

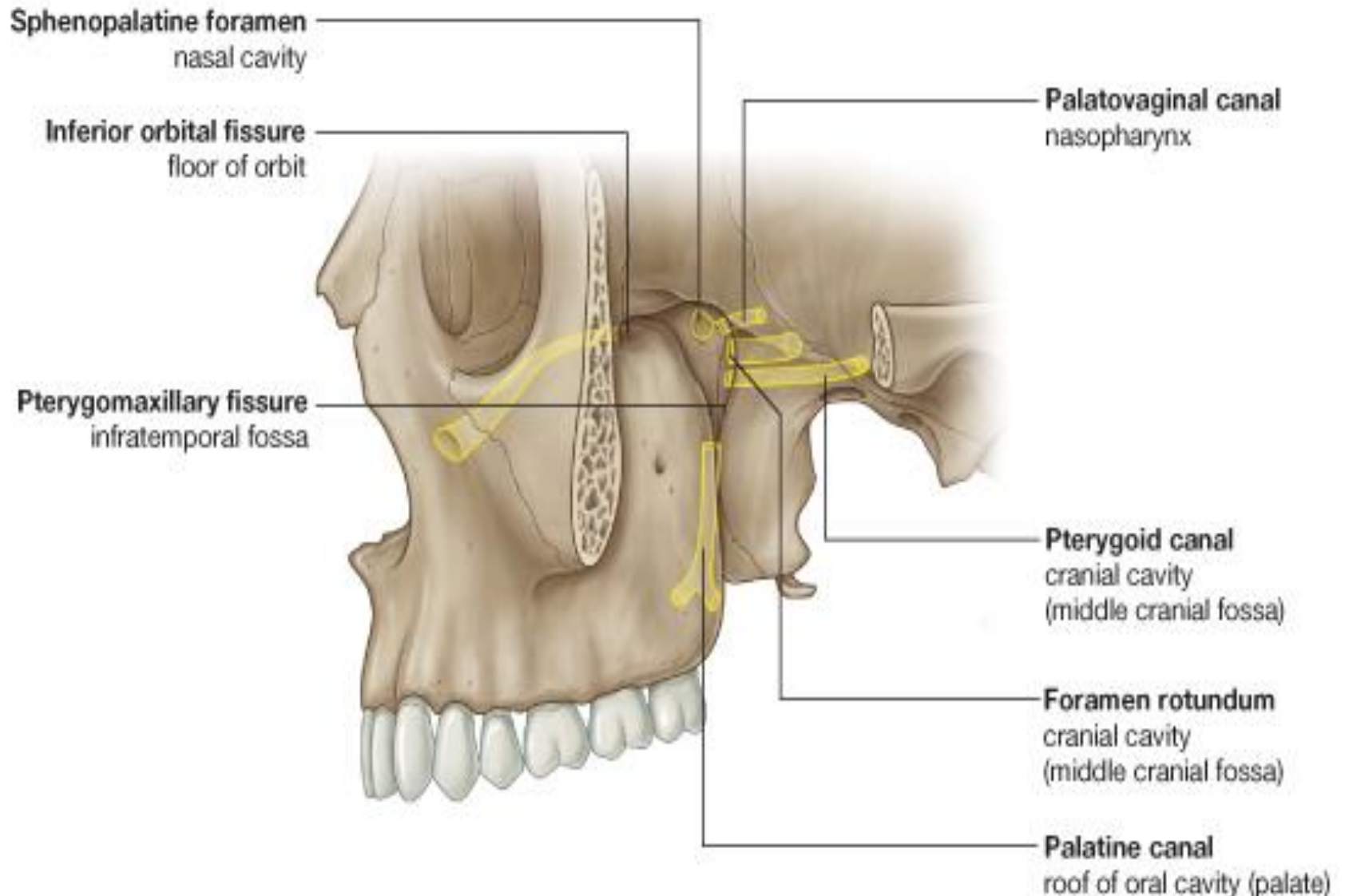
A scenic photograph of a waterfall cascading over mossy rocks into a pool, with sunlight filtering through the trees. The text "Pterygop", "alaine", and "Fossa" is overlaid in yellow on the left side of the image.

