



Temporal and Inratemporal Fossae

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Temporal Fossa

Boundaries and Bony Landmarks :

Superiorly : Superior temporal line

Inferiorly : Zygomatic arch

Anteriorly : Frontal process of zygomatic bone and zygomatic process of frontal bone

Floor: Pterion (H-shaped suture between frontal, parietal, squamous temporal and greater wing of sphenoid).

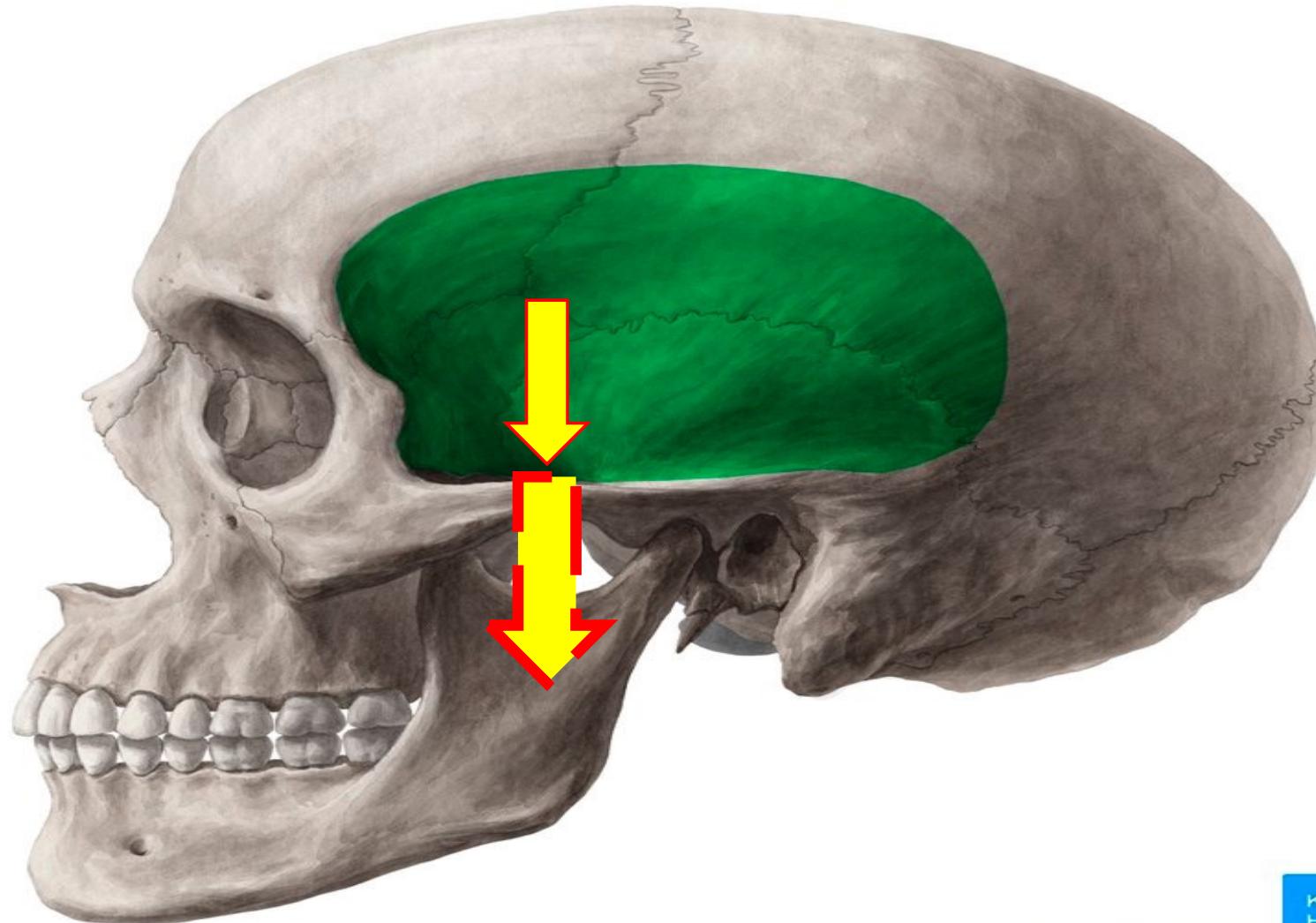


Temporal Fossa

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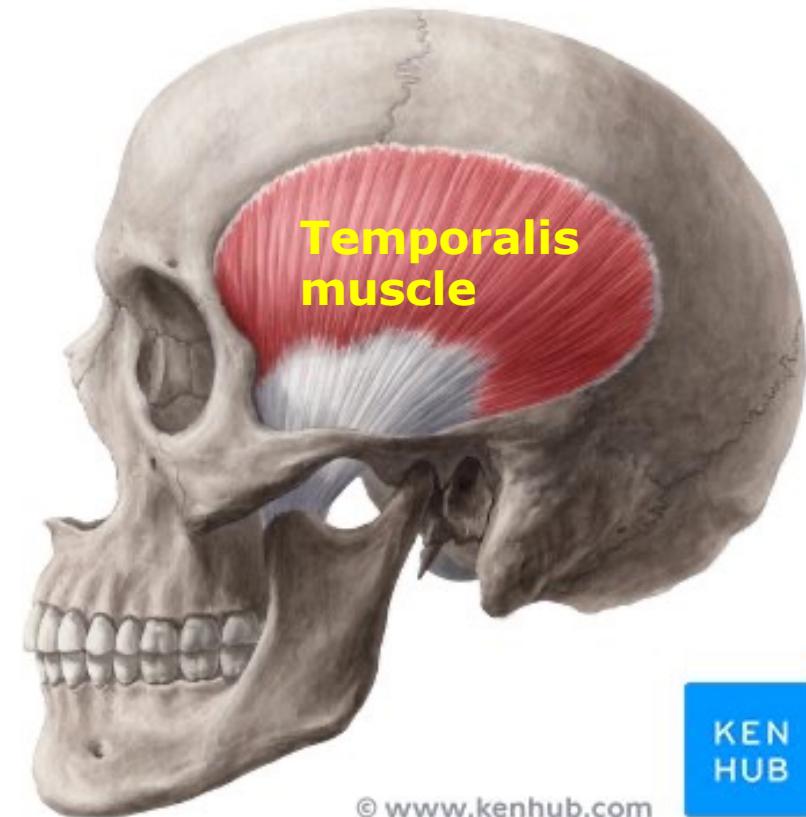
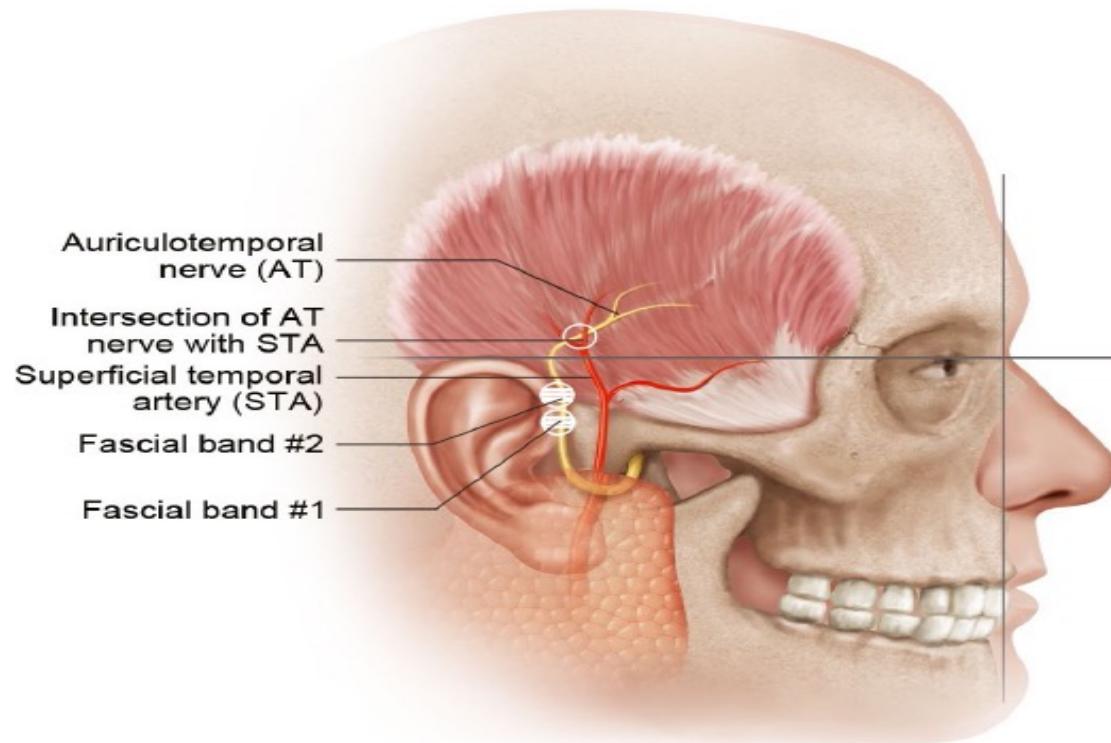
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Communication : It communicates with infratemporal fossa through the gap deep to the zygomatic arch.



Contents :

1. Temporalis muscle covered with temporal fascia.
2. Auriculotemporal nerve and superficial temporal vessels are superficial to the temporal fascia.
3. Two deep temporal nerves and vessels are deep to the temporalis muscle.



