



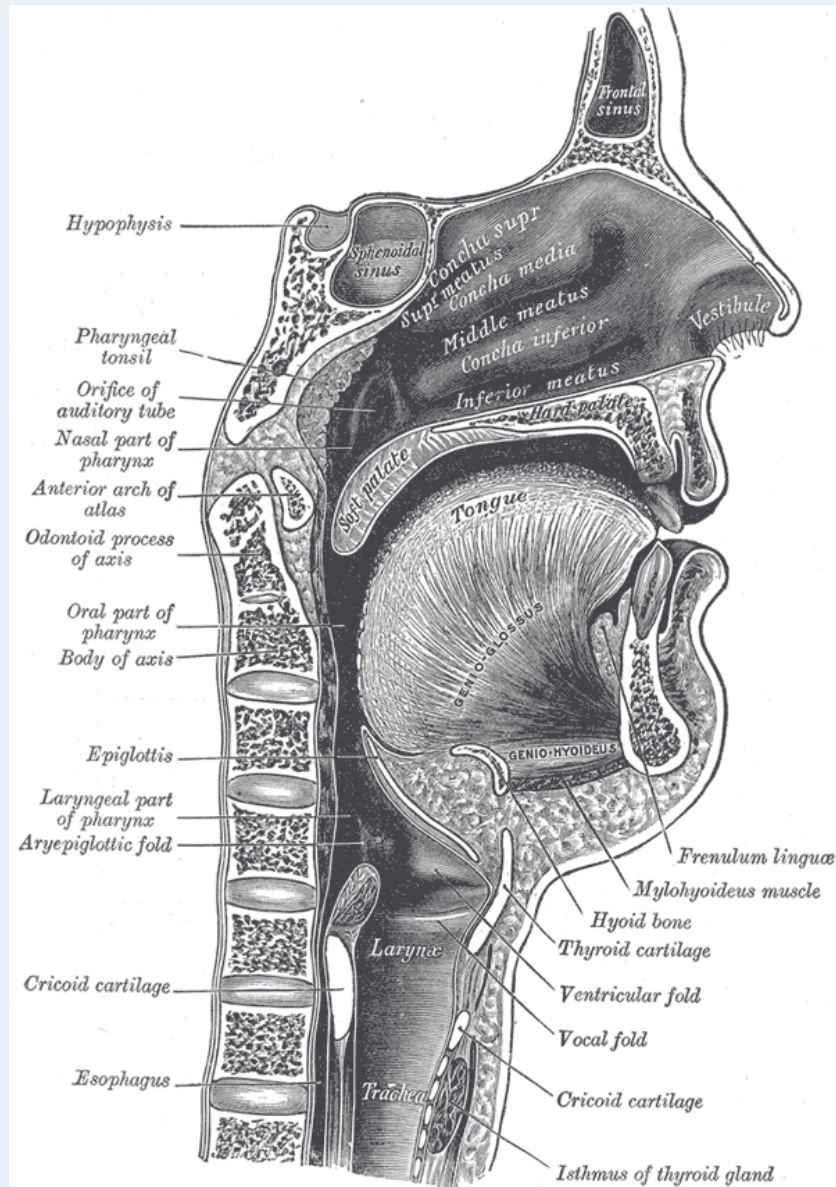
The palate and faucial isthmus

He who guards his mouth and his tongue keeps himself from calamity.

Proverbs 21:23

Ph.D., Dr. David Lendvai

Parts of the oral cavity



Parts of the oral cavity

1. Vestibule of the oral cavity

Borders:

- lips and cheek (bucca)
- dental arches

2. Oral cavity proper

Borders:

- roof: hard and soft palate
- floor: oral diaphragm (mylohyoid m.)
- antero-laterally: dental arches
- posteriorly: isthmus of the fauces