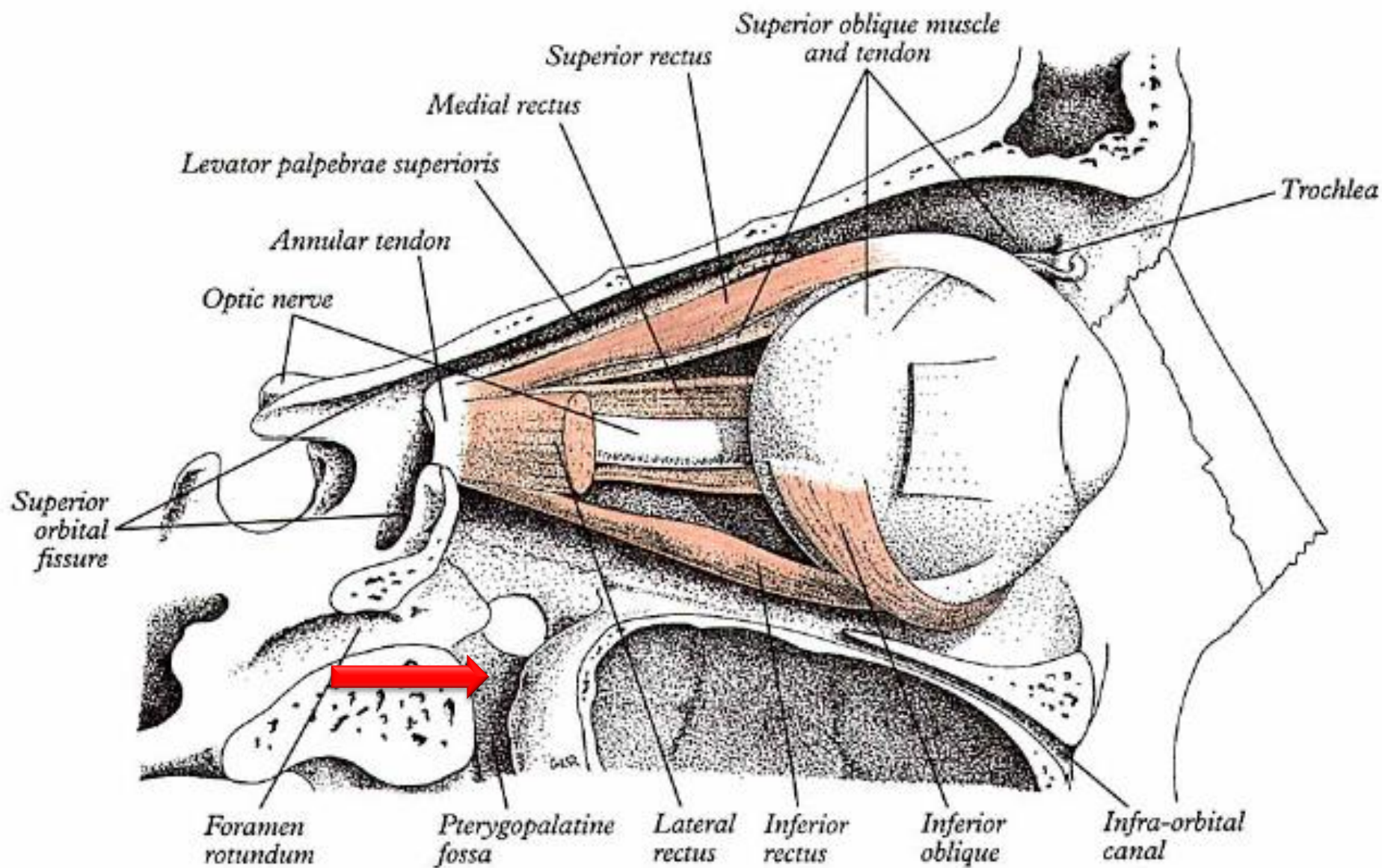
Pterygop alaine Fossa

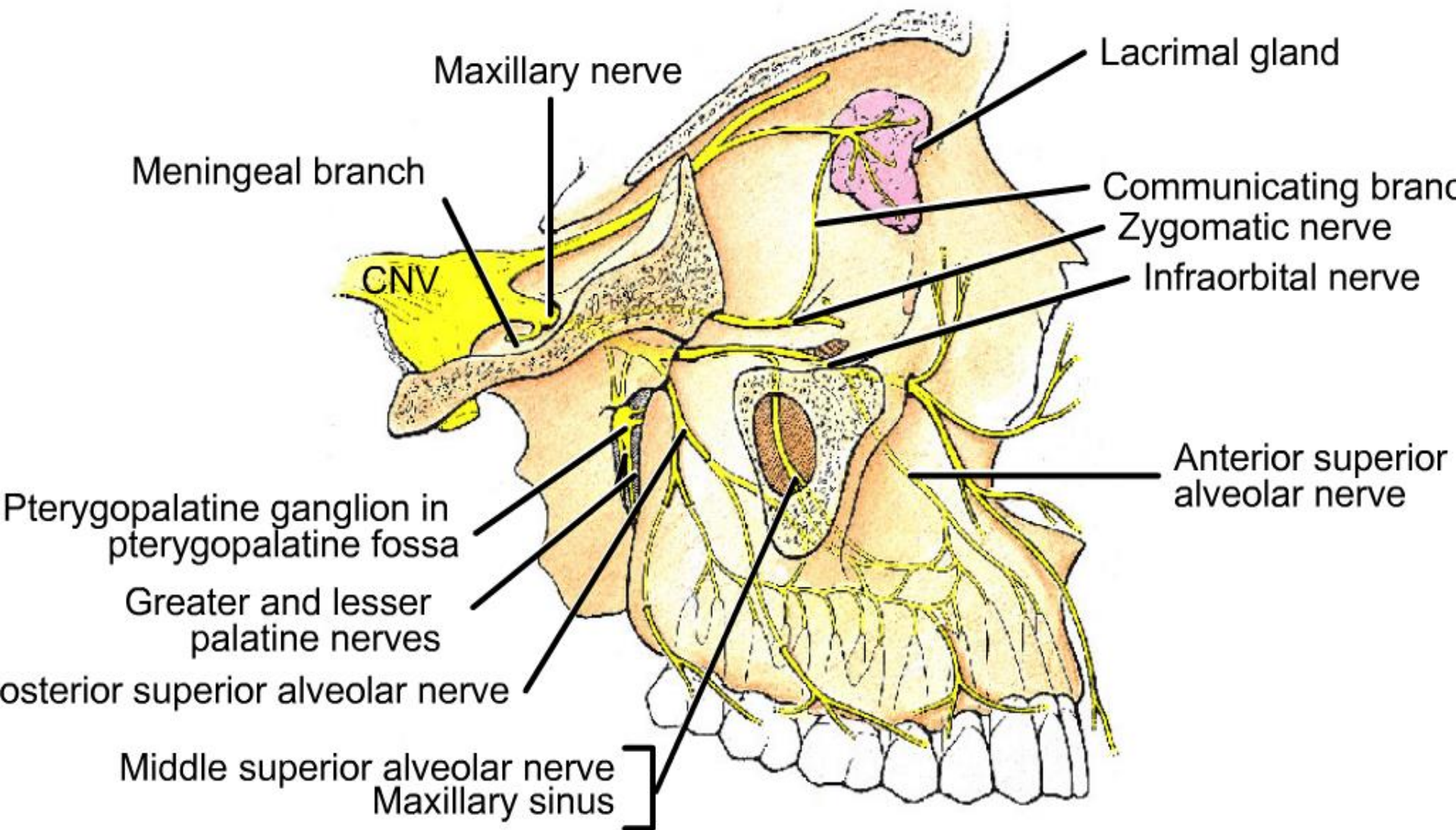
**Success keeps you glowing,
But, only Friends keep you going.**



*Its main **contents** are the maxillary nerve, pterygopalatine ganglion and terminal rami of the maxillary artery.*





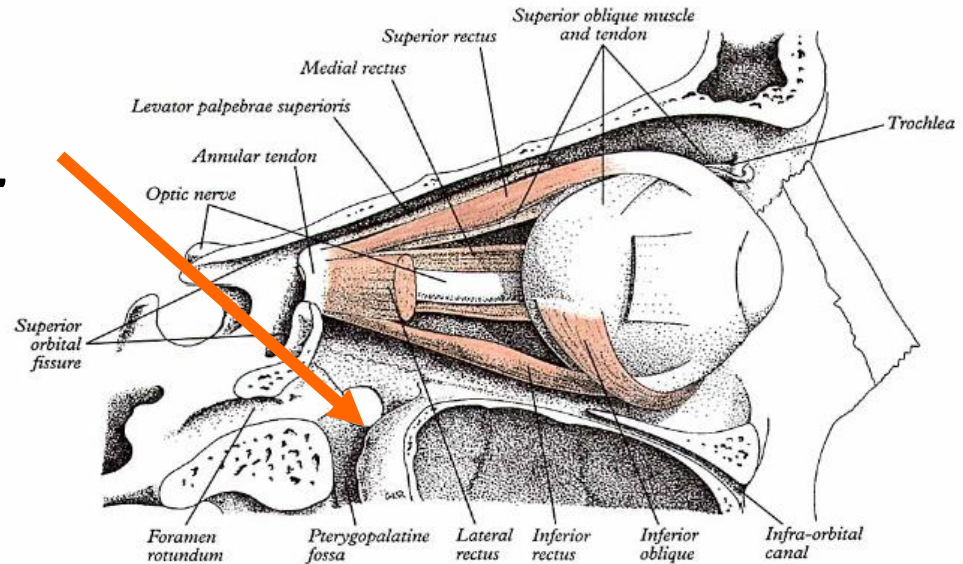


Pterygopalatine Fossa

A small pyramidal space below the orbital apex, it communicates with the –
1-infratemporal fossa via the pterygomaxillary fissure,

