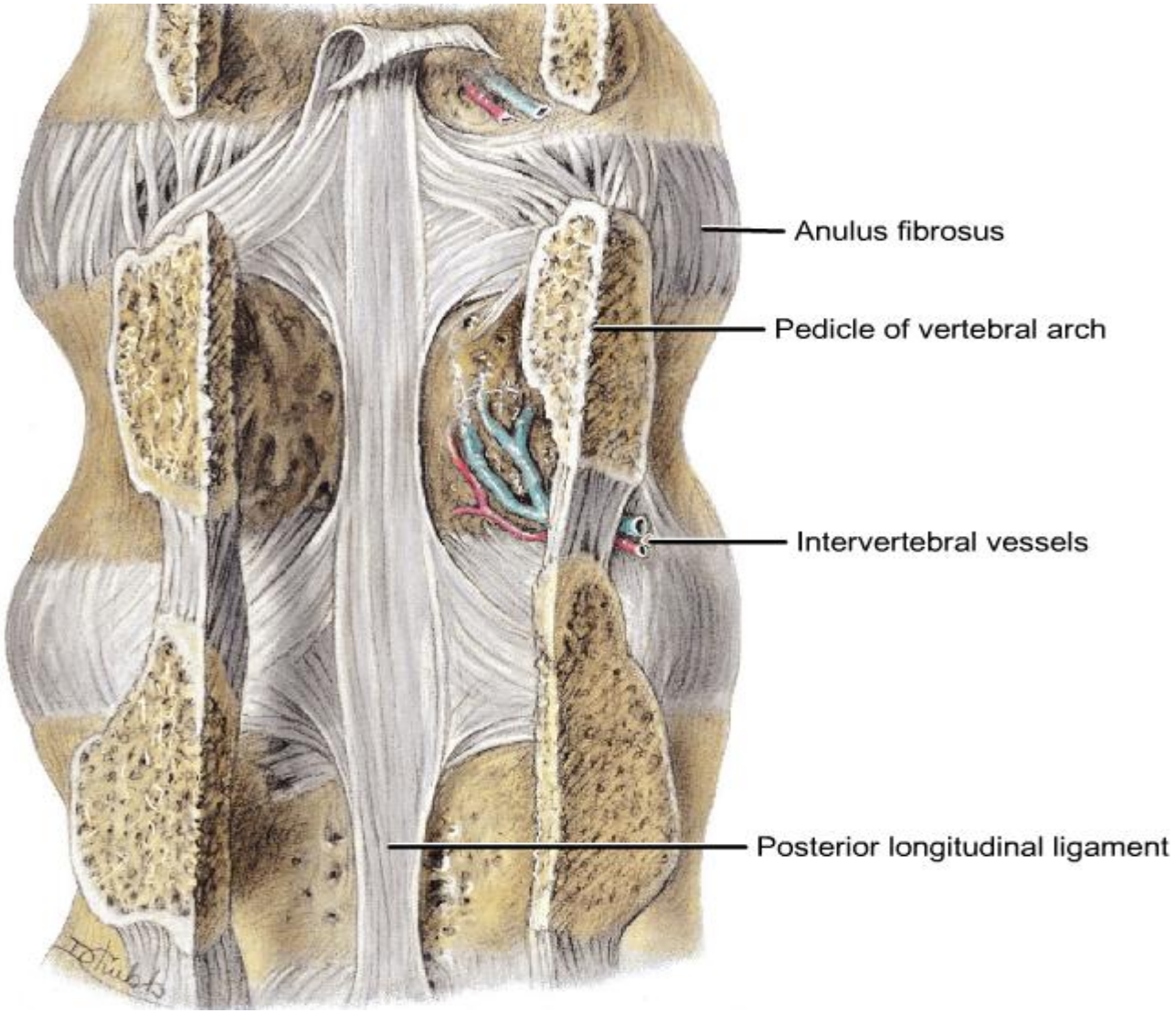
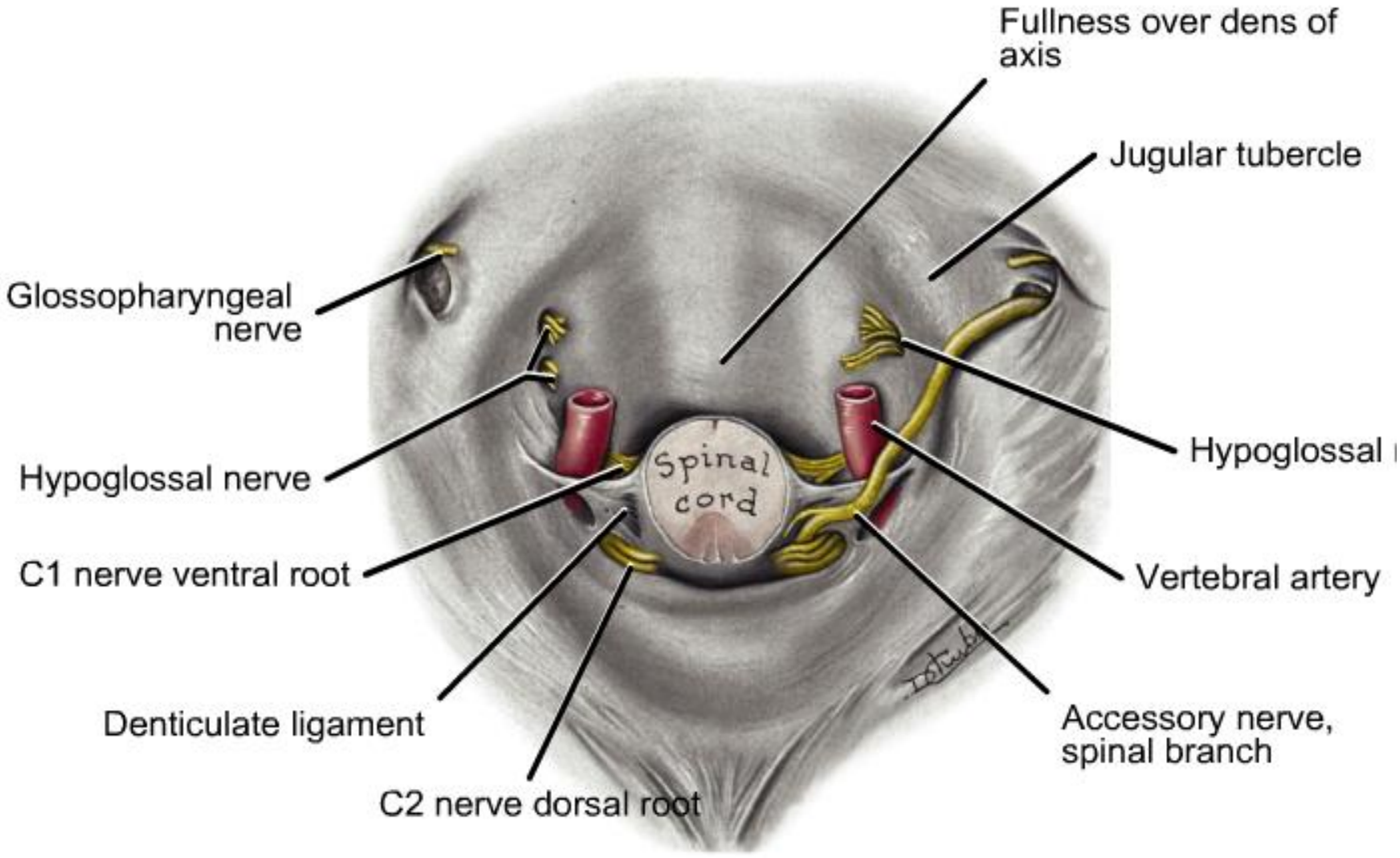