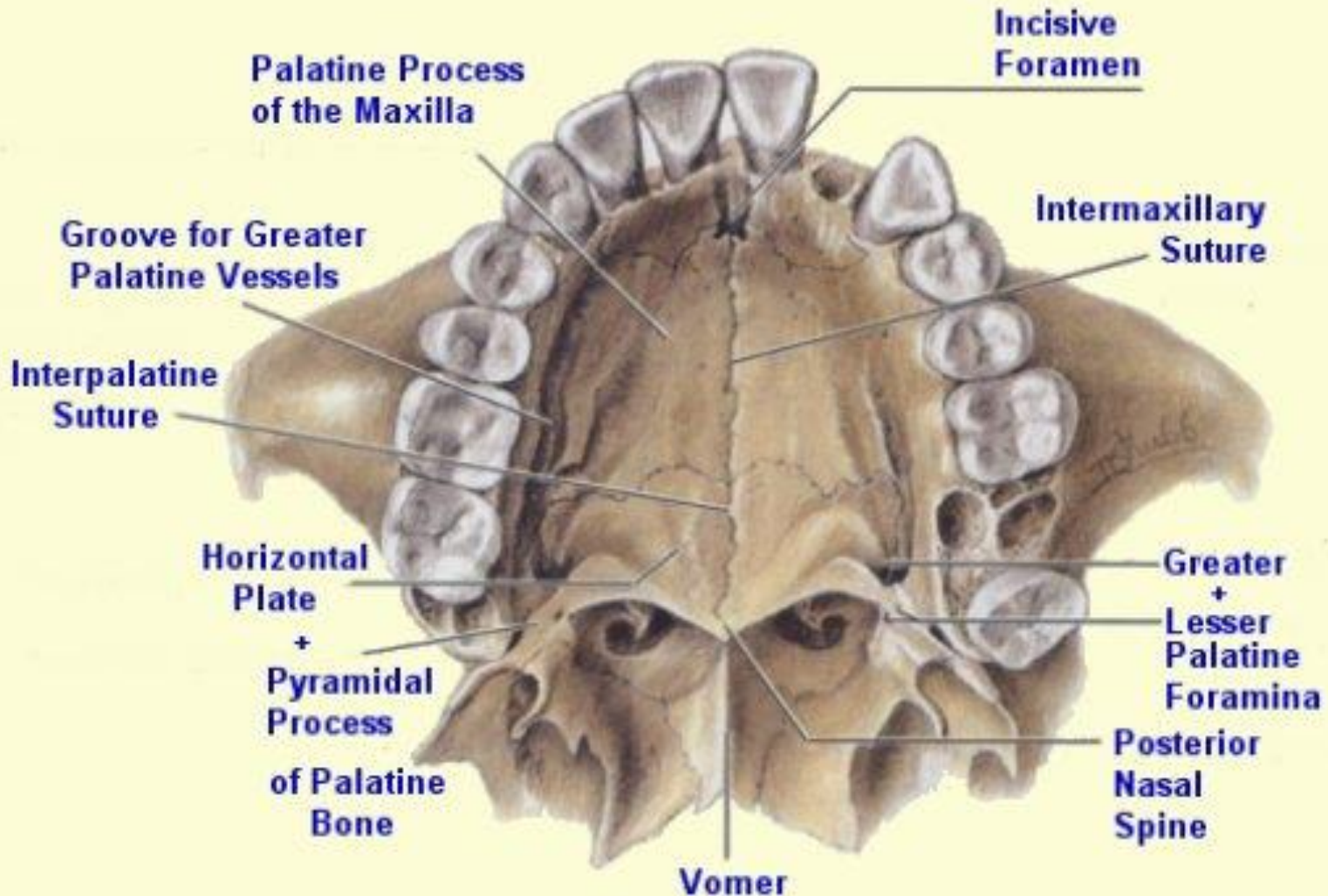


Entrance of the oral cavity

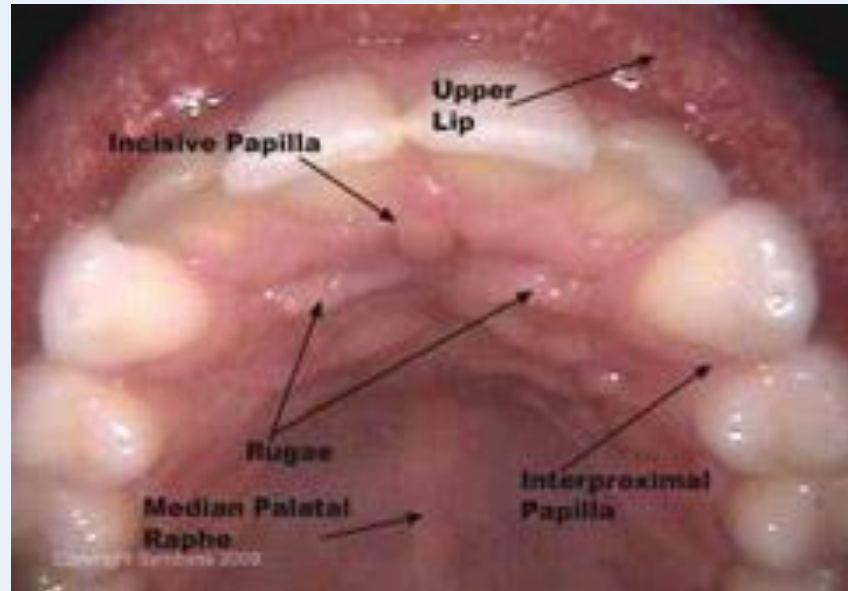
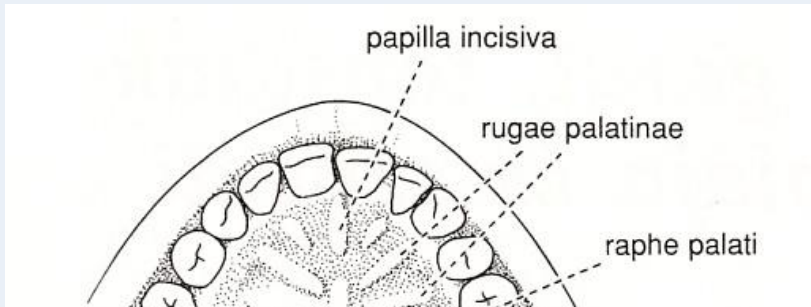


- Philtrum
 - Upper & lower lip
 - Angulus
 - Rubor labii
 - Nasolabial groove
- (Facial palsy)