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Infratemporal fossa

Boundaries :

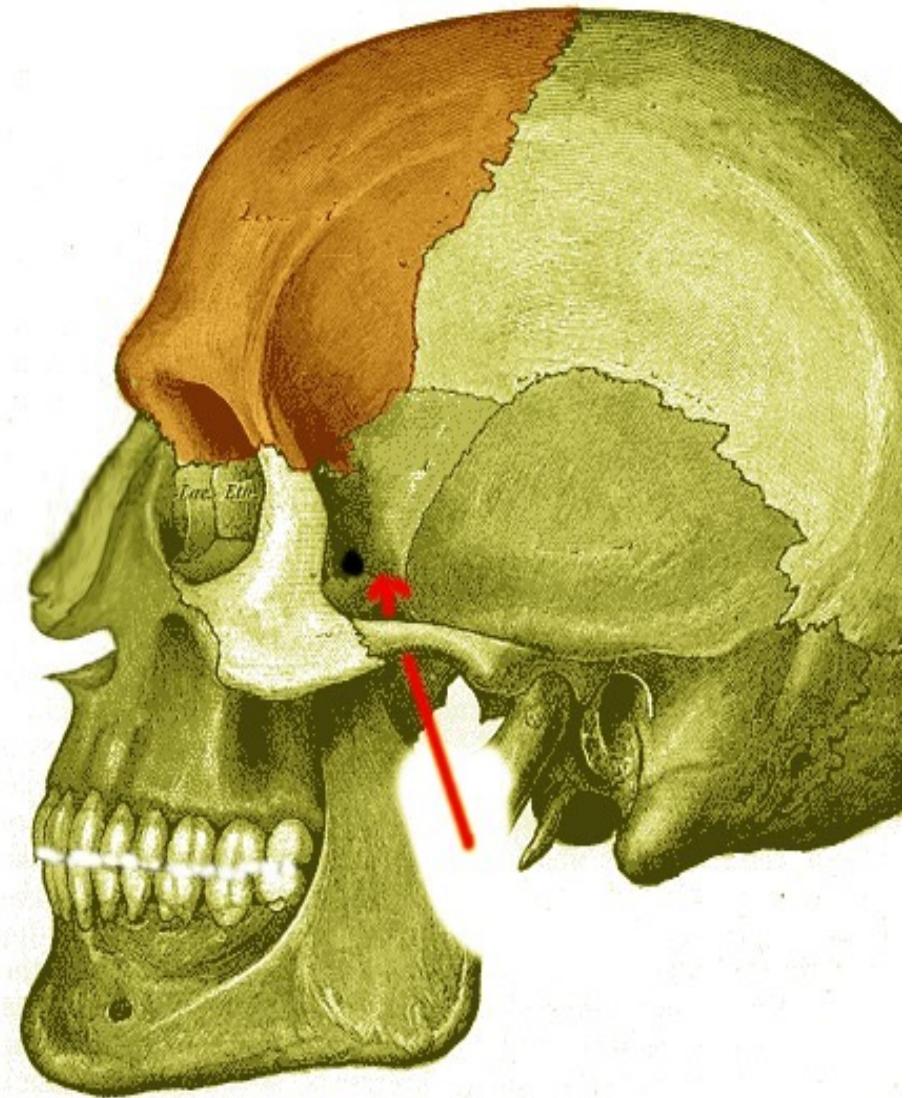
Medially : Lateral pterygoid plate and side wall of the pharynx.

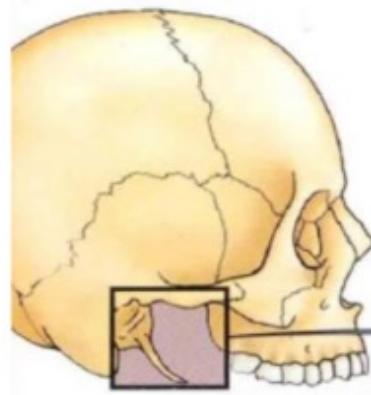
Laterally : Ramus of the mandible and masseter muscle .

Anterior wall : Posterior surface of the maxilla.

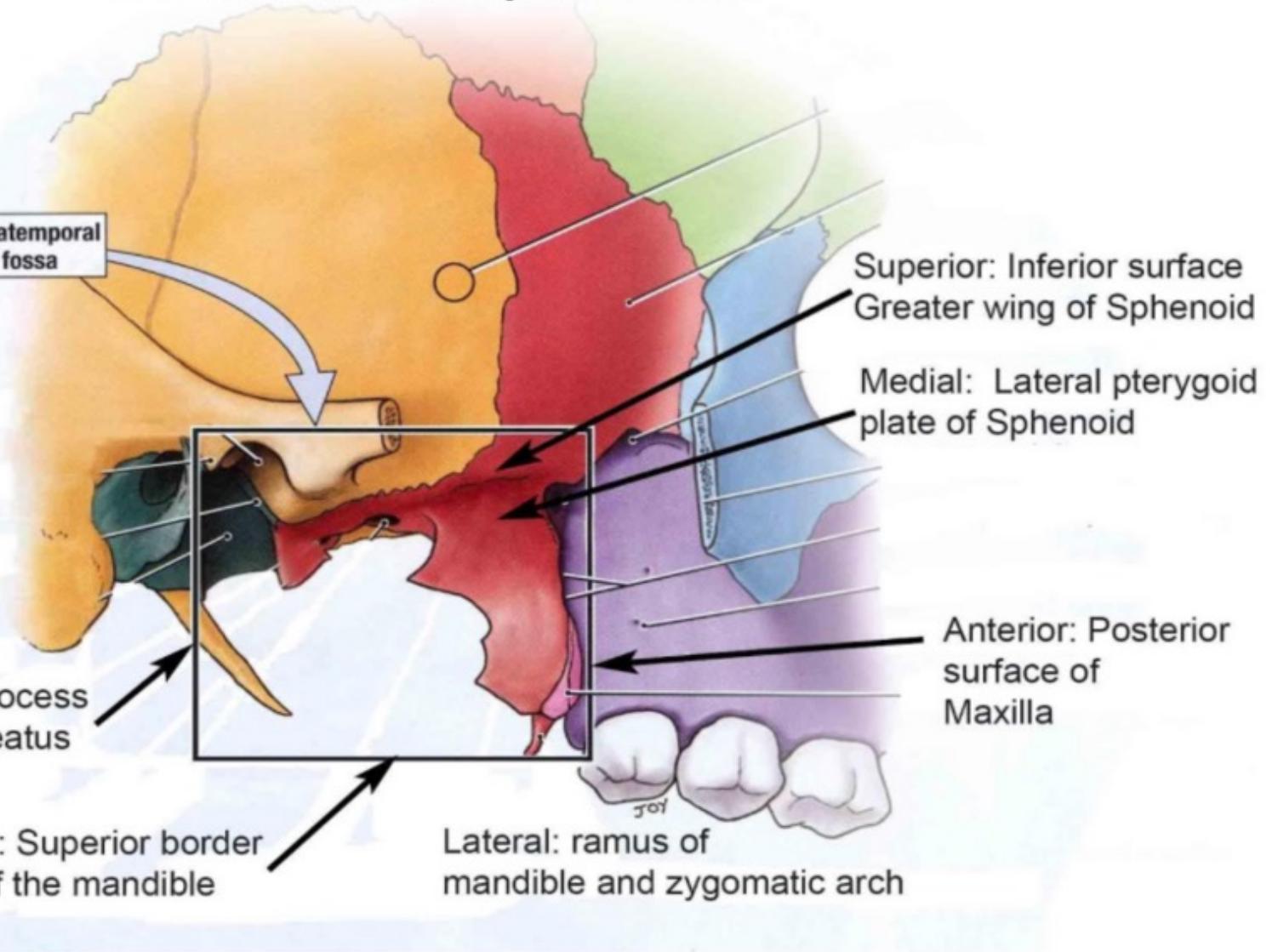
Posterior wall : Styloid apparatus and carotid sheath.

Roof: Infratemporal part of the greater wing of the sphenoid.