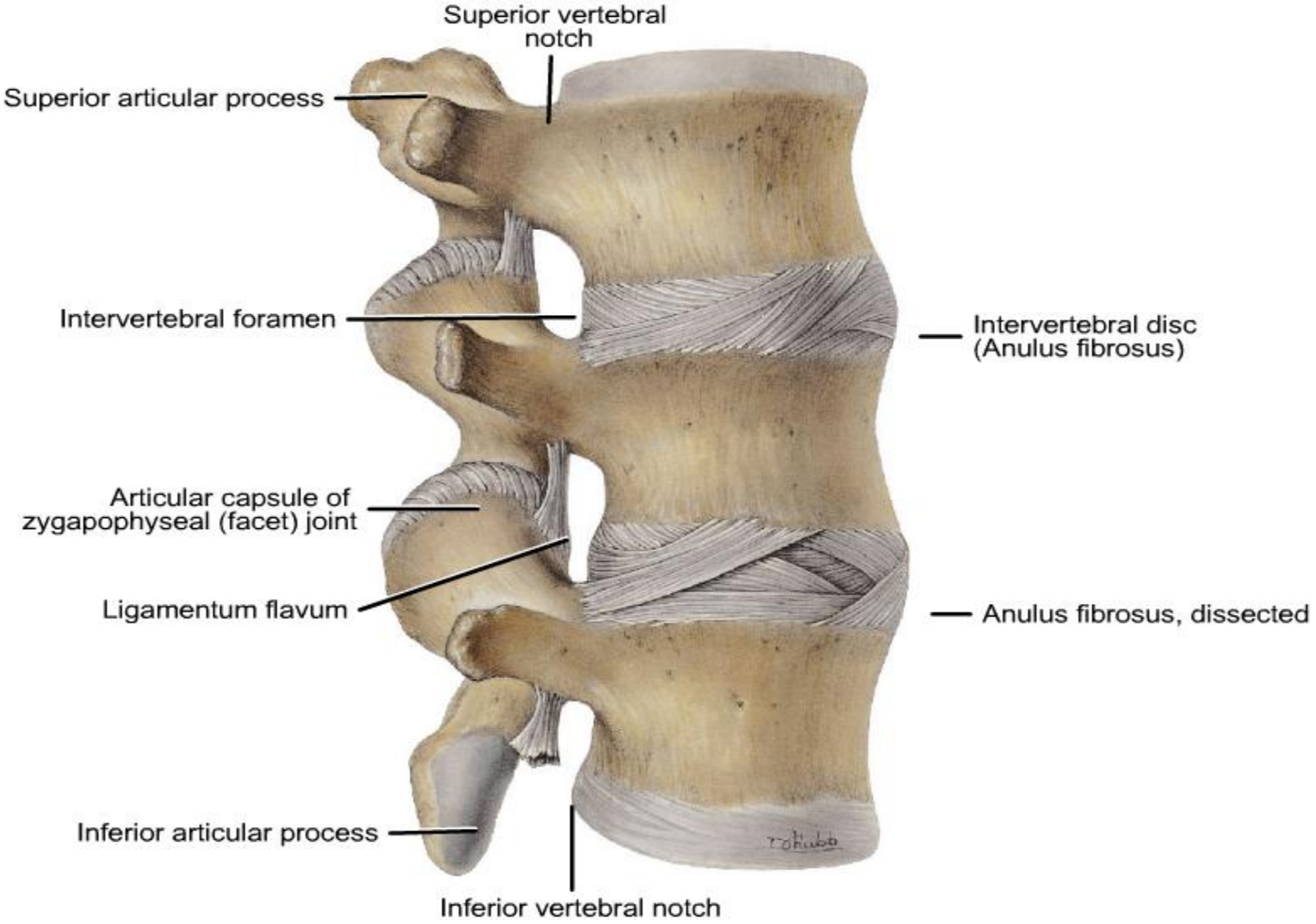
Articulation of neck