2-with the nasal cavity by the sphenopalatine foramen and

3-the orbit by the medial end of the inferior orbital fissure

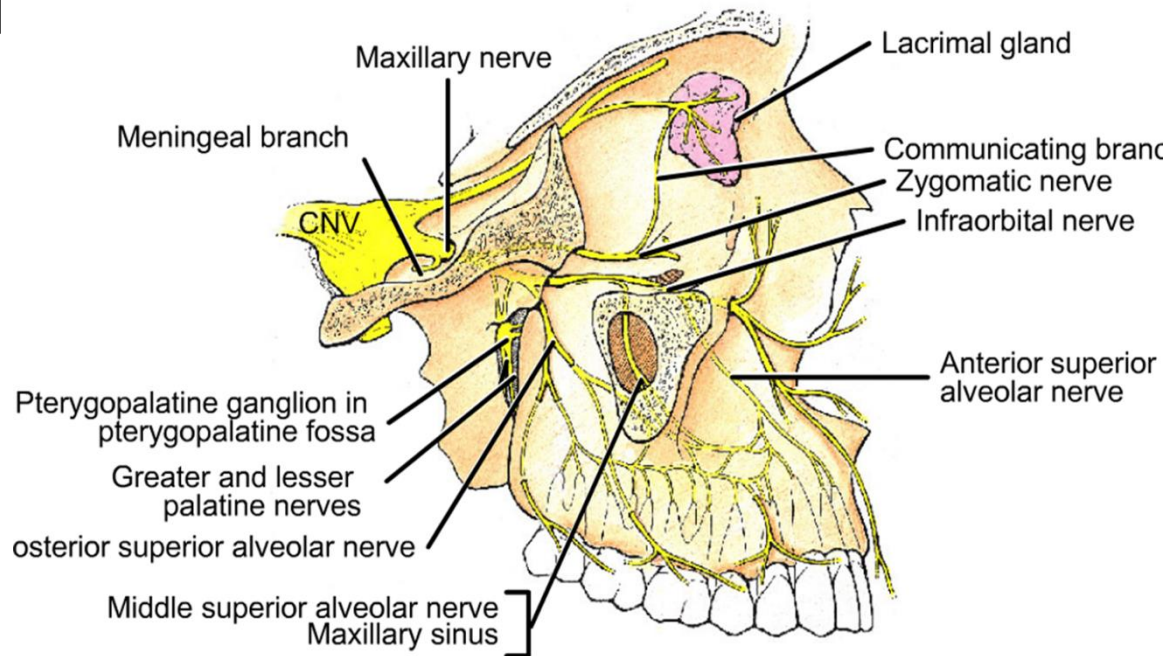


4- to cranial cavity by foramen rotundum, by which traversed by the maxillary nerve.

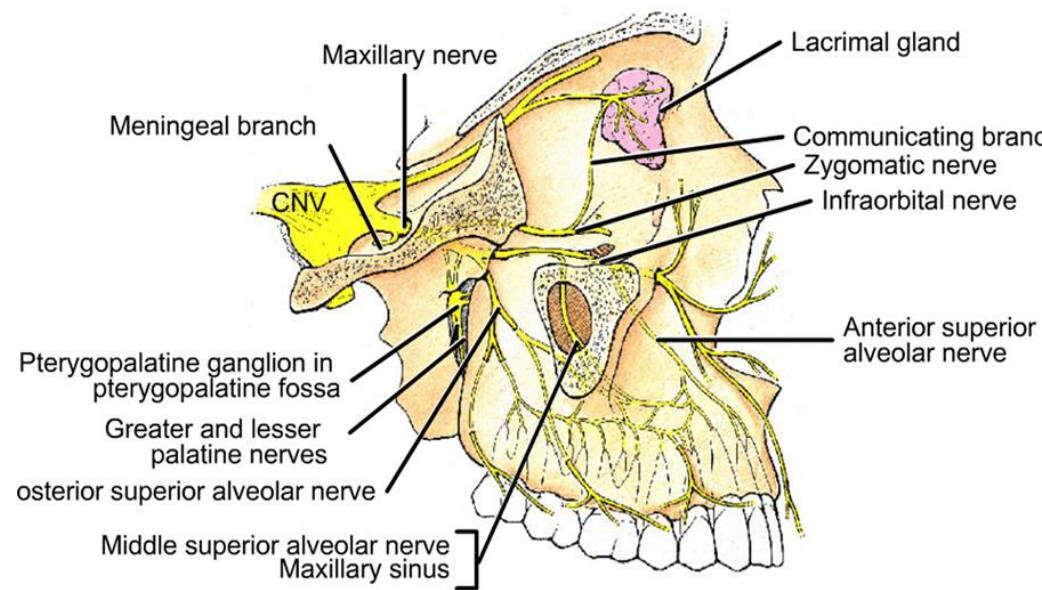
5- to nasopharynx by palatovaginal canal