Borders: Infratemporal Fossa



ROOF

Infratemporal
surface of sphenoid

Foramen ovale

Foramen spinosum

ANTERIOR WALL

Posterior surface
of maxilla

POSTERIOR WALL

Tympanic plate

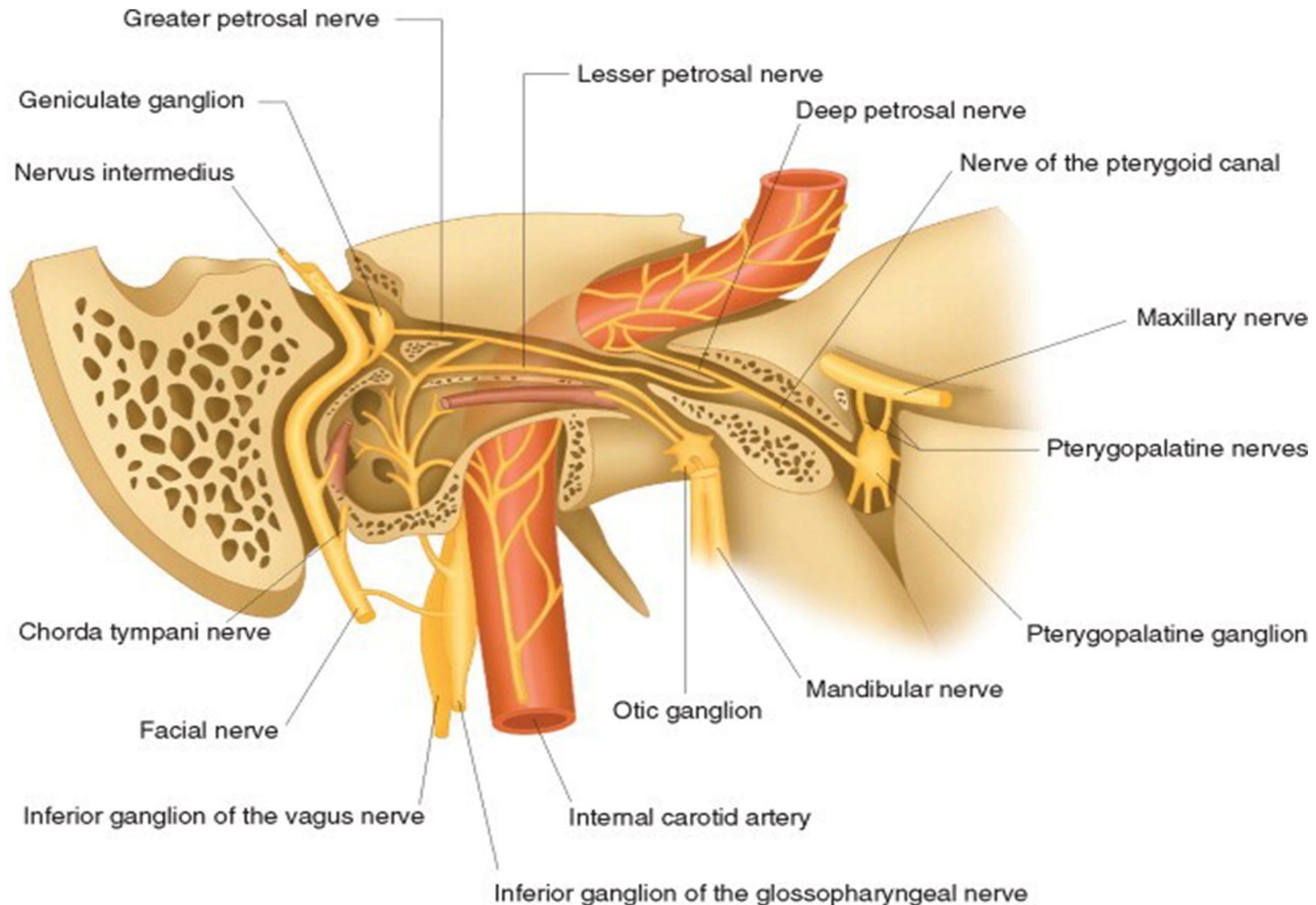
Styloid process

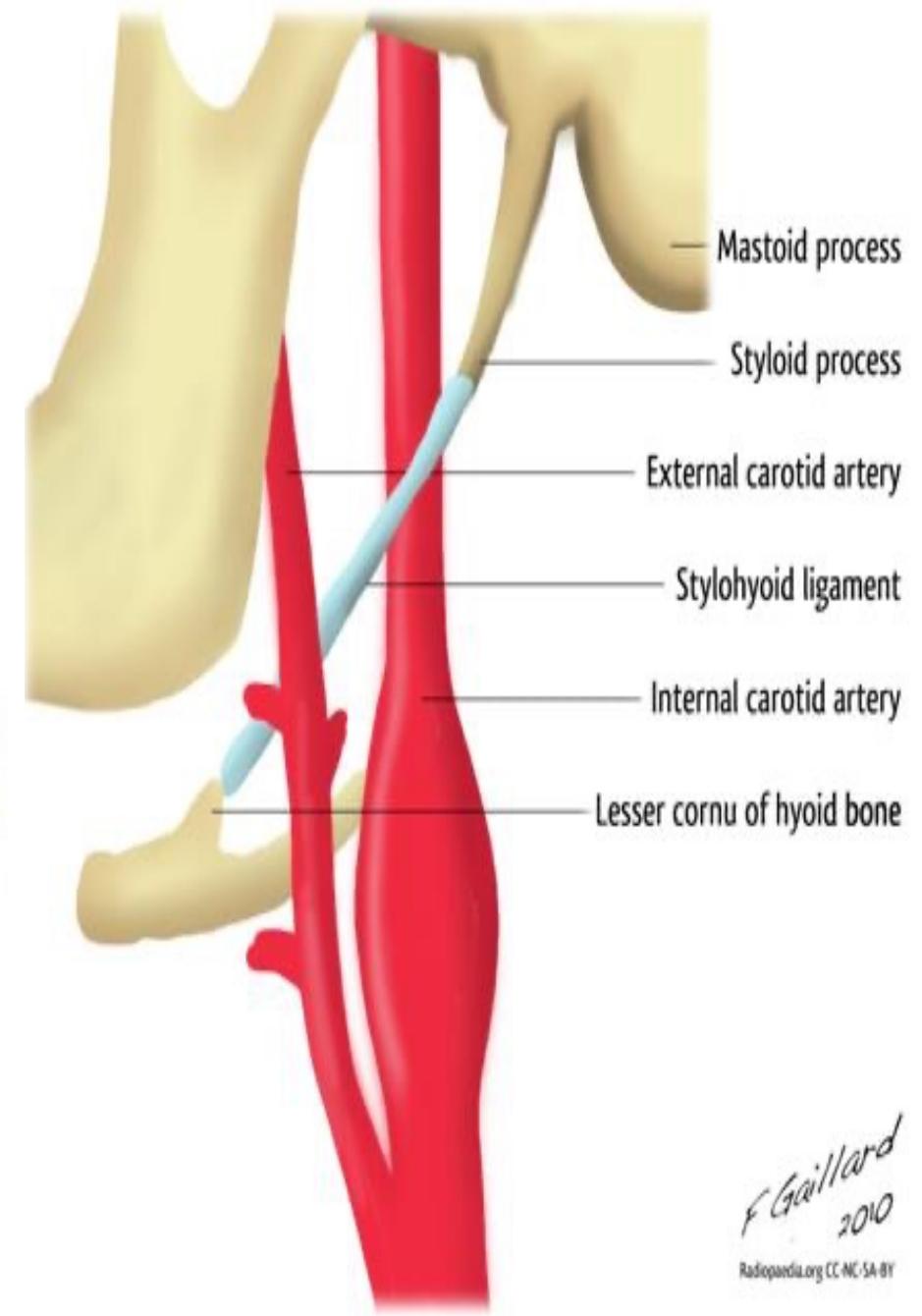
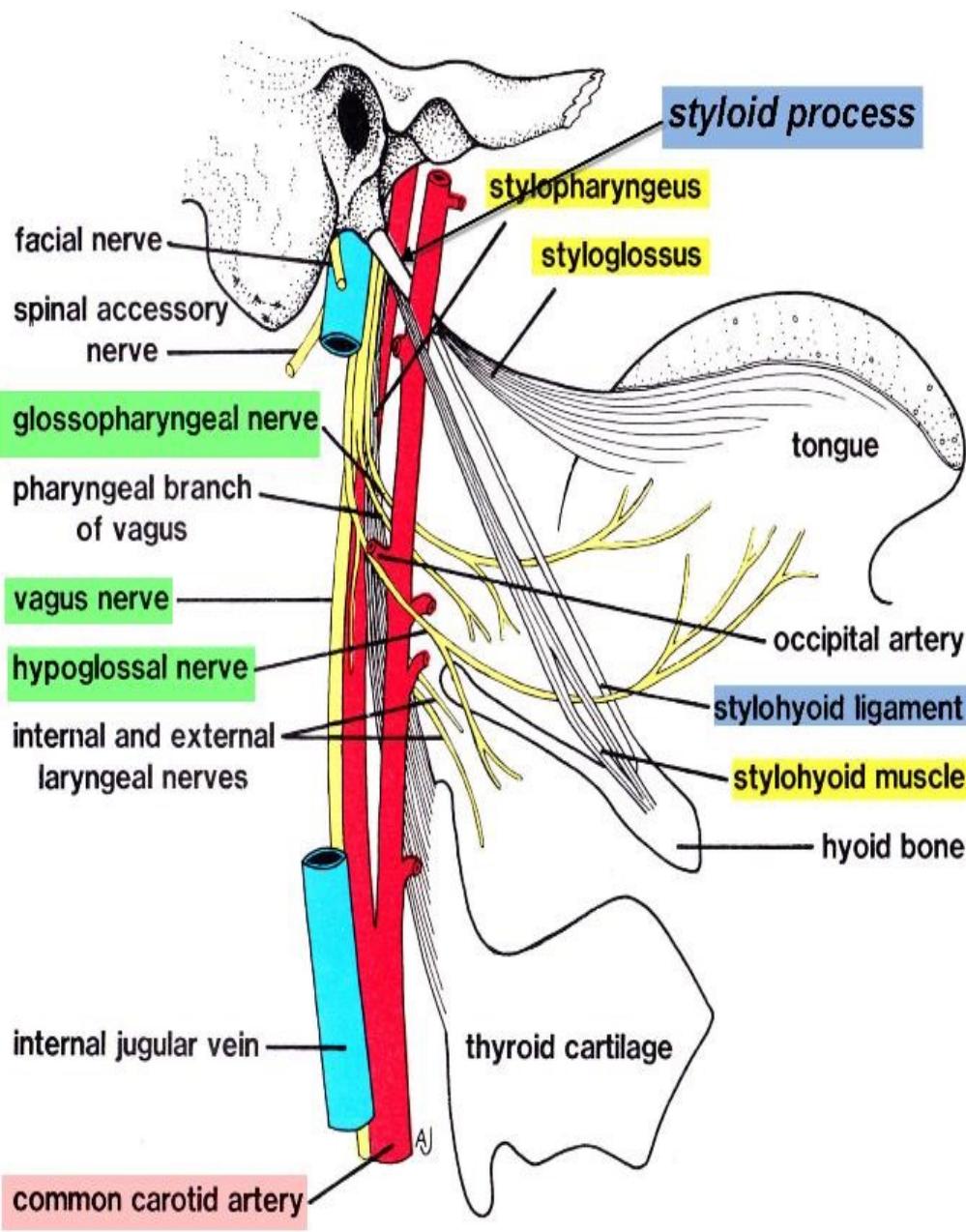
LATERAL WALL

Ramus of mandible

MEDIAL WALL

Lateral pterygoid plate
Pharynx





Communications :

Superolaterally : with temporal fossa, deep to the zygomatic arch.

Superomedially : with the orbit via inferior orbital fissure.