.5 kg
Vertebral body
Intervertebral disc
Vertebral body
Nucleus pulposus
Anulus fibrosis
Nucleus pulposus
Epiphysis

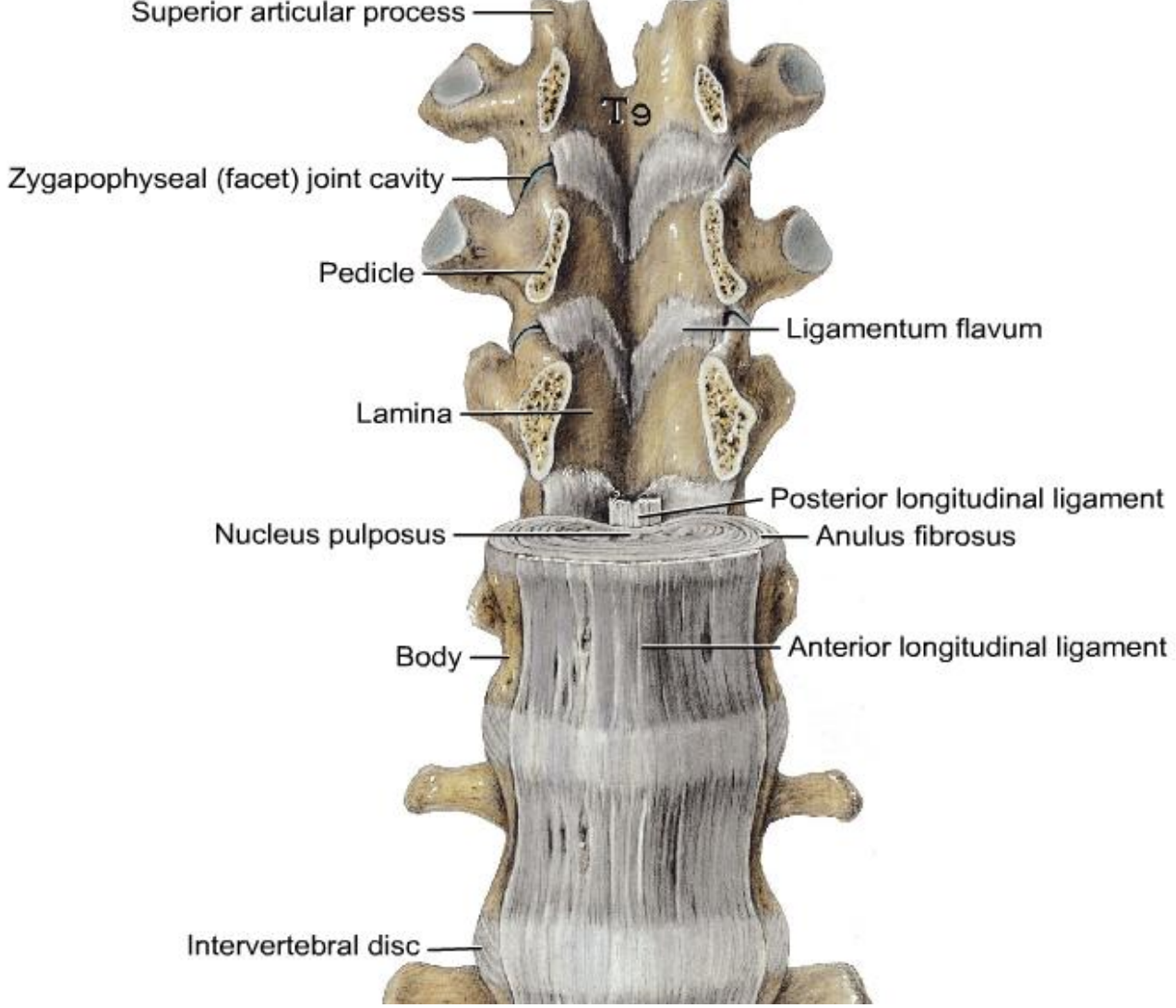

Supraspinous ligament
Interspinous ligament
Ligamentum flavum
Synovial fold
Articular capsule of zygapophyseal (facet) joint
Cauda equina
Longitudinal venous sinus (vein)
Hyaline plate (Nucleus pulposus removed)
Anulus fibrosus


Anulus fibrosus
Pedicle of vertebral arch
Intervertebral vessels
Posterior longitudinal ligament


Fullness over dens of axis
Jugular tubercle
Glossopharyngeal nerve
Hypoglossal nerve
Hypoglossal
Spinal cord
C1 nerve ventral root
Vertebral artery
Denticulate ligament
Accessory nerve, spinal branch
C2 nerve dorsal root

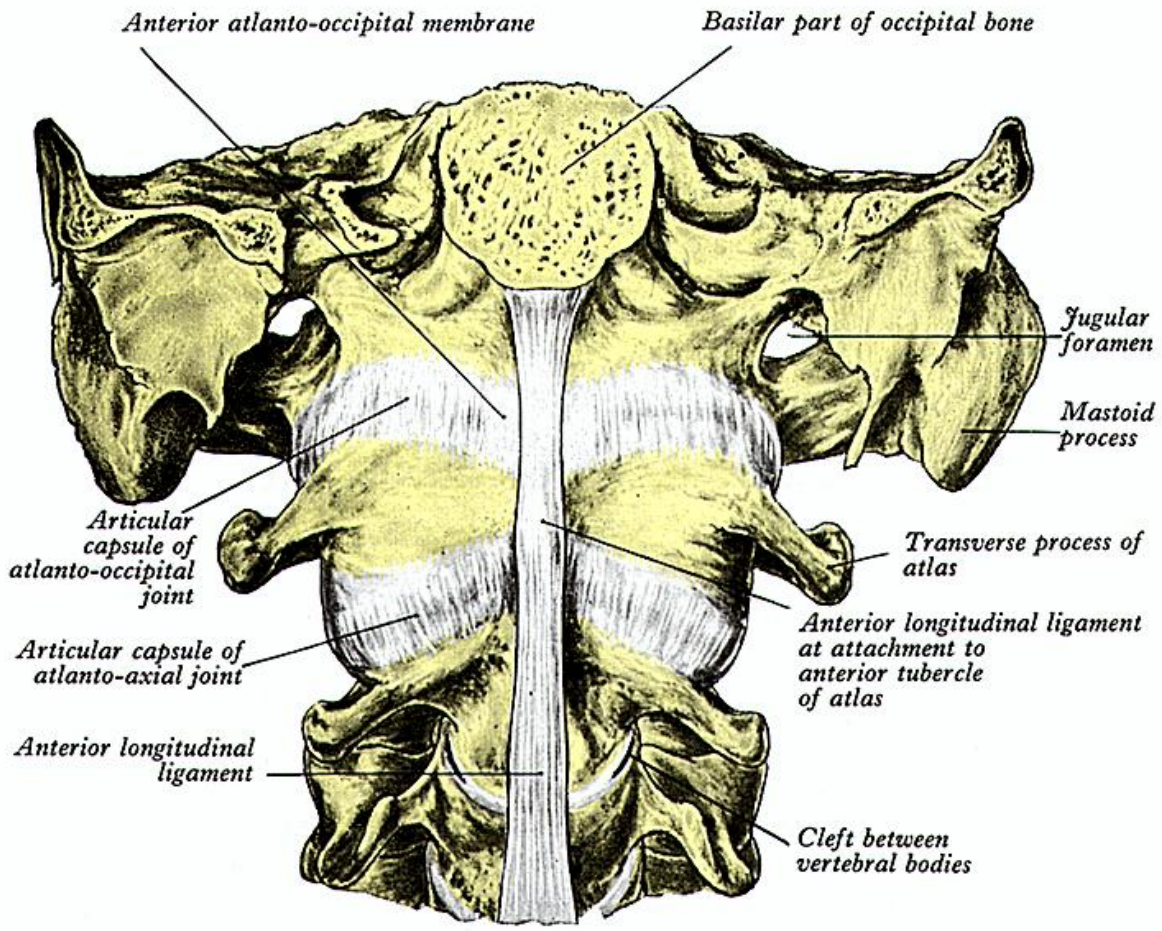

Superior vertebral notch
Superior articular process
Intervertebral foramen
Intervertebral disc (Anulus fibrosus)
Articular capsule of zygapophyseal (facet) joint
Ligamentum flavum
Anulus fibrosus, dissected
Inferior articular process
Inferior vertebral notch

the posterior longitudinal ligament, a taut, but somewhat flimsy, band passing from disc to disc, spans the posterior surfaces of the vertebral bodies and renders smooth the anterior wall of the vertebral canal