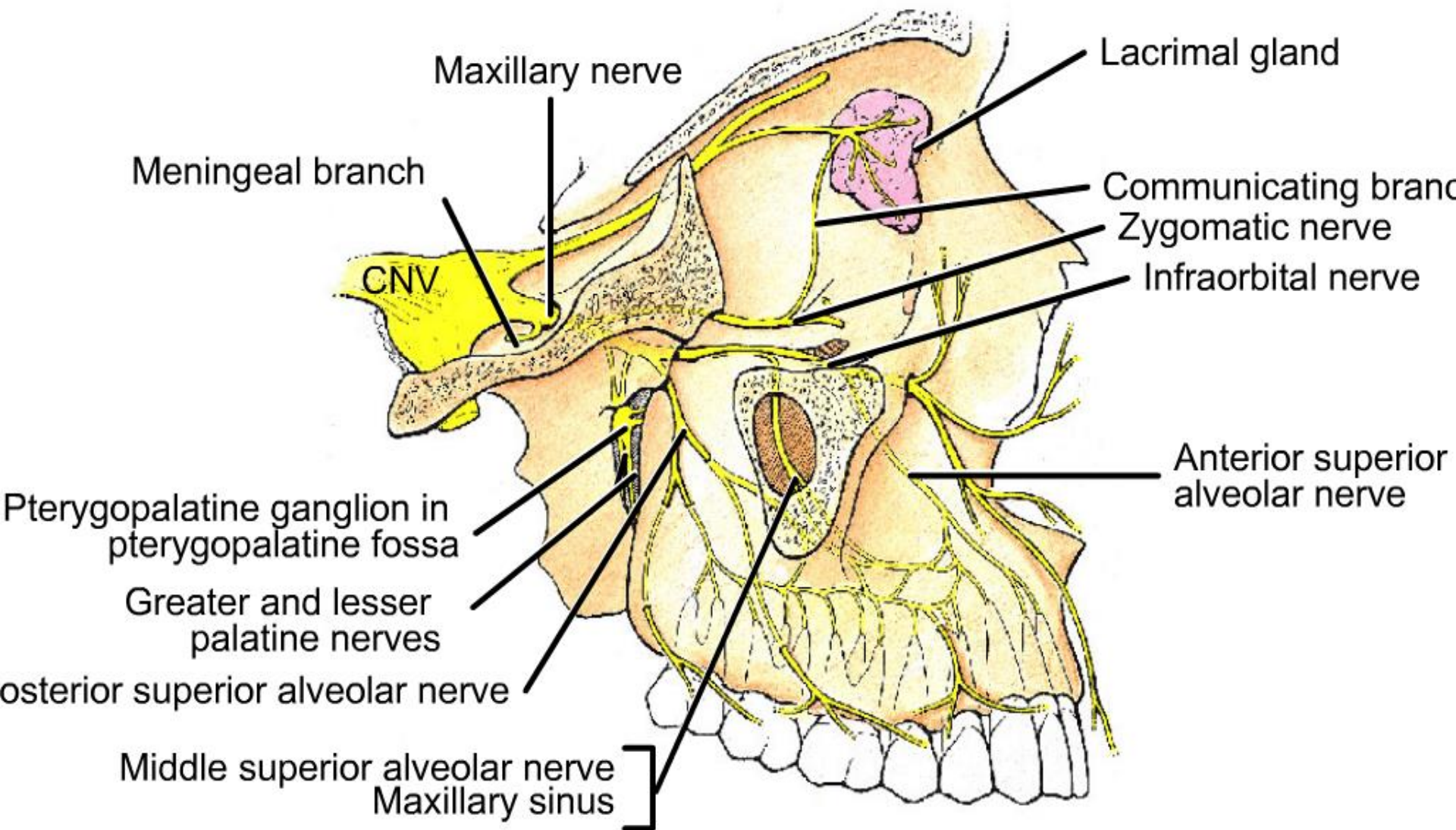
6-palatin canal to roof of oral cavity

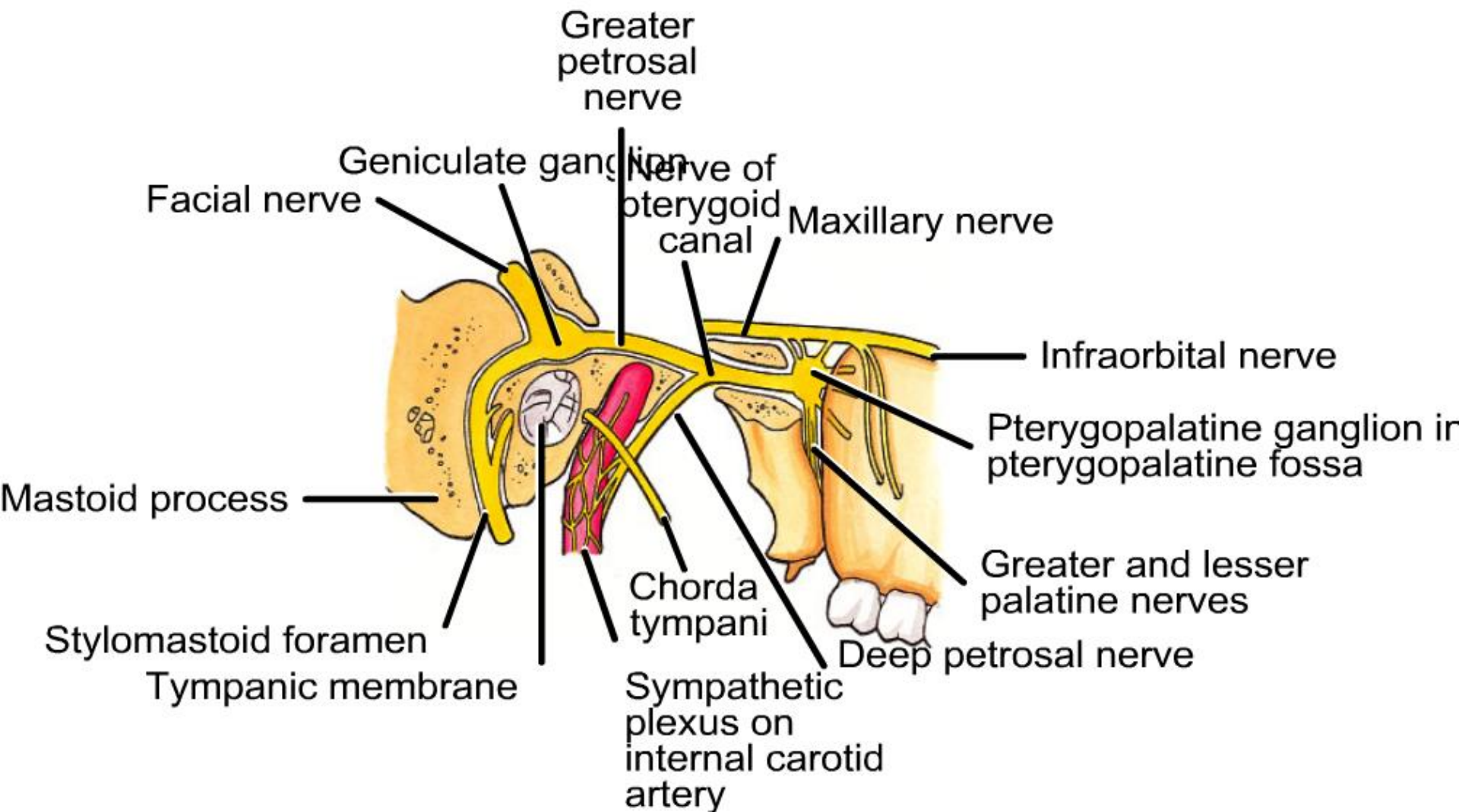
- The pterygopalatine fossa is bounded
- behind by the root of the pterygoid process and adjoining anterior surface greater wing of the sphenoid,
- medially by the palatine bone's