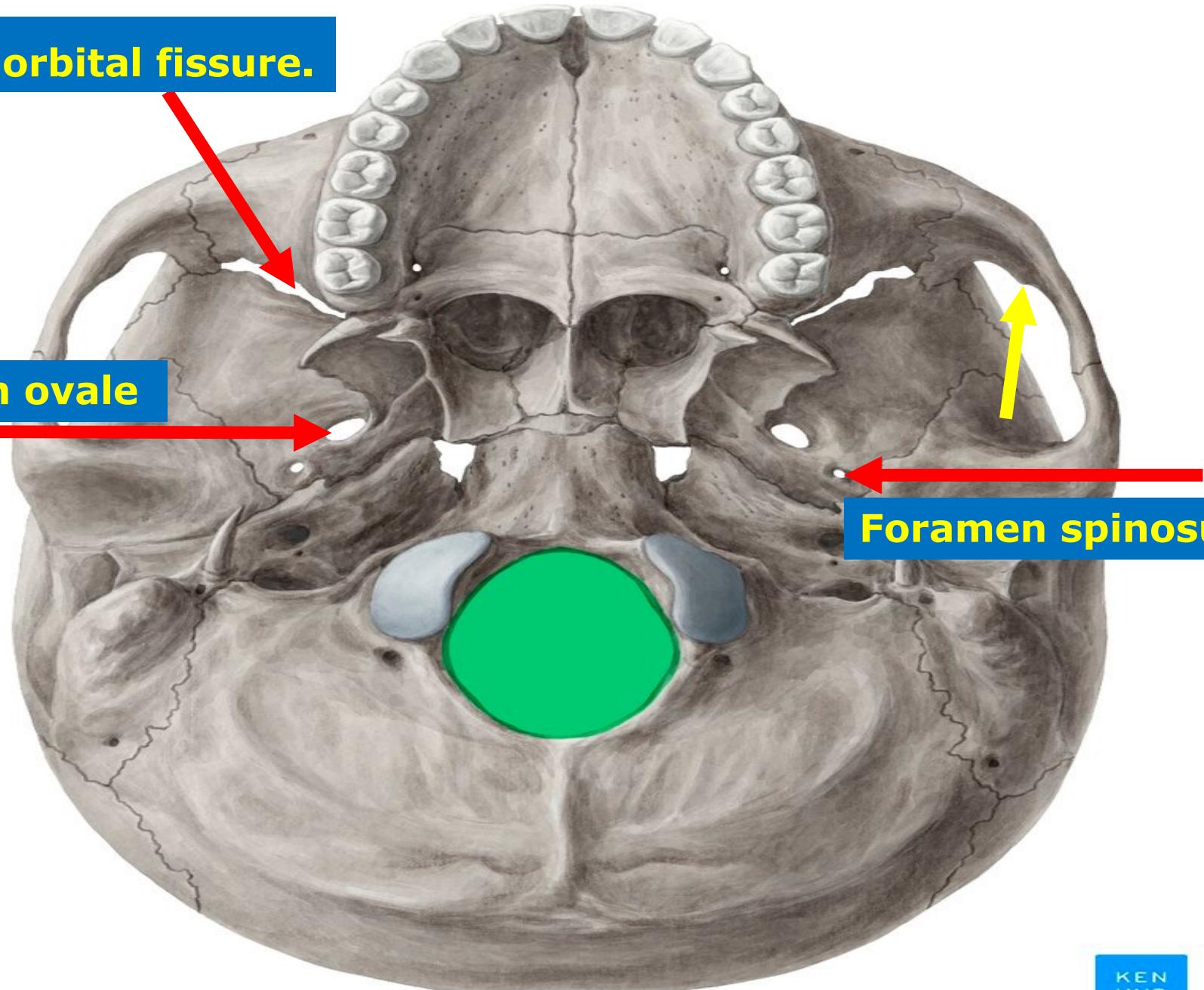
Above through its roof: with middle cranial fossa via foramen ovale and foramen spinosum.

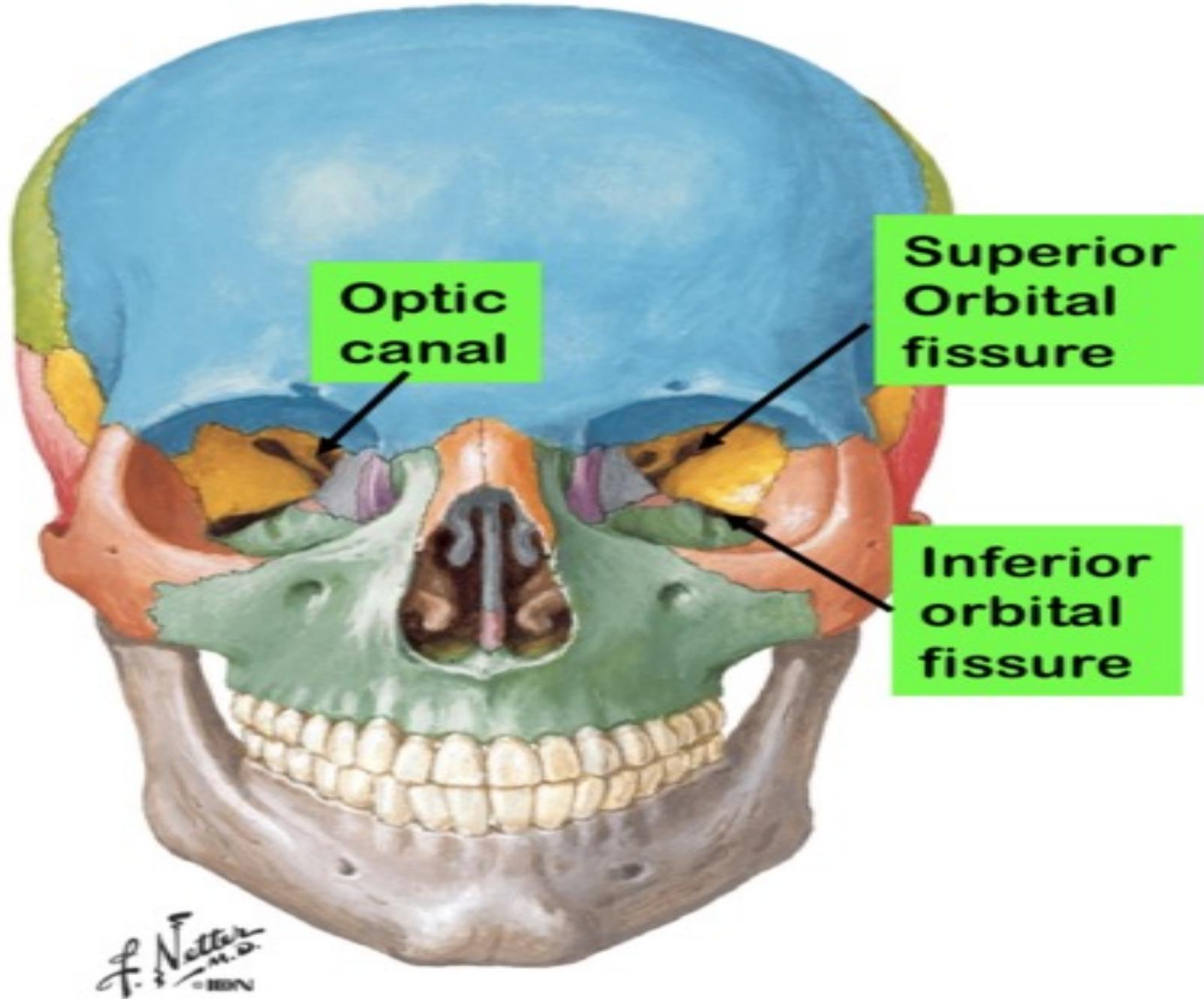
Medially : with pterygo-palatine fossa via pterygomaxillary fissure.

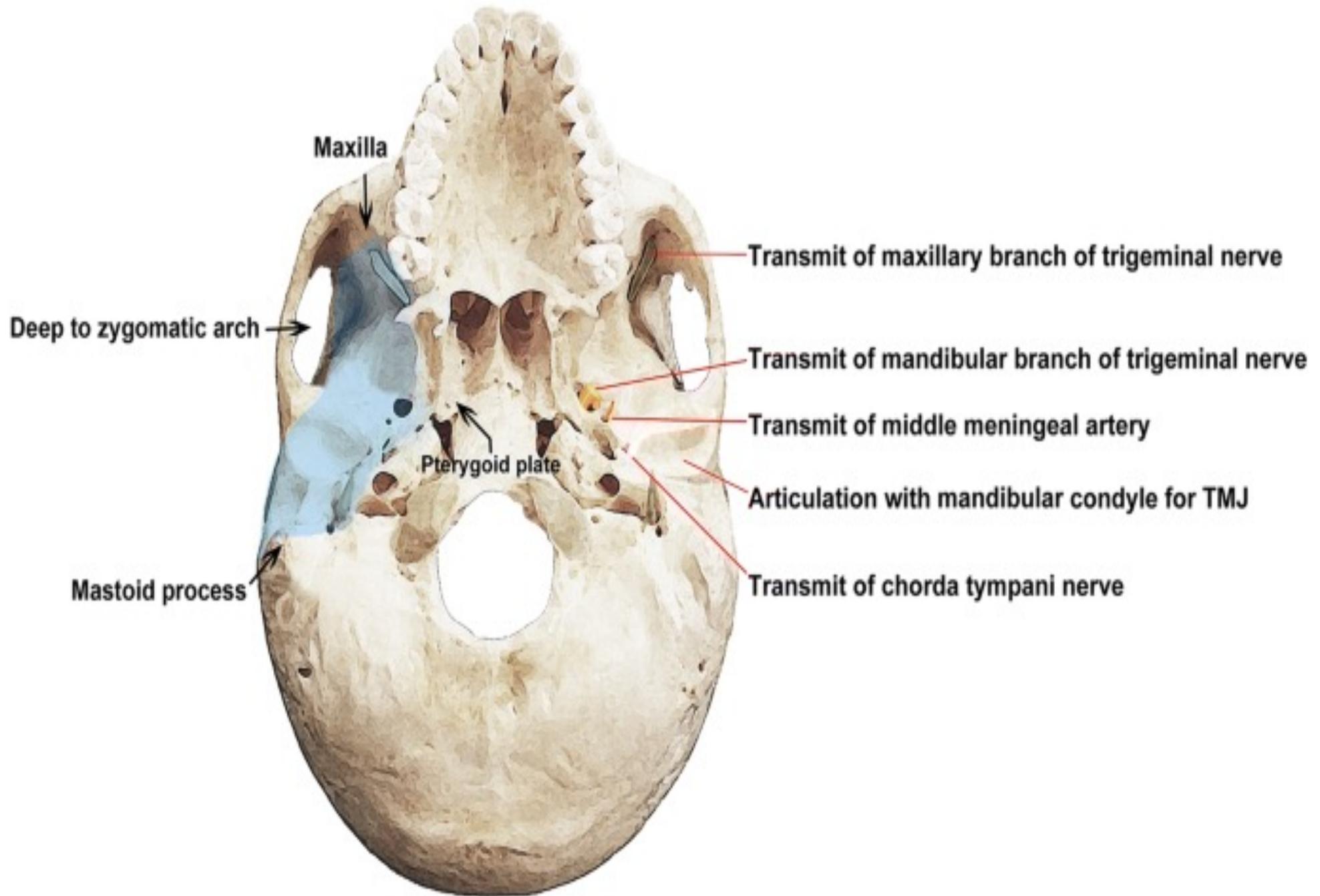
Inferior orbital fissure.