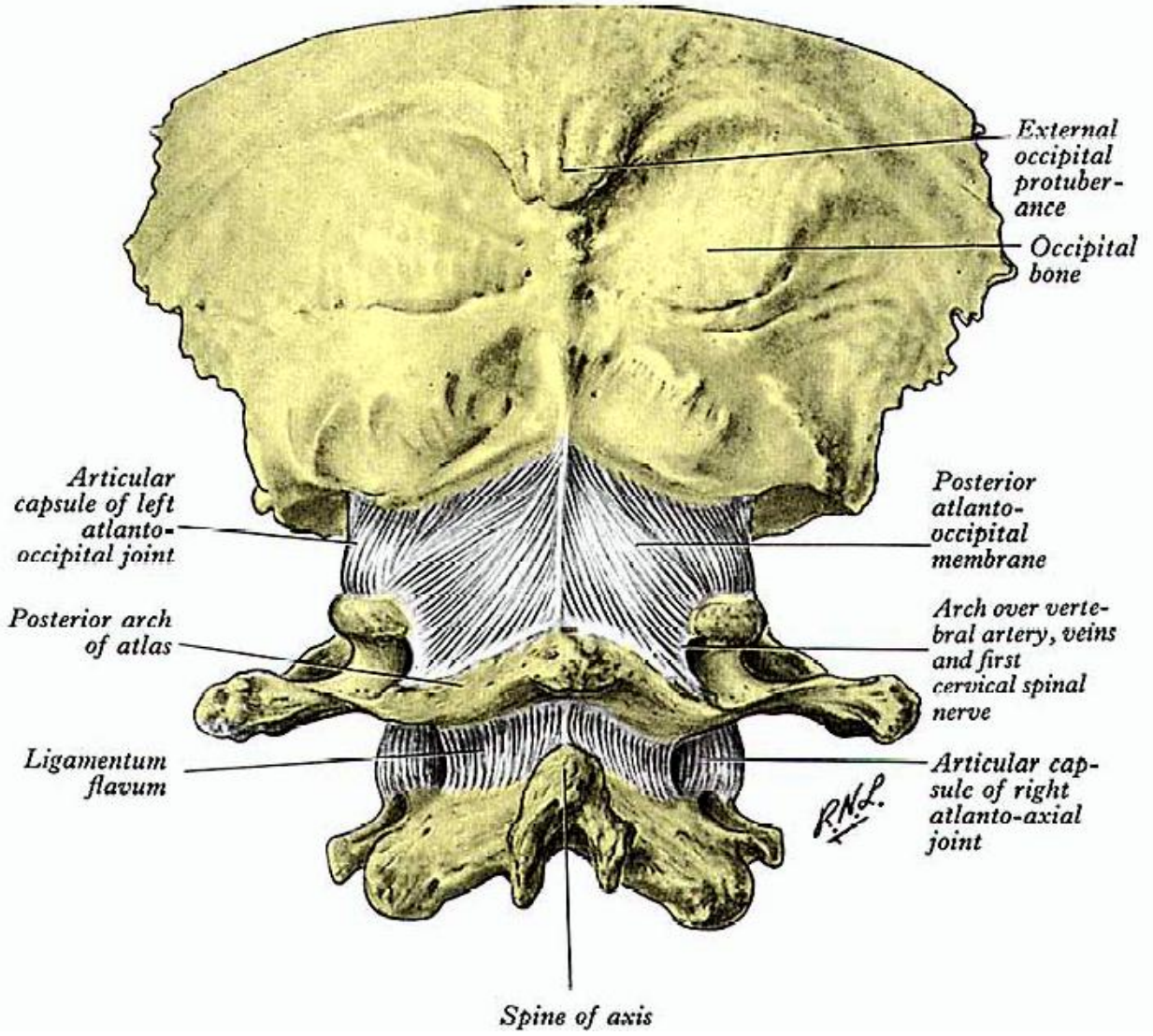
Atlanto-Axial Joints

Articulation of atlas to axis is at three synovial joints, a pair between lateral masses, and a median complex between the dens of the axis and the anterior arch and transverse ligament of the atlas.



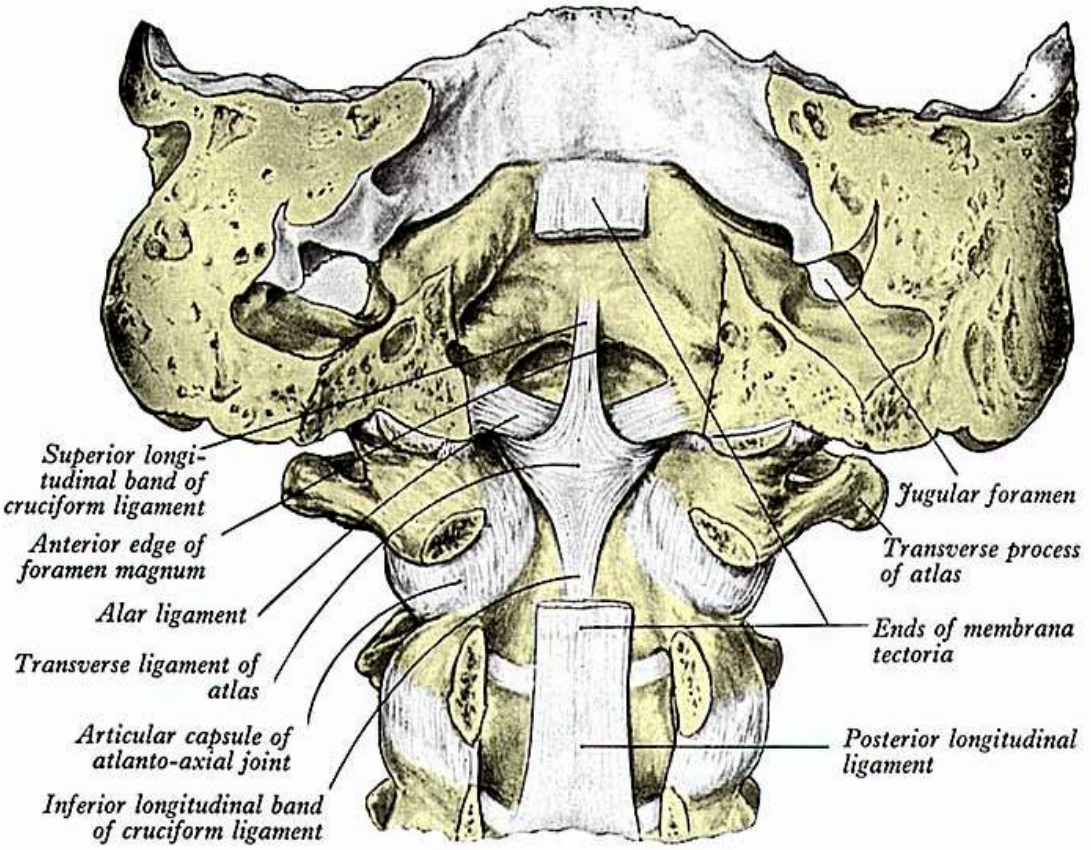
Movements at the Atlanto-Occipital JointsThe main movement is flexion, with a little lateral flexion and rotation