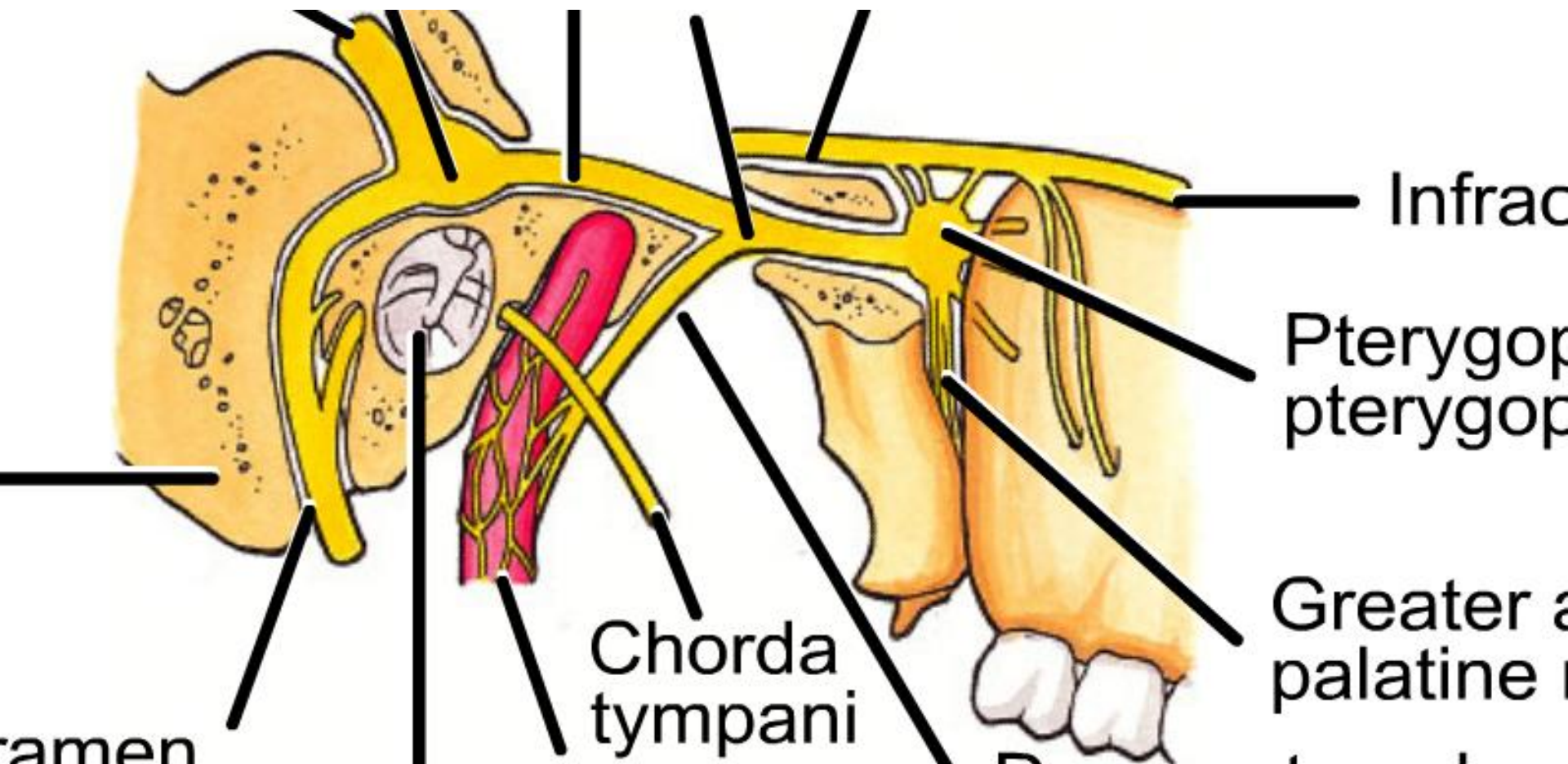


- **perpendicular plate with its orbital and sphenoidal processes,**
- **anteriorly by the superomedial part of the maxilla's posterior surface.**
- **Laterally it connects with the infratemporal fossa via the pterygomaxillary fissure.**



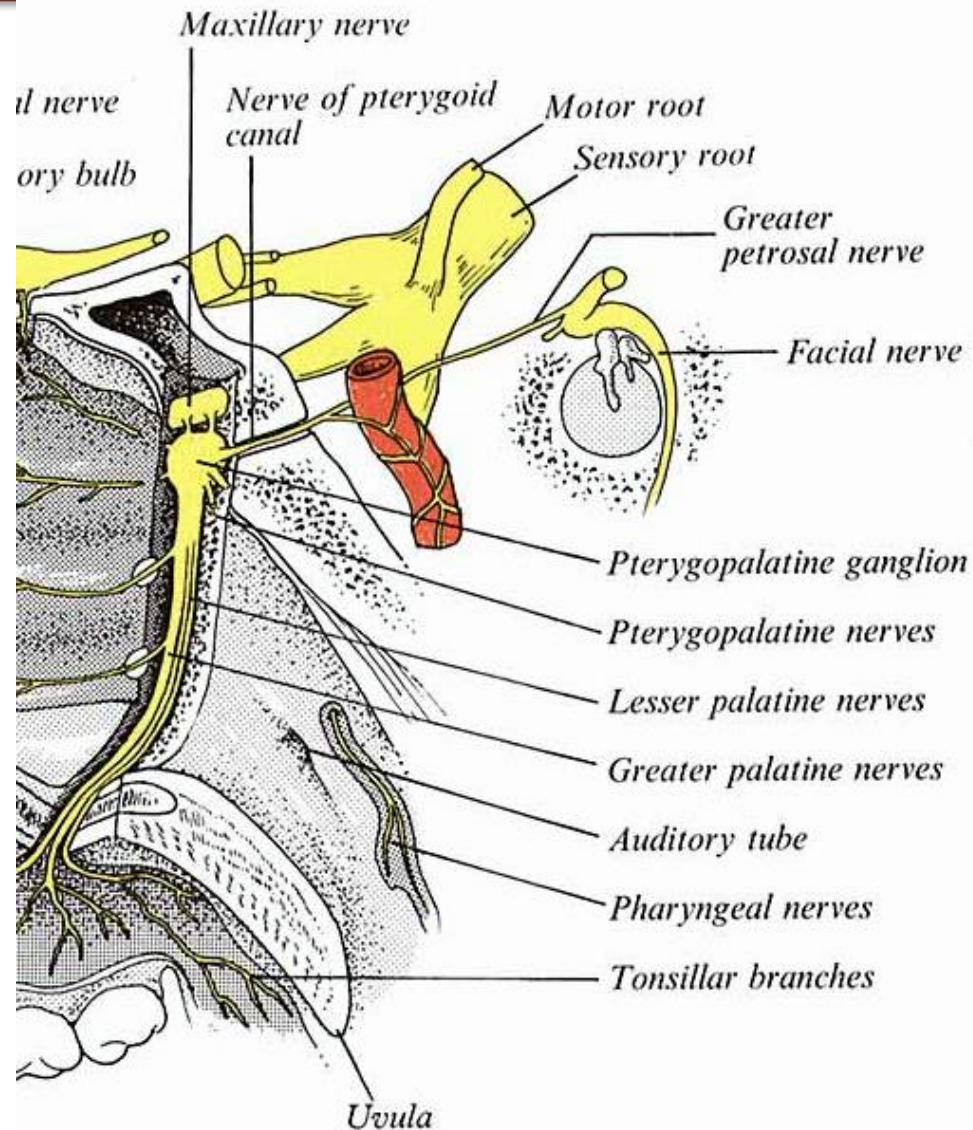






Pterygopalatine Ganglion

- The largest of the peripheral parasympathetic ganglia,
- Placed deeply in the pterygopalatine fossa, near the sphenopalatine foramen and anterior to the pterygoid canal and foramen rotundum. It is flattened, reddish-grey and lies just below the maxillary nerve as it crosses the fossa.