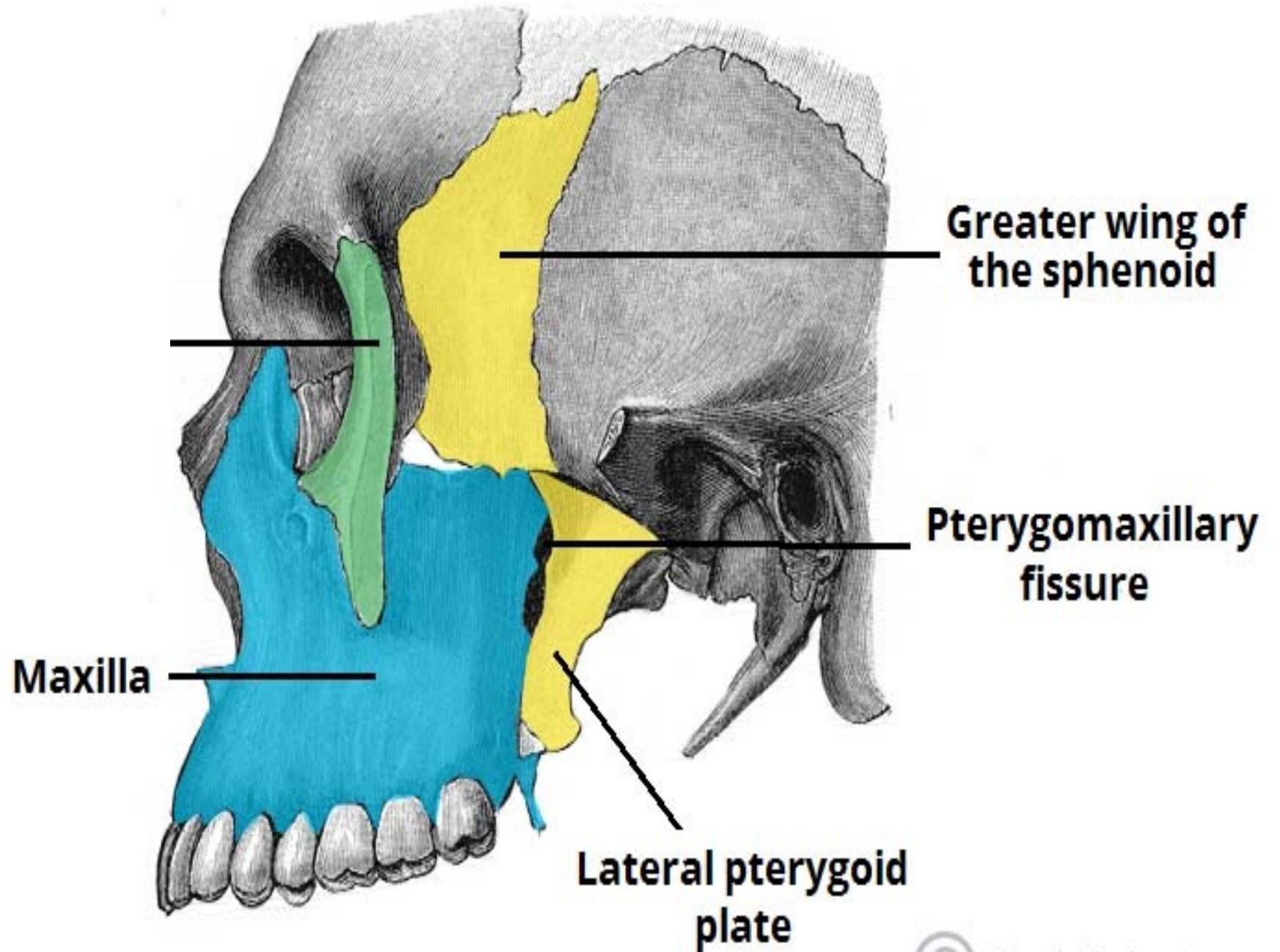
Foramen ovale

Foramen spinosum.





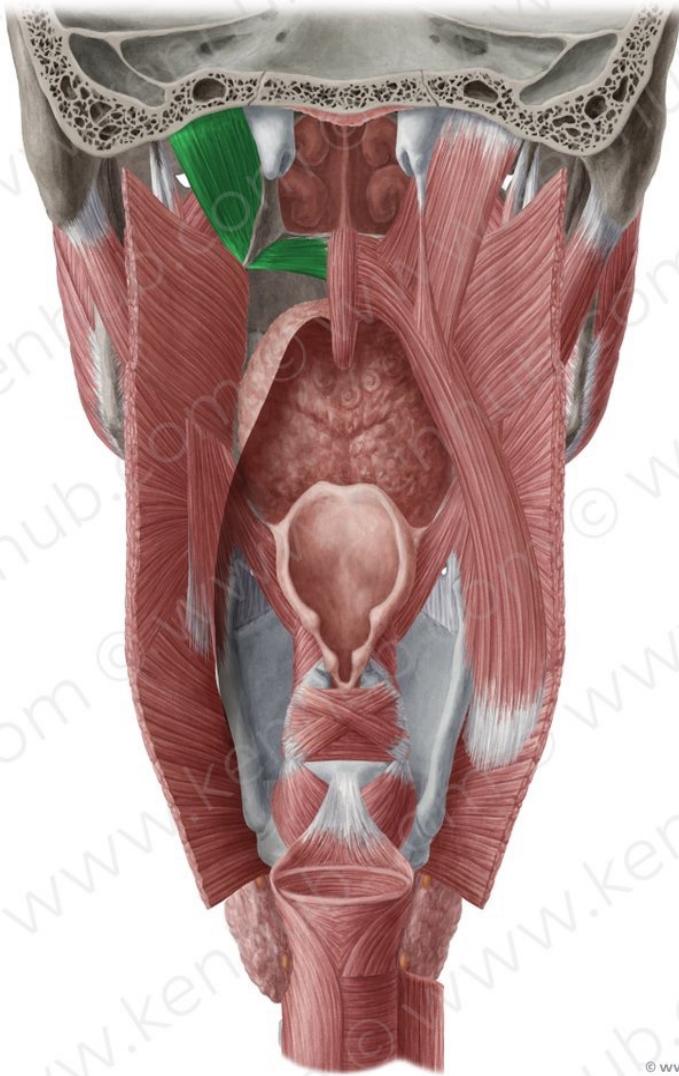




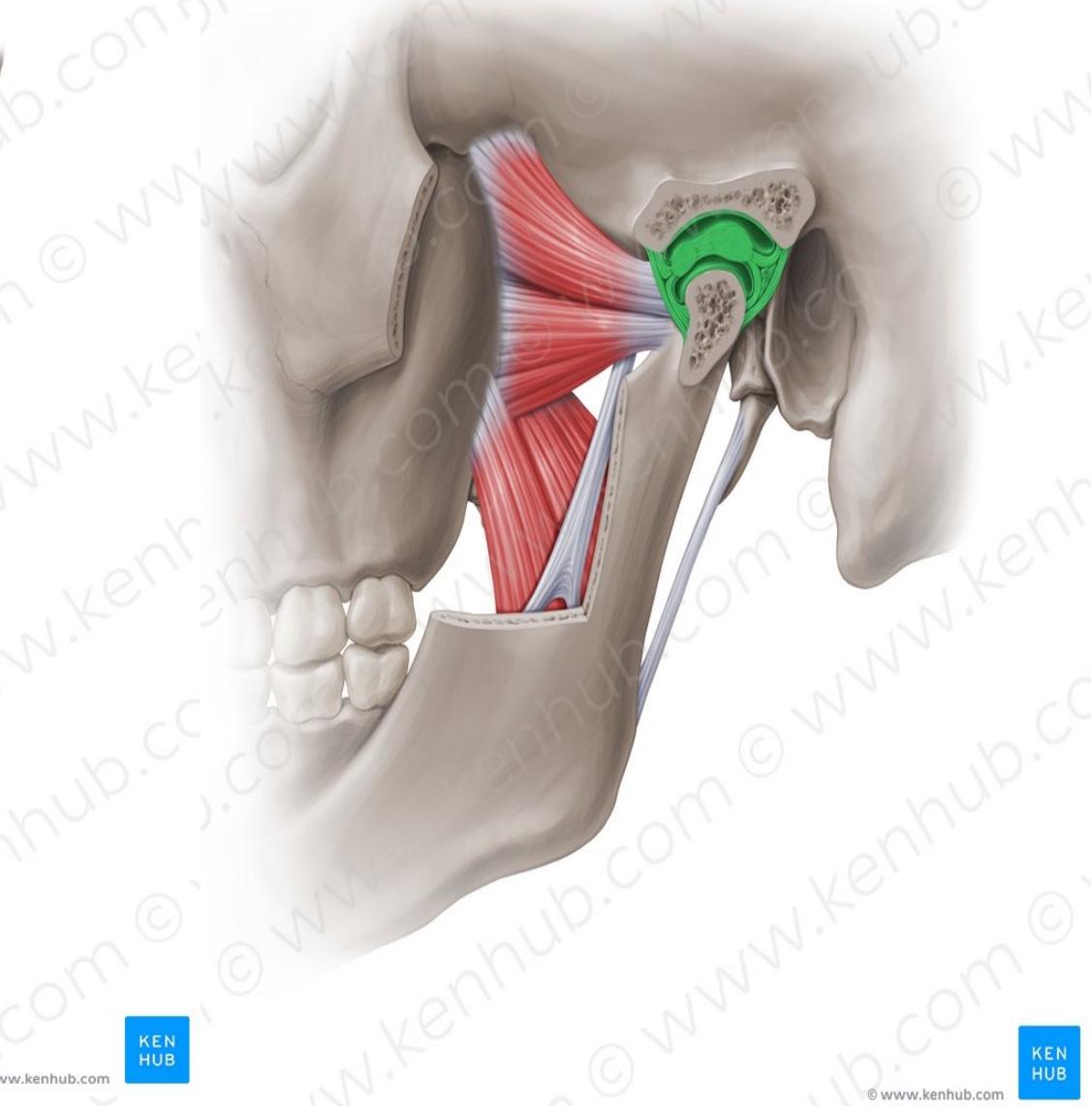
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Contents of infratemporal fossa