Roof of the oral cavity: hard and soft palate



Structures of the hard palate

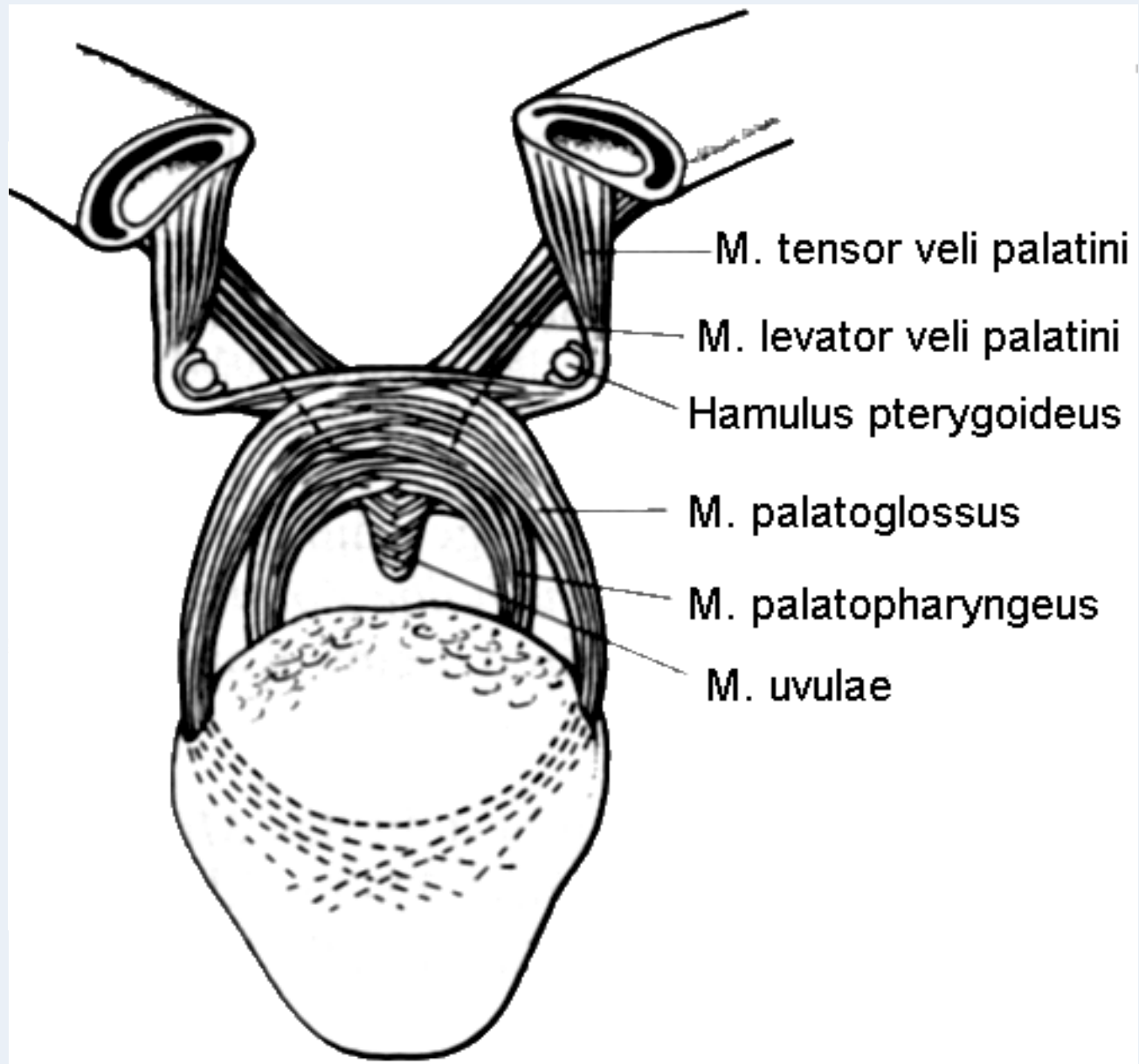


- incisive papilla
- palatine rugae
- palatine raphe
- torus

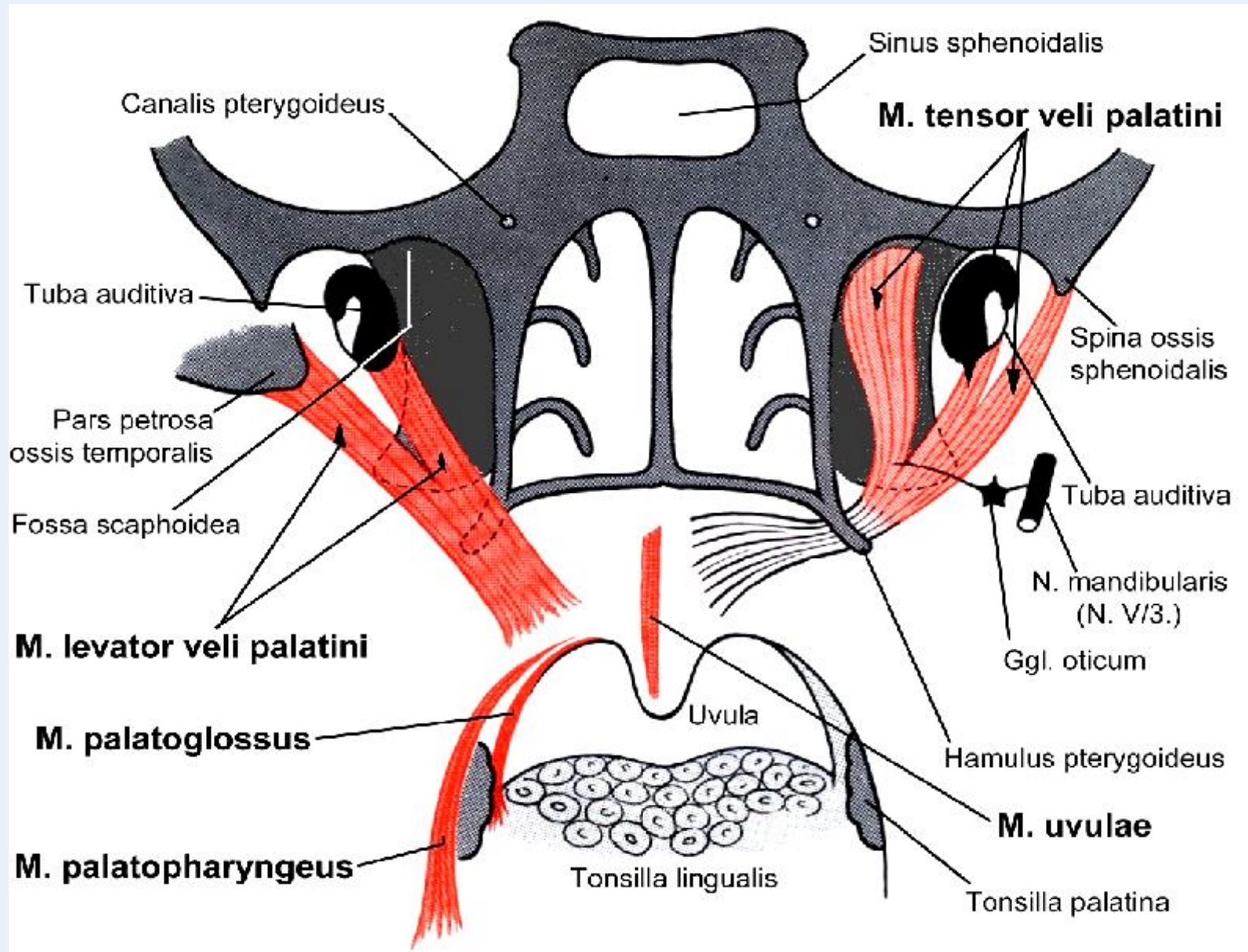