the majority of the 'branches' of the ganglion;-

A. sensory fibres from the palate,

B. nasal mucosa,

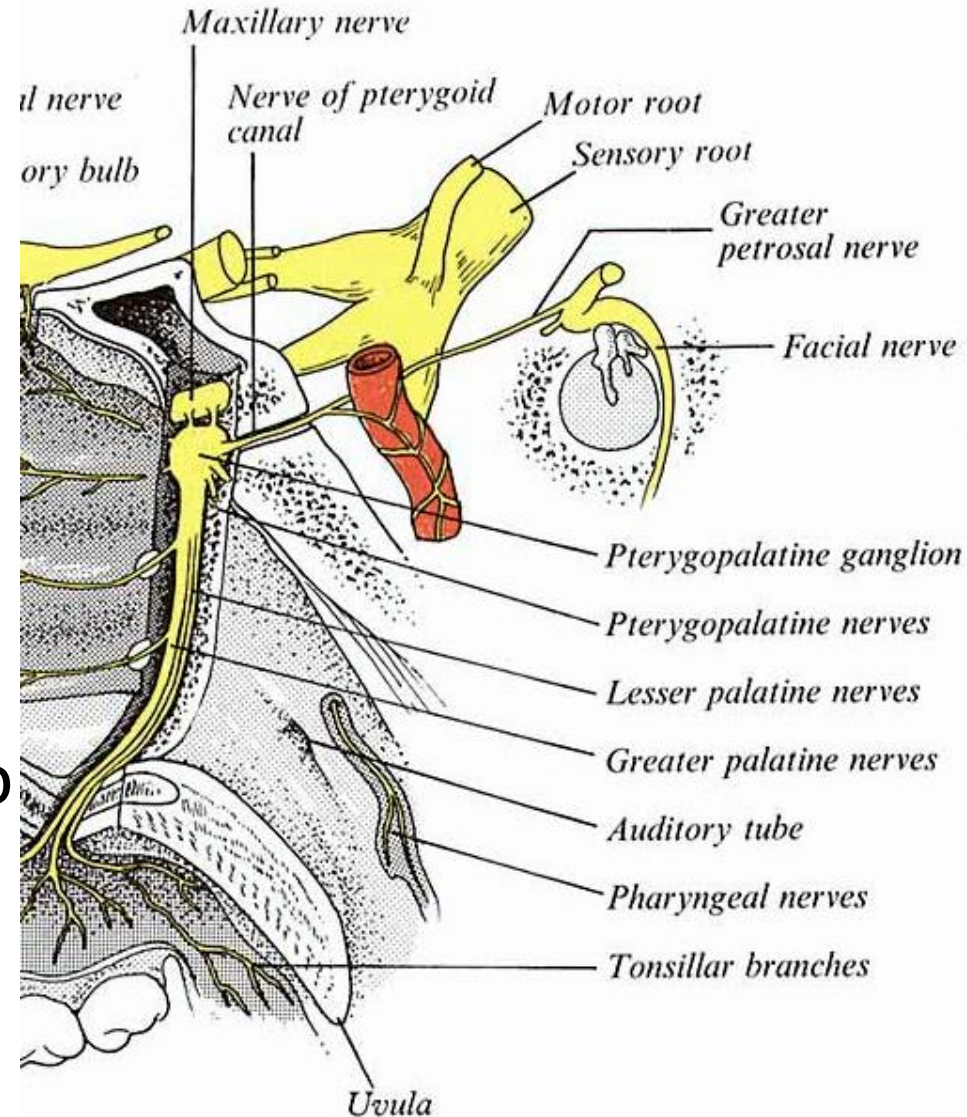
C. pharynx and

D. orbit

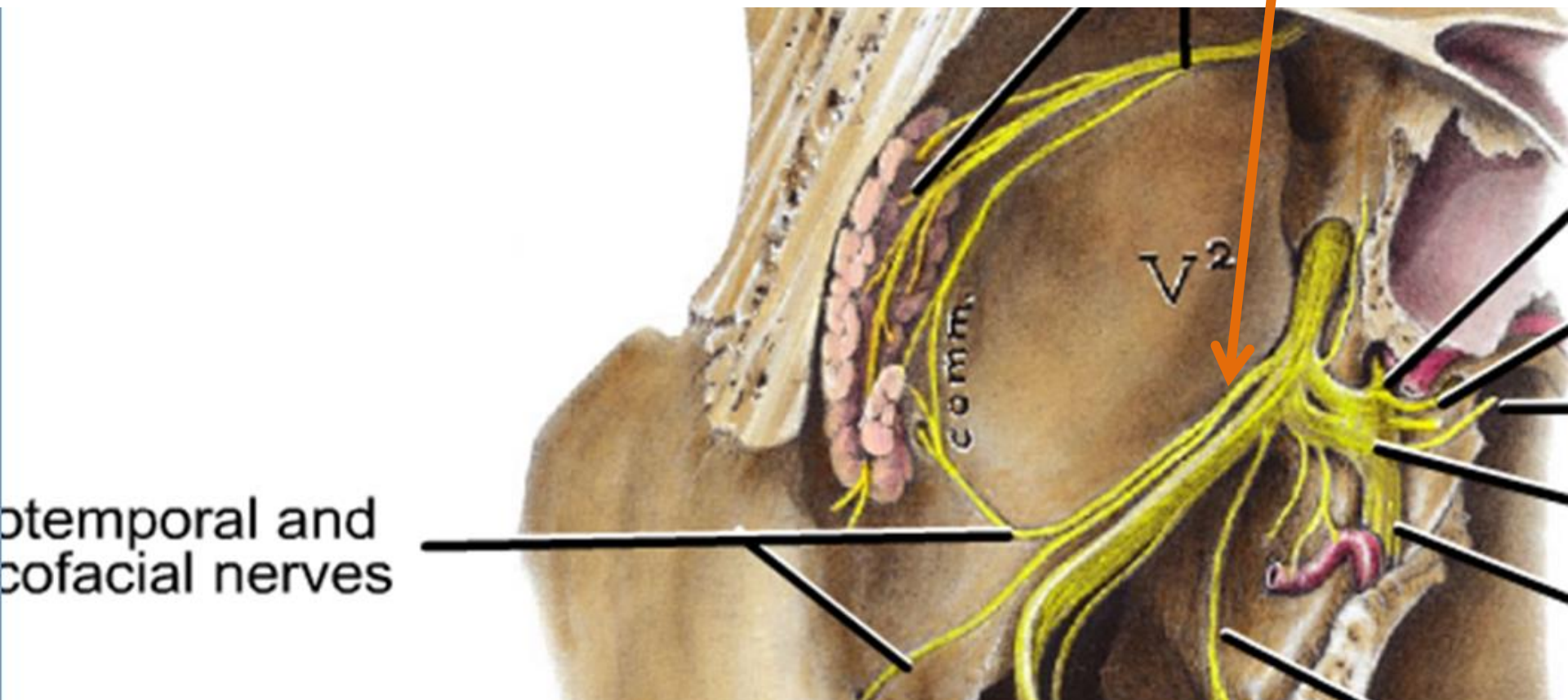
- which pass through the ganglion without synapsing and enter the maxillary nerve through its ganglionic branches.

The motor or parasympathetic root

- Preganglionic fibres arise from
- Special lacrimatory nucleus in the lower pons, emerging in the sensory root of the facial nerve (nervus intermedius) to run in its greater petrosal branch, which unites with the deep petrosal nerve to form the nerve of the pterygoid canal.