Atlanto-Occipital JointsEach joint consists of two reciprocally curved articular surfaces, one on the occipital condyle the other on the lateral mass of the atlas;
The bones are connected by articular capsules and the *anterior and posterior atlanto-occipital membranes.*

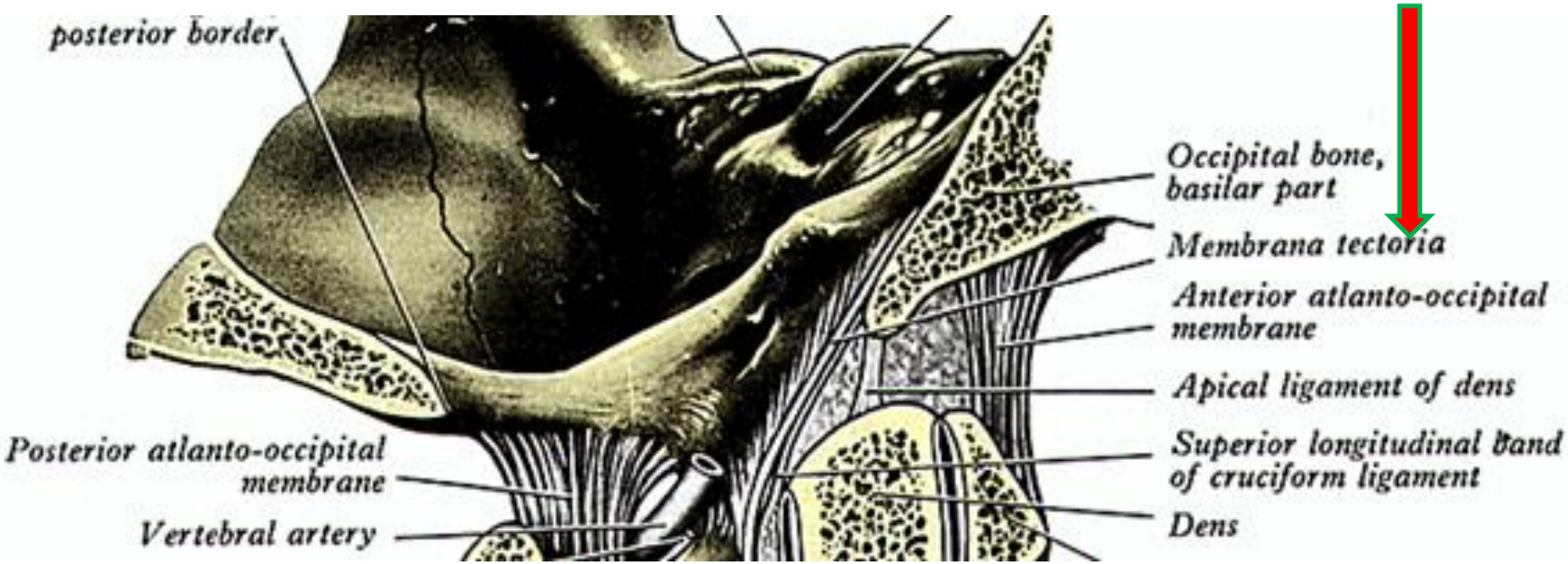


- Ligaments Connecting Axis and Occipital Bone
- membrana tectoria, and paired alar and median apical ligaments.
- Membrana Tectoria : upward continuation of the posterior longitudin

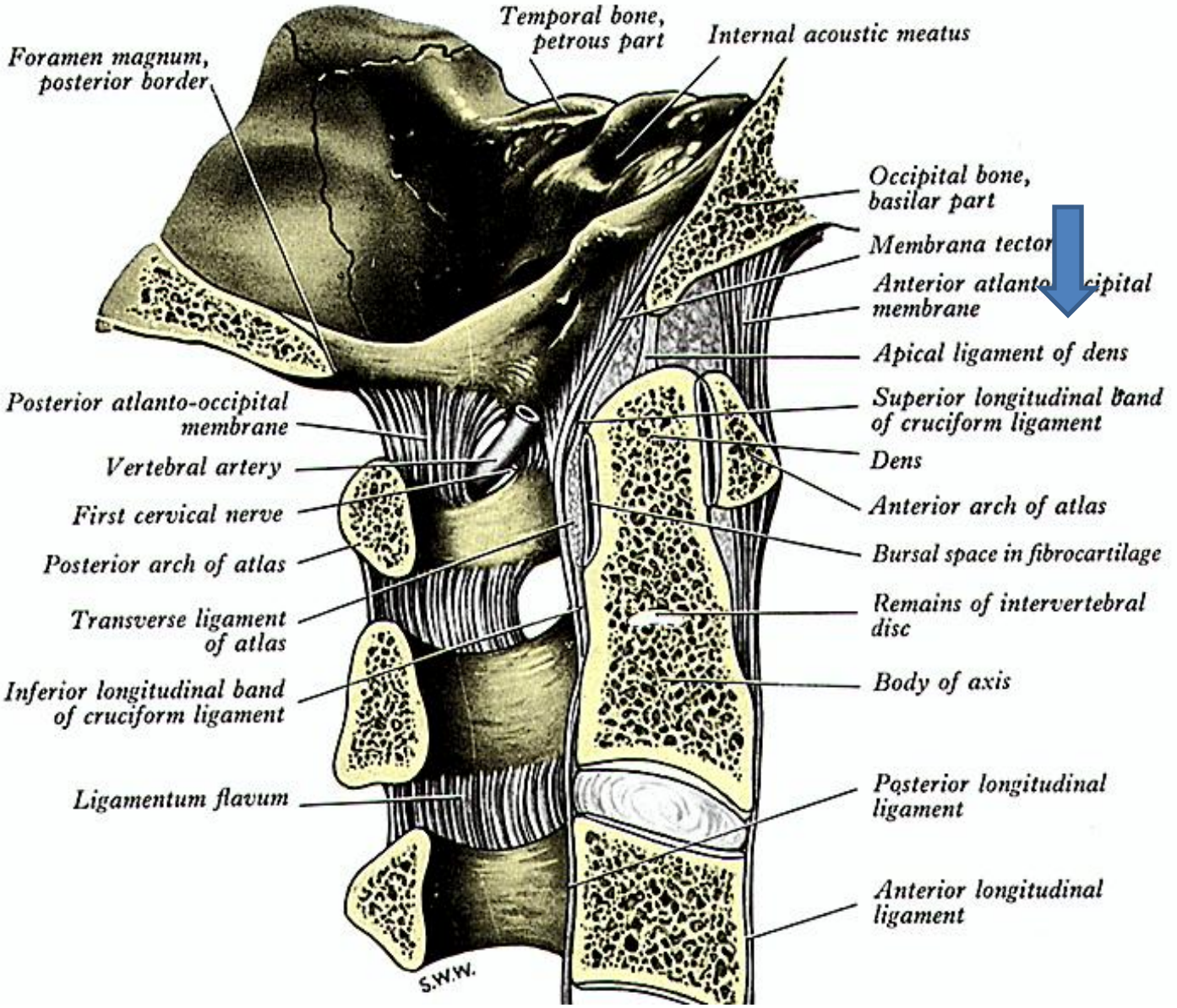
  al ligament.
- Its superficial deep laminae are both attached to the posterior surface of the axial body,