Hard and soft palate

Muscles of the soft palate

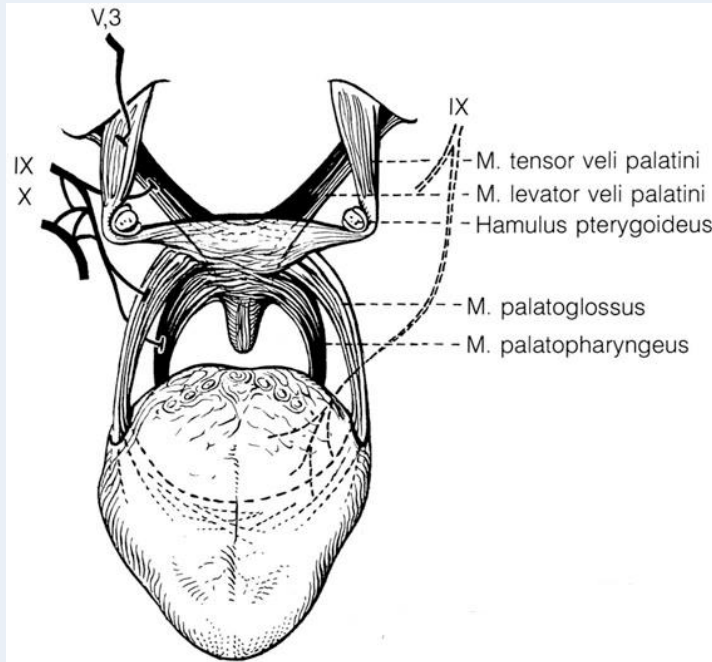
- Levator veli palatini m.
- Tensor veli palatini m.
- Palatoglossus m.
- Palatopharyngeus m.
- M. uvulae