- the postganglionic fibres leave the ganglion, join the maxillary nerve and pass into its **zygomatic branch** and thence into the zygomaticotemporal nerve in its communicating ramus to reach **the lacrimal nerve**



Secretomotor fibres (of uncertain origin)

- a) for the palatine,**
- b) pharyngeal and**
- c) nasal glands are .**

**The postganglionic fibres are
distributed in the palatine and
nasal branches**

The sympathetic root

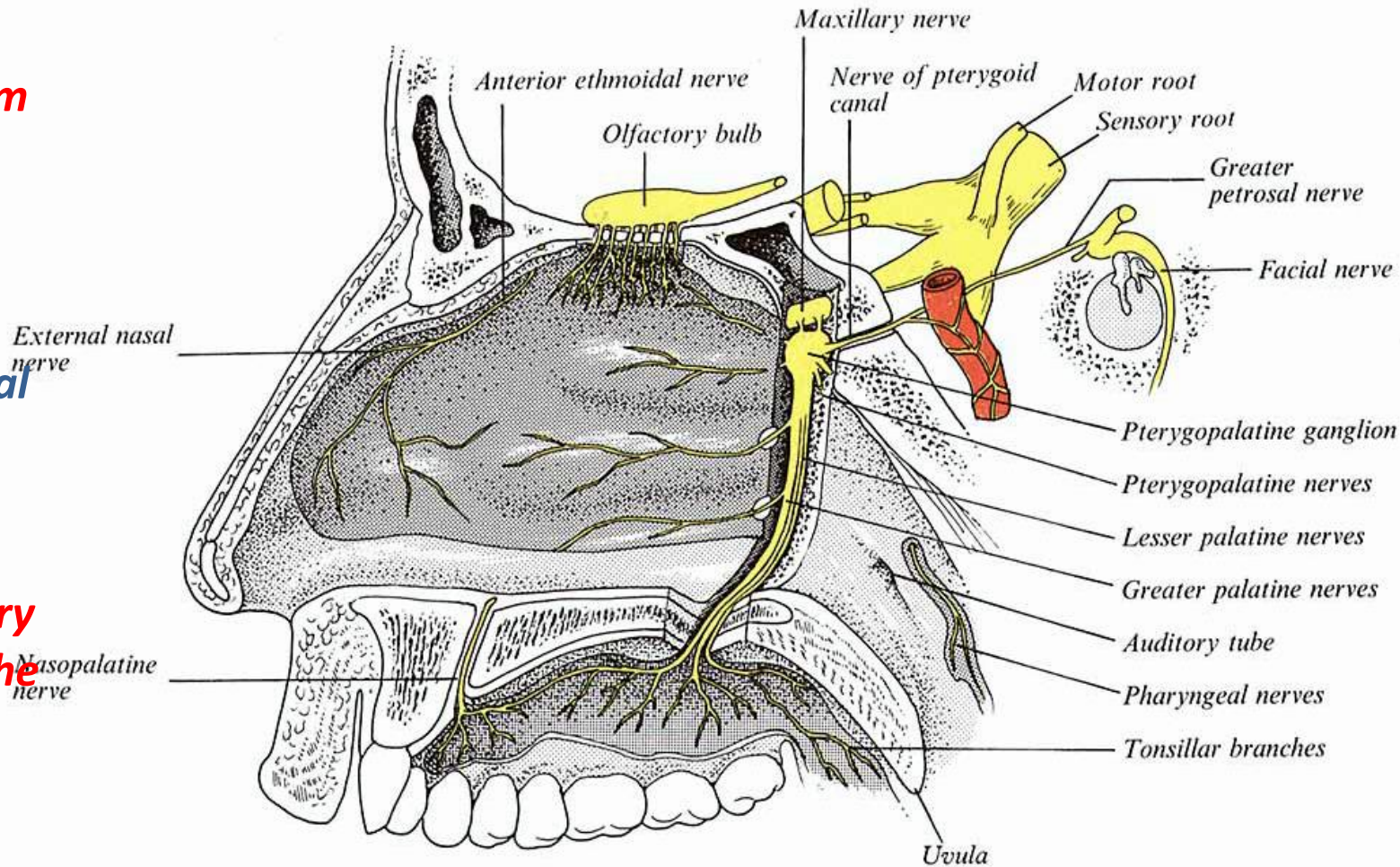
- *The deep Petrosal nerve to* the petrosal canal, its postganglionic fibres arise in the superior cervical ganglion and travel via the internal carotid plexus then to :-
- Palatine, nasal and pharyngeal.
- Orbital branches : by the inferior orbital fissure distributed to the periosteum and orbitalis muscle; and sphenoidal and ethmoidal sinuses.

Taste impulses

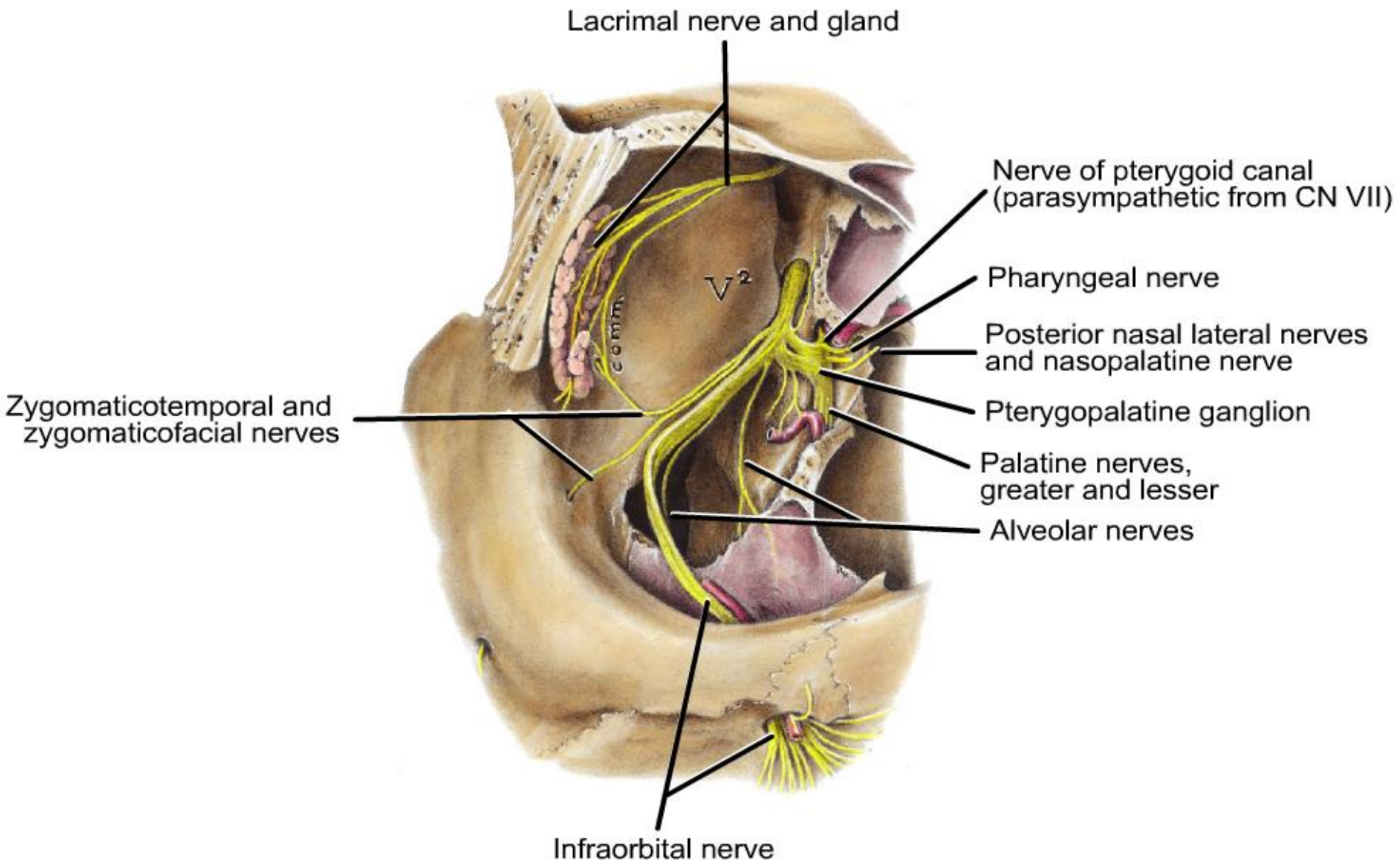
- from the palate passes via the **palatine nerves** to the **pterygopalatine ganglion** and through it to the **nerve of the pterygoid canal** and **greater petrosal nerve** to the facial ganglion, where their somata are situated. The central processes of these neurons traverse the sensory root of the **facial nerve (nervus intermedius)** to pass to the **gustatory nucleus in the nucleus of the tractus solitarius**