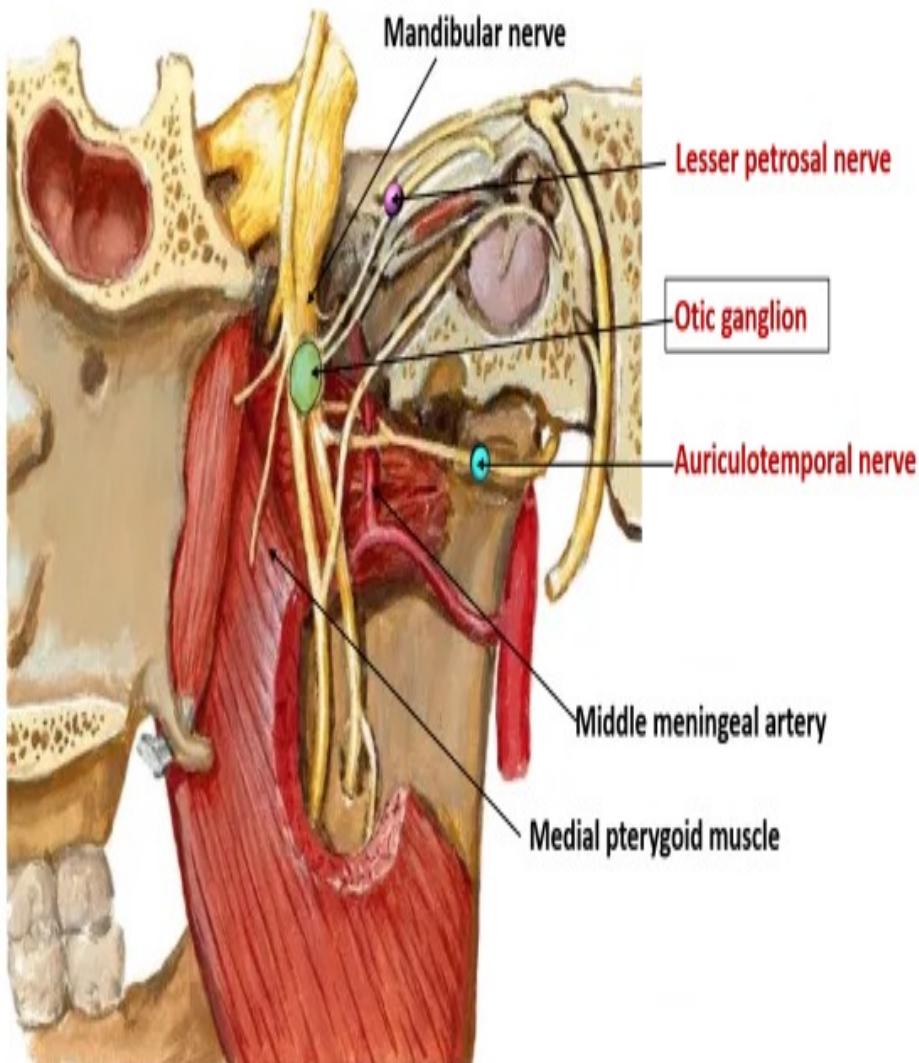
| Superficial contents | Deep contents |
|--|---|
| Muscles 1. Lateral pterygoid muscle 2. Medial pterygoid muscle | Tensor palati muscle |
| Nerves Branches of the mandibular Nerve | 1. Trunk of the mandibular Nerve 2. Otic ganglion 3. Chorda tympani |
| Vessels 1. Maxillary A. (first and second parts only). 2. Pterygoid venous plexus | Middle and accessory meningeal arteries |
| | Sphenomandibular ligament |