the superficial lamina expanding as it ascends to the upper surface of the basilar occipital bone, attaching above the foramen magnum, where it blends with the cranial dura mater.

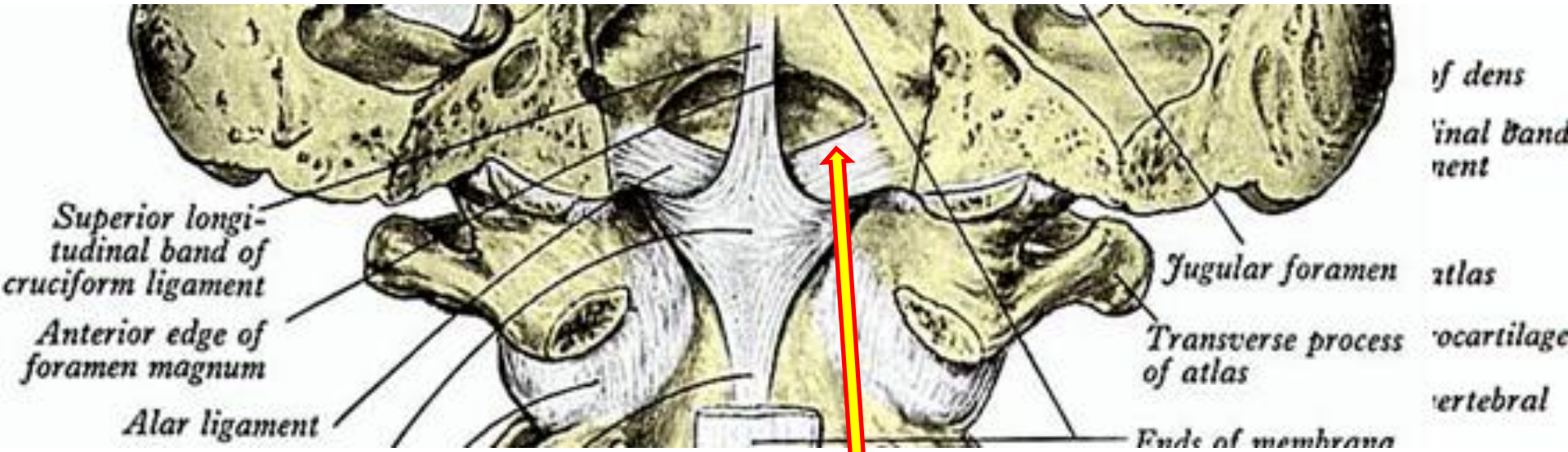


The deep lamina has a strong median band ascending to the foramen magnum, and two lateral bands which pass and blend with the capsules of the atlanto-occipital joints as they reach the foramen magnum.



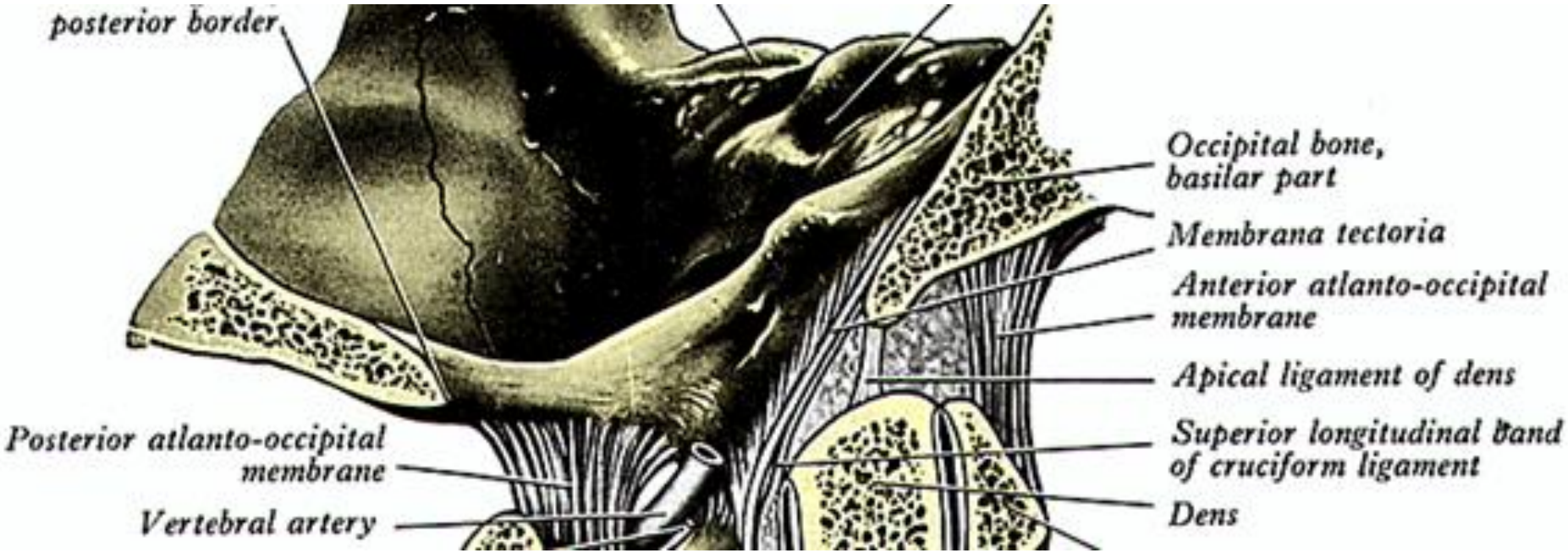
The membrane is separated from the cruciform ligament of the atlas by a thin layer of loose areolar tissue, and sometimes by a bursa.