Pharyngeal Nerve

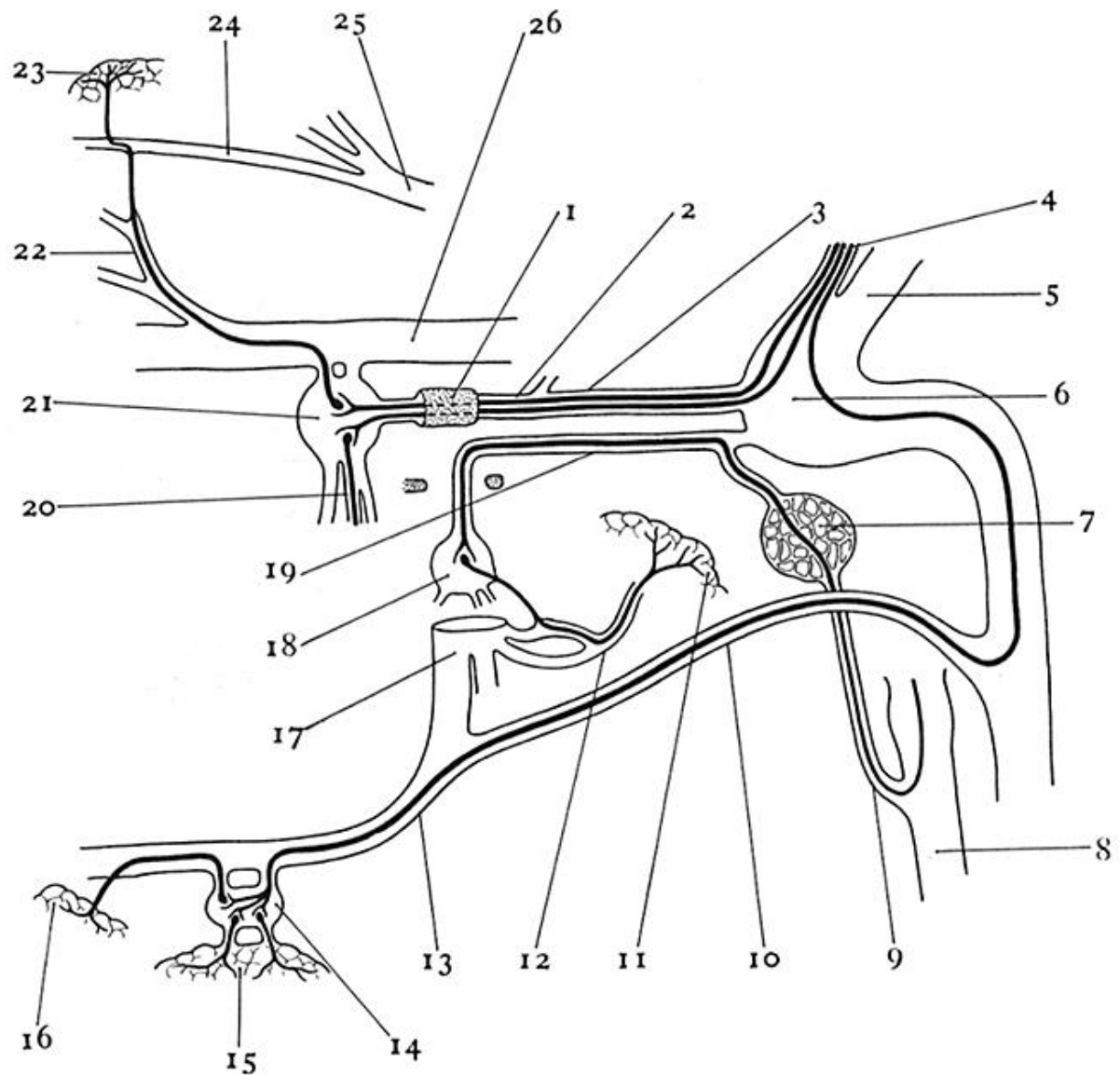
This arises from the posterior part of the ganglion, traverses the palatinovaginal canal with a pharyngeal branch of the maxillary artery and supplies the mucosa of the nasopharynx



Six lateral posterior superior nasal nerves innervate the nasal conchae and the mucosa lining of the posterior ethmoidal sinuses. The largest of these nerves is the nasopalatine (long sphenopalatine) nerve, which runs antero-inferiorly on the nasal septum.



1. Pterygoid canal.
2. Nerve of pterygoid canal.
3. Greater petrosal nerve.
4. Sensory root of facial nerve.
5. Motor root of facial nerve.
6. Ganglion of facial nerve.
7. Tympanic plexus.
8. Glossopharyngeal nerve.
9. Tympanic nerve.
10. Chorda tympani nerve.
11. Parotid gland.
12. Auriculotemporal nerve.
13. Lingual nerve.
14. Submandibular ganglion.
15. Submandibular salivary gland.
16. Sublingual salivary gland.
17. Mandibular nerve.
18. Otic ganglion.



19. Lesser petrosal nerve
20. Palatine nerves.
21. Pterygopalatine ganglion.
22. Zygomaticotemporal nerve.
23. Lacrimal gland.
24. Lacrimal nerve.
25. Ophthalmic nerve.
26. Maxillary nerve.