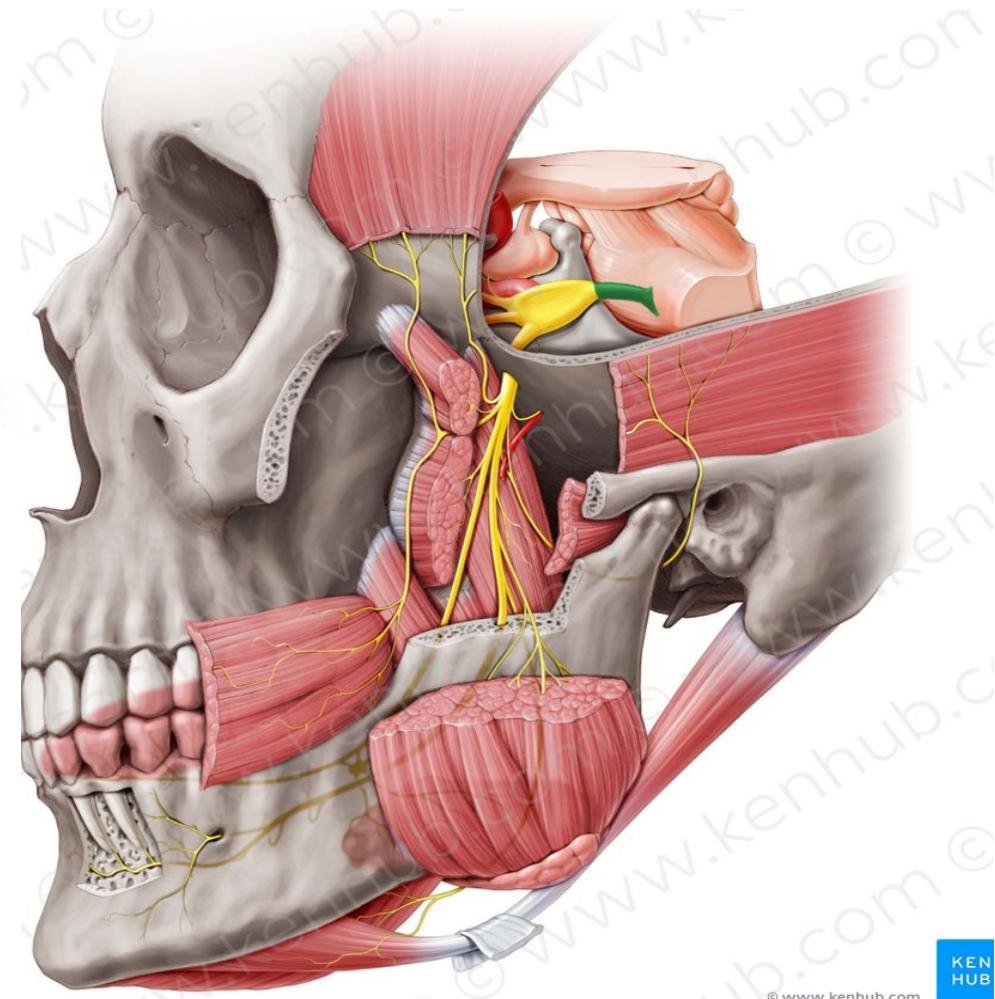
Tensor palati muscle



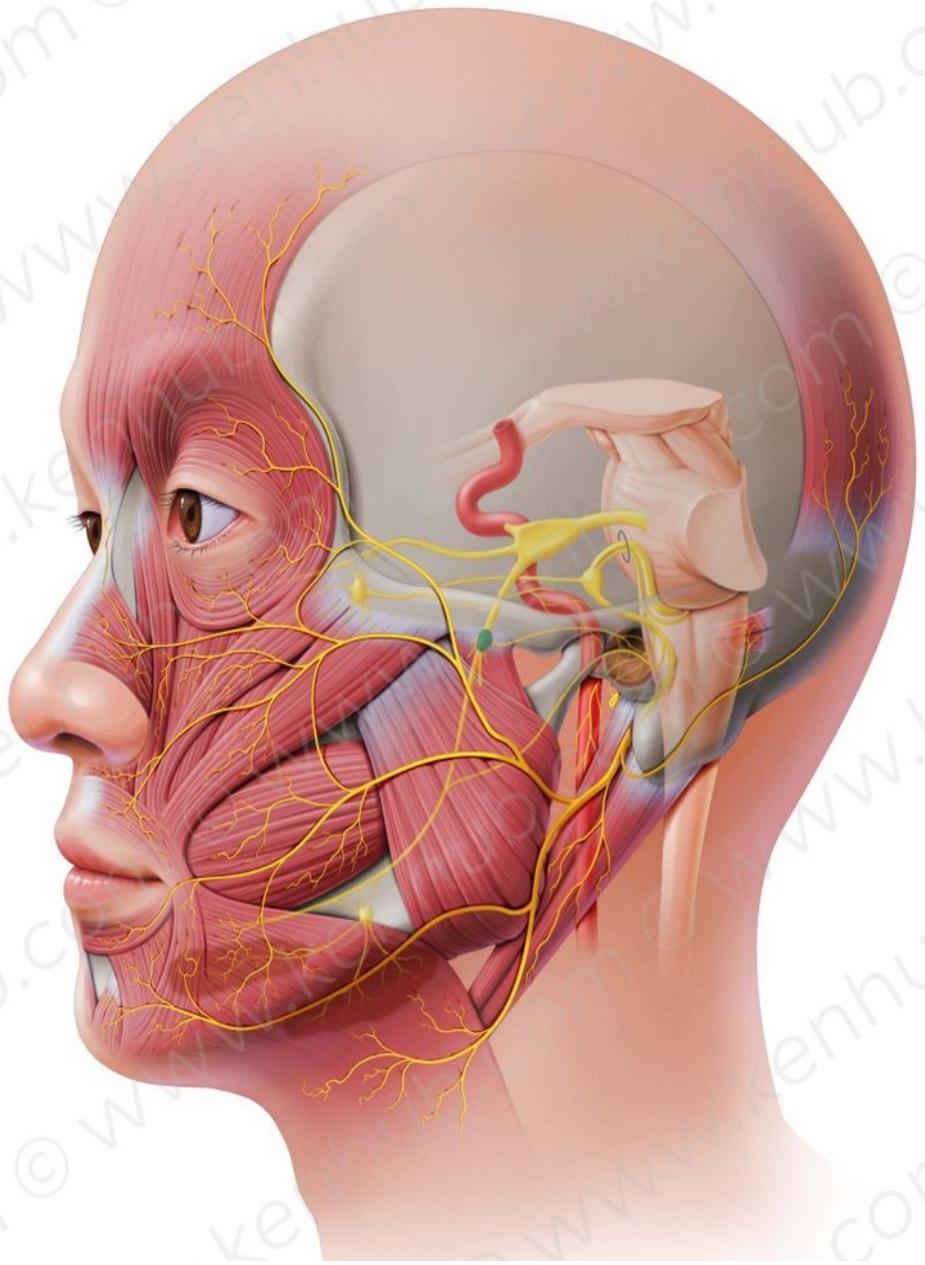
Lateral and medial pterygoid muscles



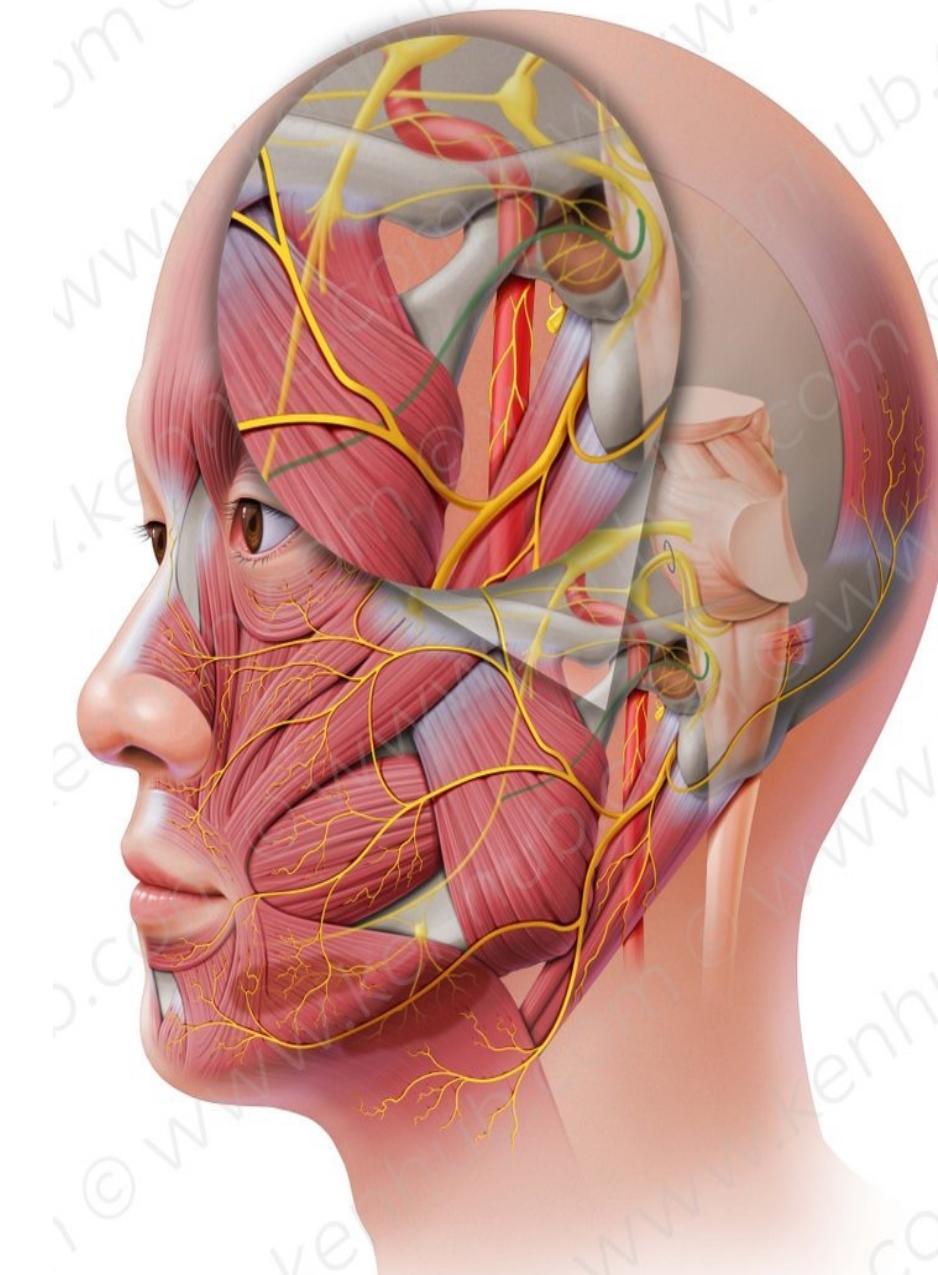
Otic ganglion



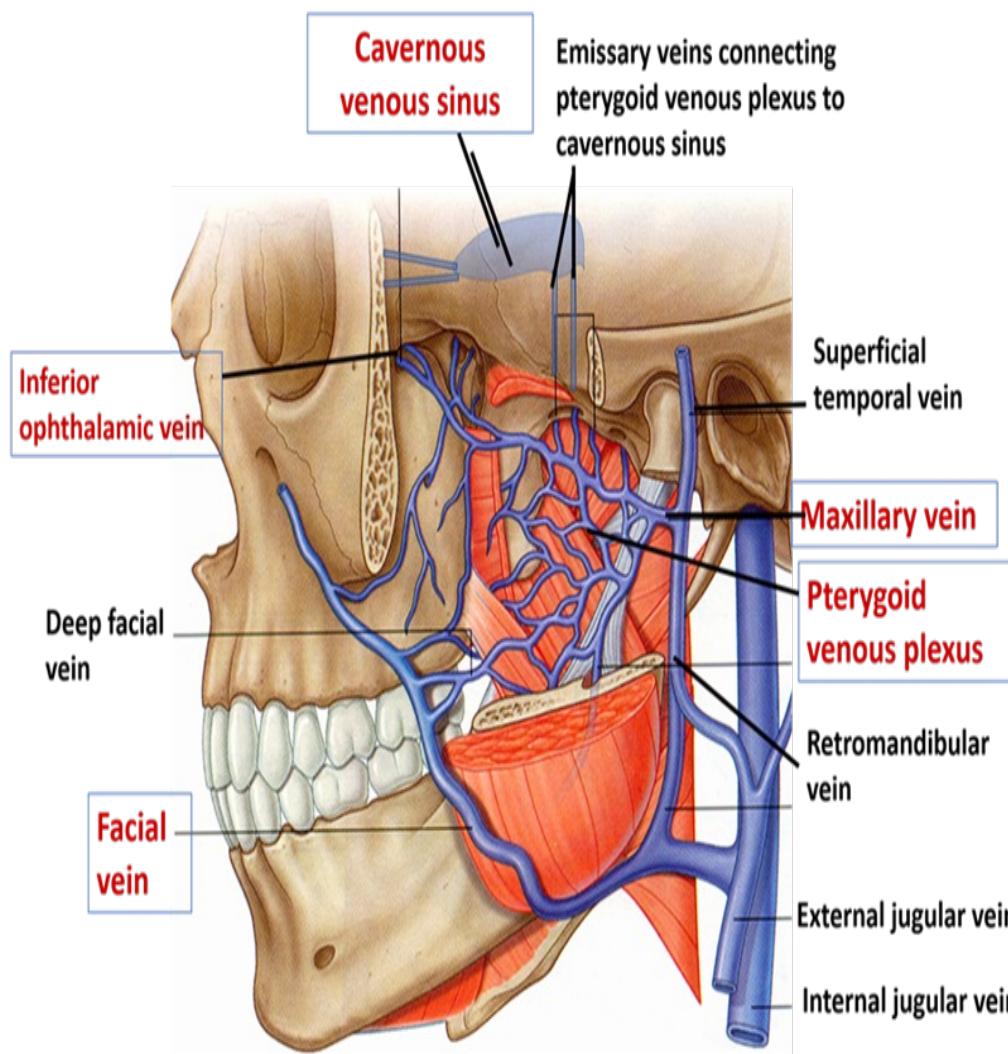
Trunk of the mandibular Nerve



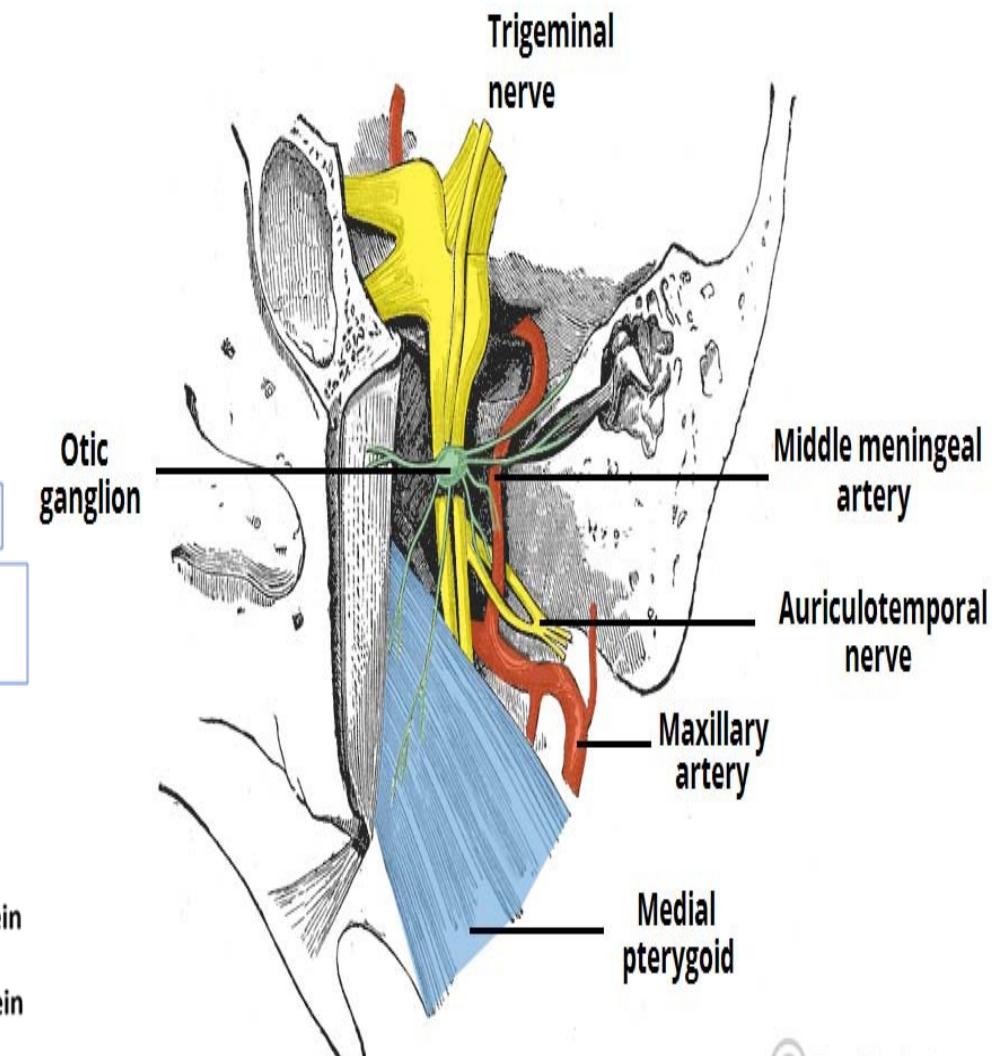
Otic ganglion



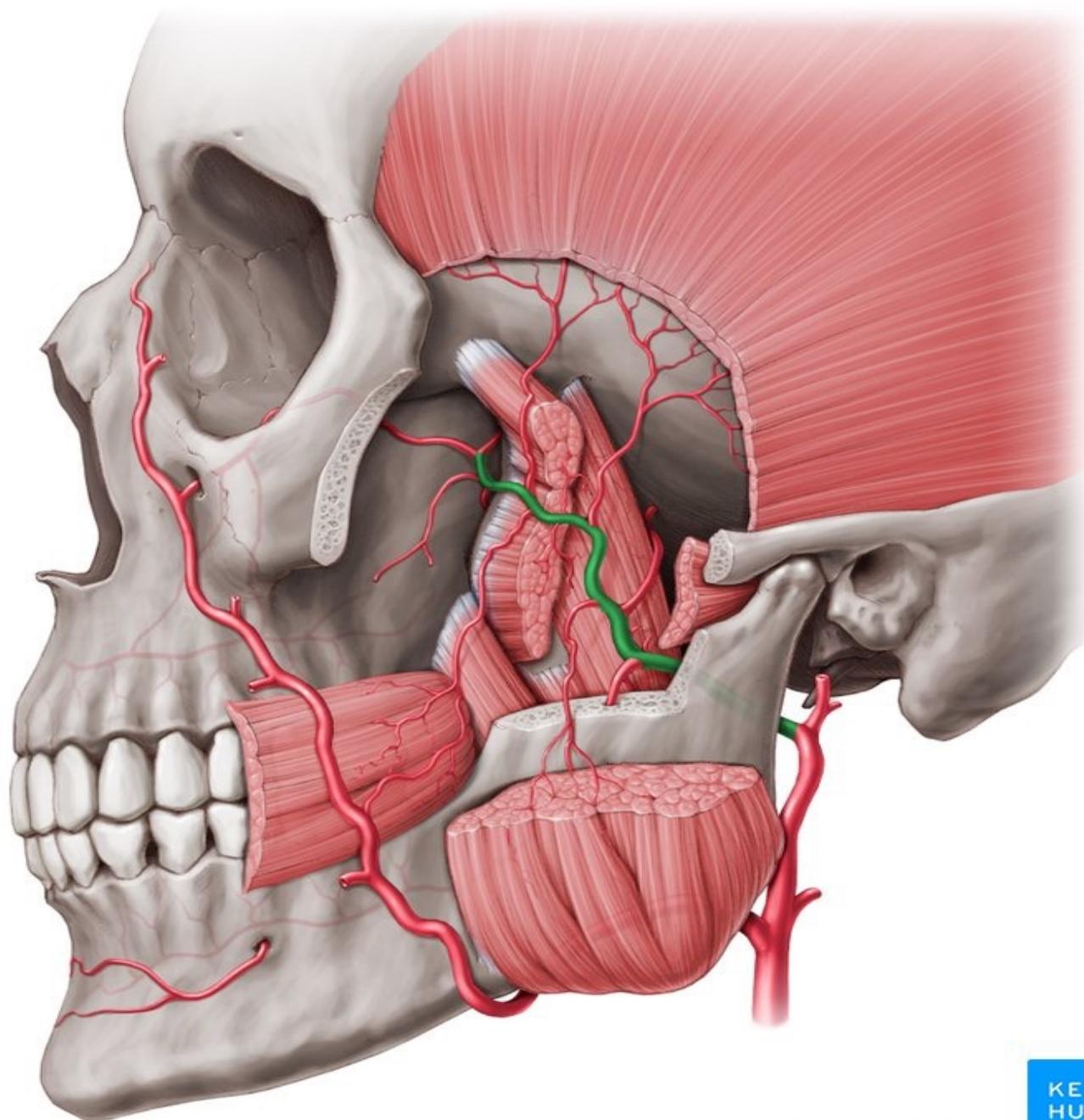