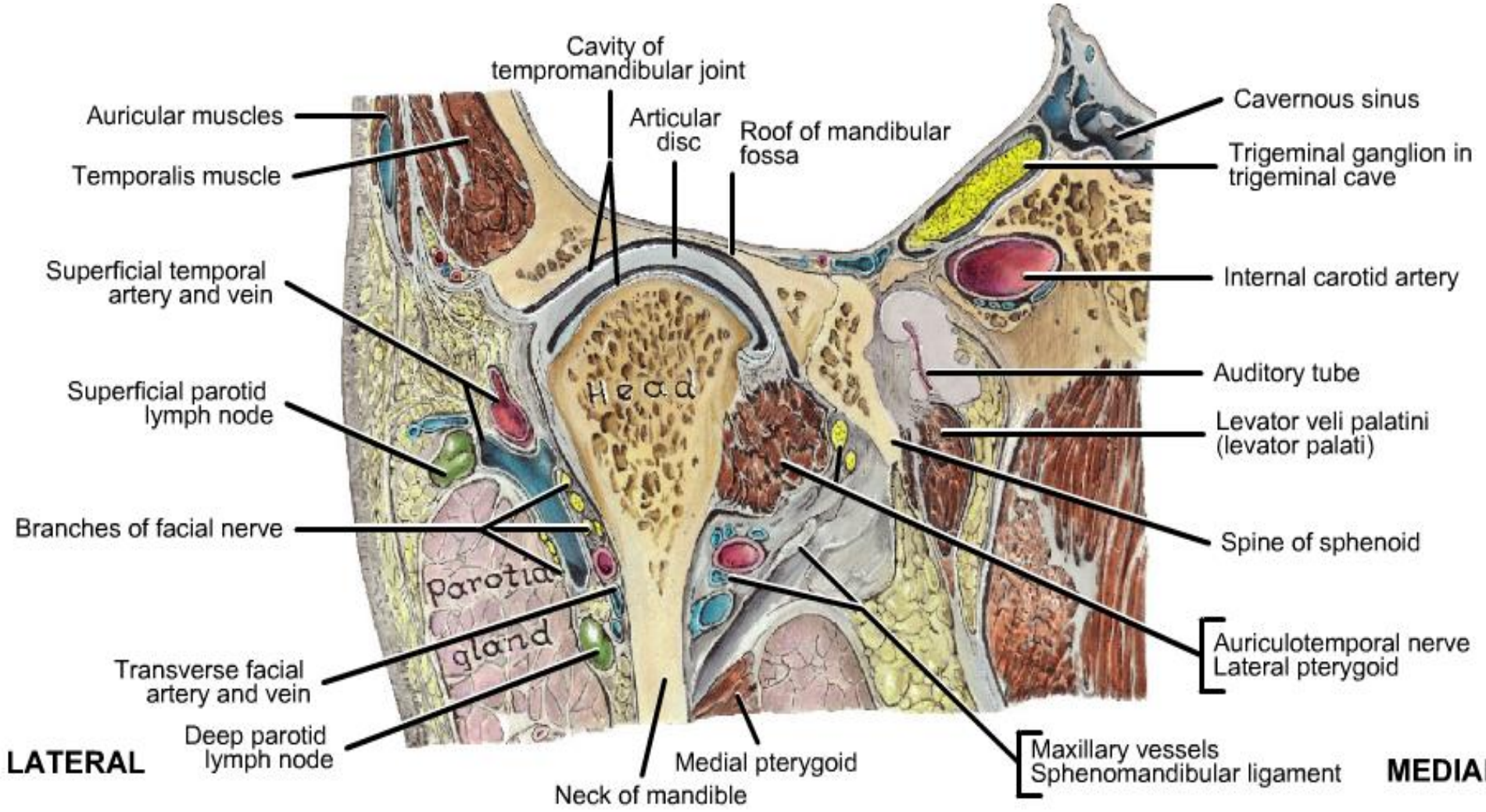
- Alar Ligaments ; from dens to the side of the occipital condyles and into the lateral mass of the atlas
- These ligaments consist mainly of collagen fibres arranged in parallel. The main function of the alar ligaments is now considered to be limitation of atlantoaxial rotation, the left becoming taut on rotation to the right and vice versa.



It is separated for most of its extent from the anterior atlanto-occipital membrane and cruciform ligament by pads of fatty tissue, though it blends with their attachments at the foramen magnum, and with the alar ligaments at the apex of the dens.

- Apical Ligament of the Dens
- It fans out from the apex of the dens into the anterior margin of the foramen magnum between the alar ligaments.