Muscles of the soft palate

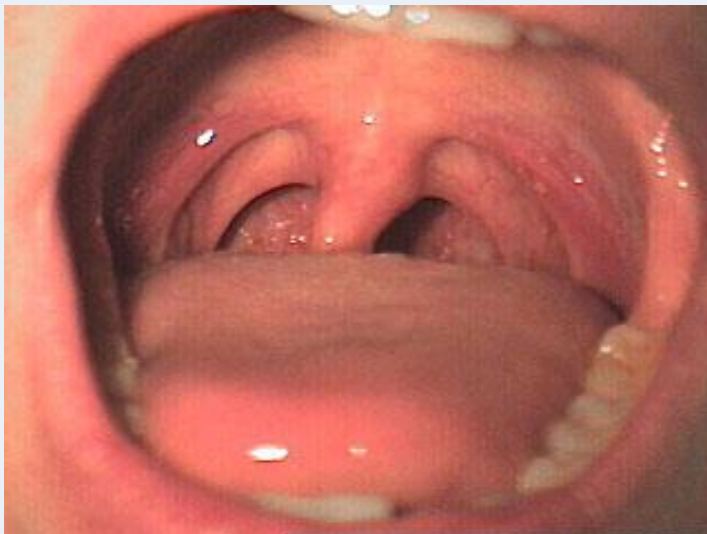


Muscles of the soft palate



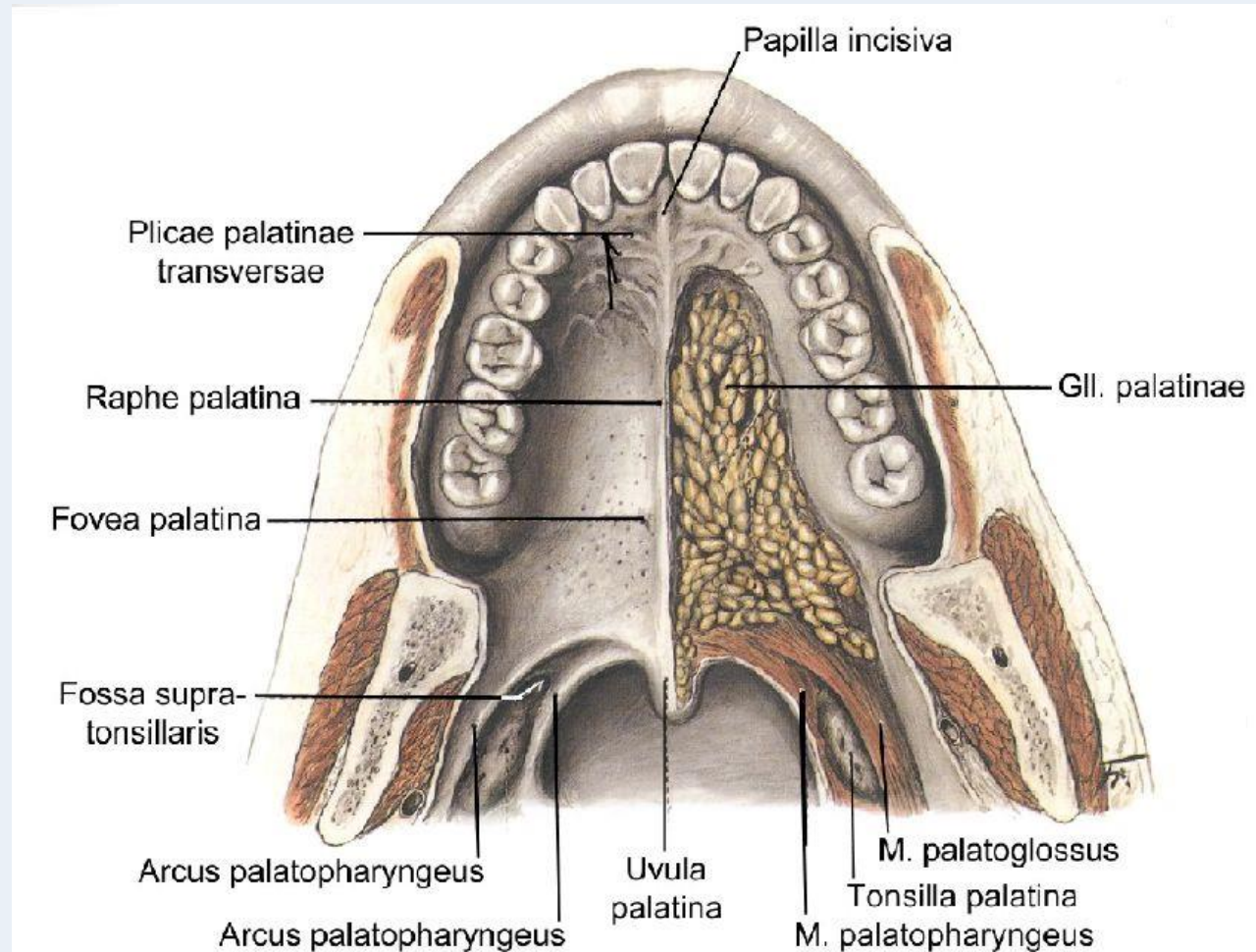
Attachments and Actions of the Muscles of Soft Palate