Chorda tympani



Pterygoid venous plexus



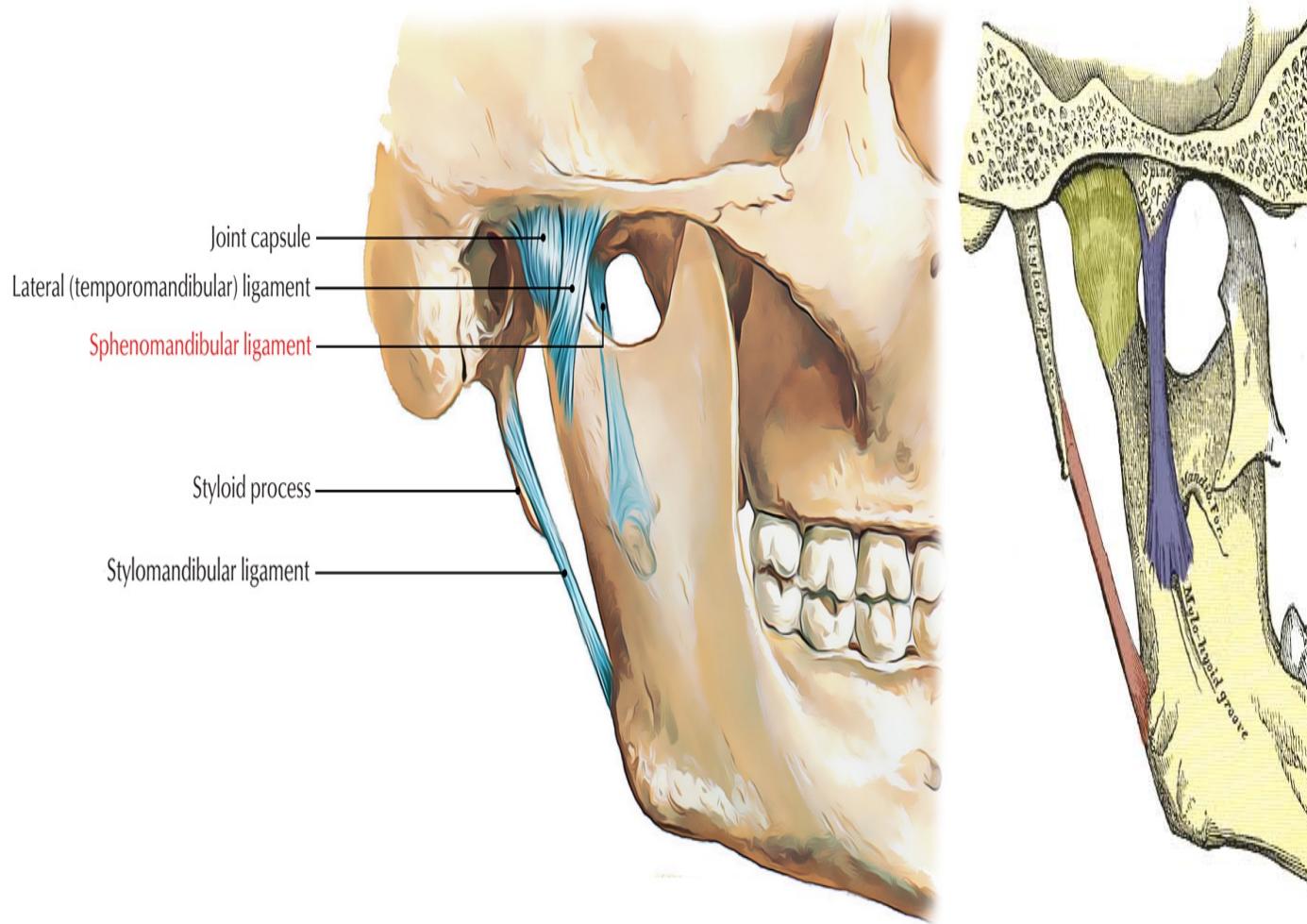
Maxillary A.



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Maxillary A.



- Joint Capsule
- Lateral ligament
- Sphenomandibular ligament
- Stygomandibular ligament

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Sphenomandibular ligament

Thank you!