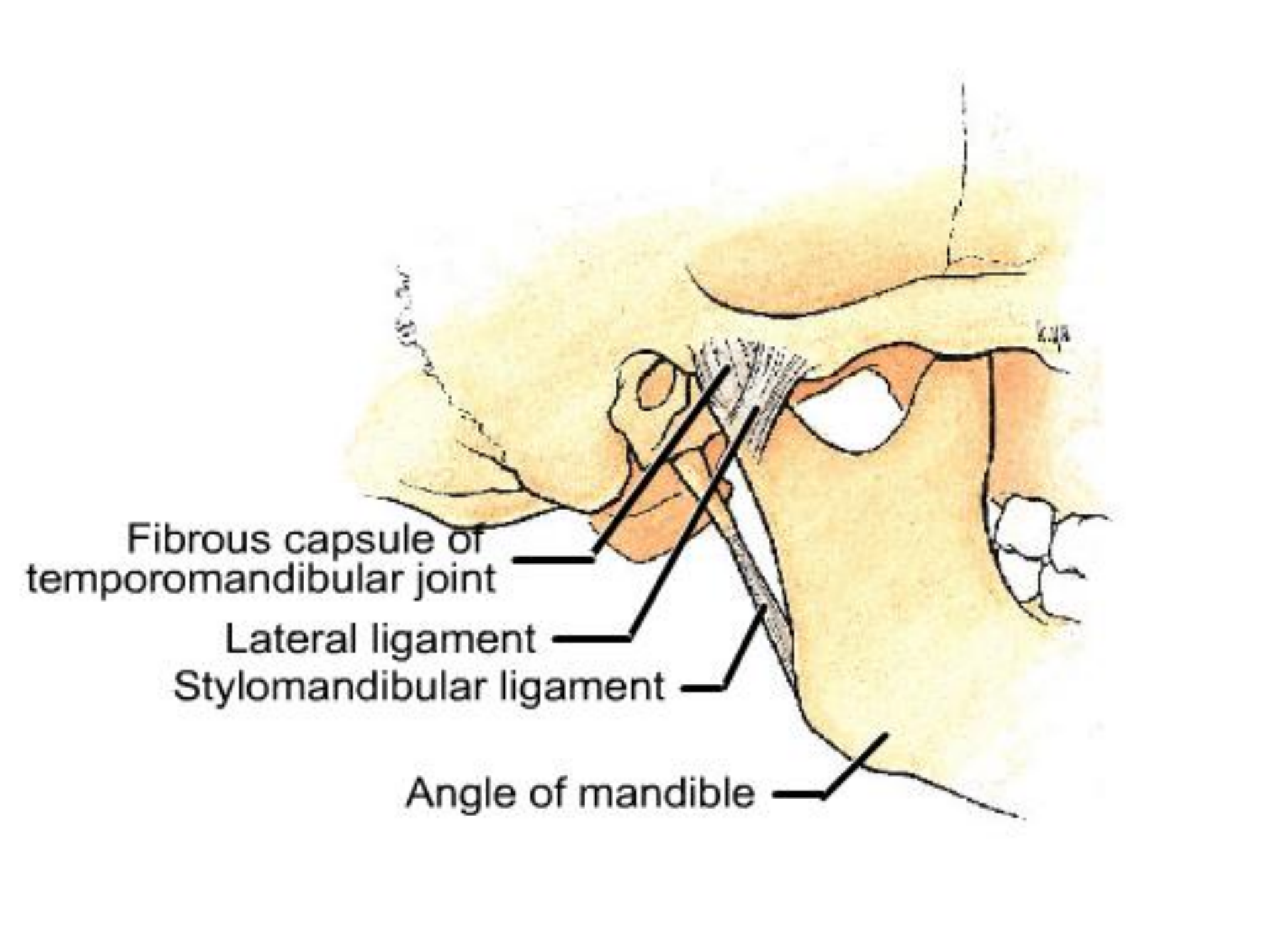

Cavity of tempromandibular joint
Auricular muscles
Articular disc
Roof of mandibular fossa
Cavernous sinus
Temporalis muscle
Trigeminal ganglion in trigeminal cave
Superficial temporal artery and vein
Internal carotid artery
Head
Superficial parotid lymph node
Auditory tube
Levator veli palatini (levator palati)
Branches of facial nerve
Spine of sphenoid
Parotid gland
Auriculotemporal nerve
Lateral pterygoid
Transverse facial artery and vein
Deep parotid lymph node
Maxillary vessels
Sphenomandibular ligament
LATERAL
Medial pterygoid
MEDIAL
Neck of mandible

- lateral ligaments

stylomandibular ligament,.

The fibrous capsule of the ***temporomandibular joint attaches to the margins of the articular area of the temporal bone and around the neck of the mandible;***

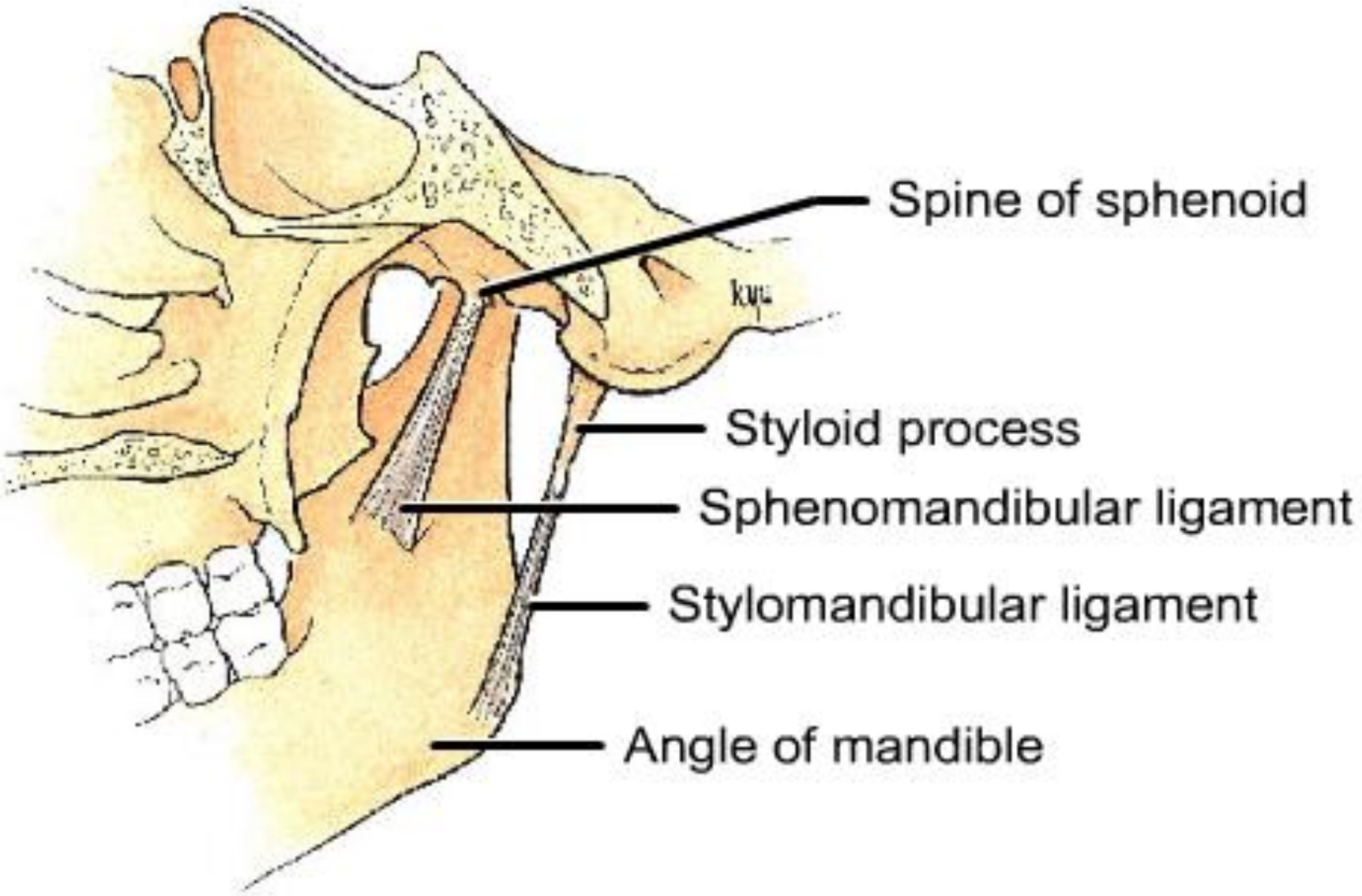
temporomandibular ligament strengthens the lateral aspect of the joint.


Fibrous capsule of temporomandibular joint
Lateral ligament
Stylomandibular ligament
Angle of mandible

- ***medial view***

  =stylomandibular ligament, joins the styloid process to the angle of the mandible.

  =The sphenomandibular ligament, descends from spine of the sphenoid to the lingula of the mandible and the


Spine of sphenoid
Styloid process
Sphenomandibular ligament
Stylomandibular ligament
Angle of mandible