Muscles	Origin	Insertion	Action
Tensor veli palatini	Lateral surface of auditory tube, spine of sphenoid, scaphoid fossa	Its tendon hooks around the pterygoid hamulus and forms aponeurosis which is attached to the inferior surface of hard palate (behind the palatine cres) and to the posterior border of hard palate	Tightens the soft palate and helps in opening the auditory tube
Levator veli palatini	Inferior surface of petrous part of temporal bone near its apex, medial surface of auditory tube	Upper surface of palatine aponeurosis	Elevation of soft palate and helps in opening the auditory tube
Palatoglossus	Inferior surface of palatine aponeurosis	Side of tongue at the junction of its oral and pharyngeal part	Elevation of tongue Approximation of the two palatoglossal arches to close the oropharyngeal isthmus
Palatopharyngeus	Superior surface of palatine aponeurosis and posterior border of hard palate. It arises by two fasciculi which are separated by levator veli palatini)	Posterior border of lamina of thyroid cartilage	Pulls the pharyngeal and laryngeal walls upwards during swallowing
Musculus uvulae	Posterior nasal spine and palatine aponeurosis	Mucosa of uvula	Shortens and raises the uvula



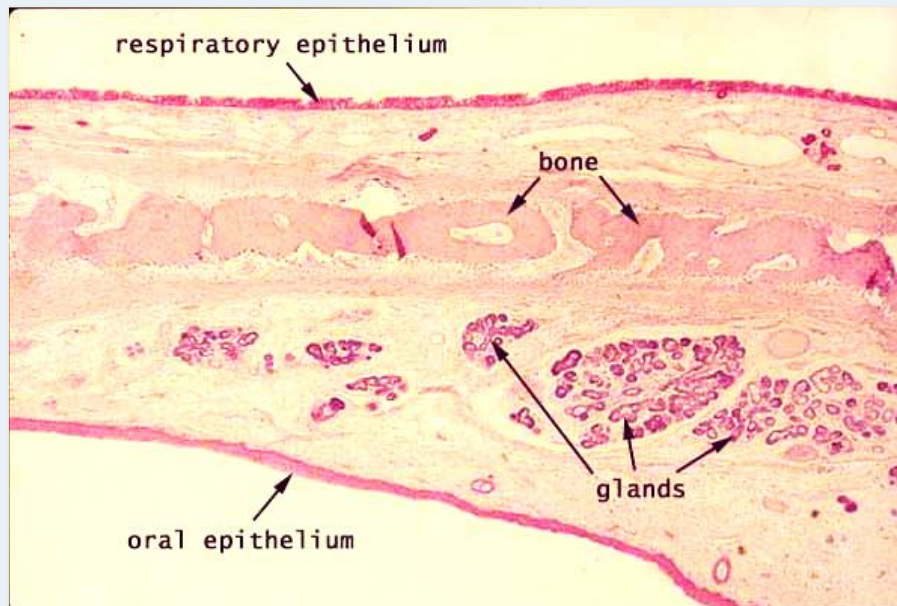
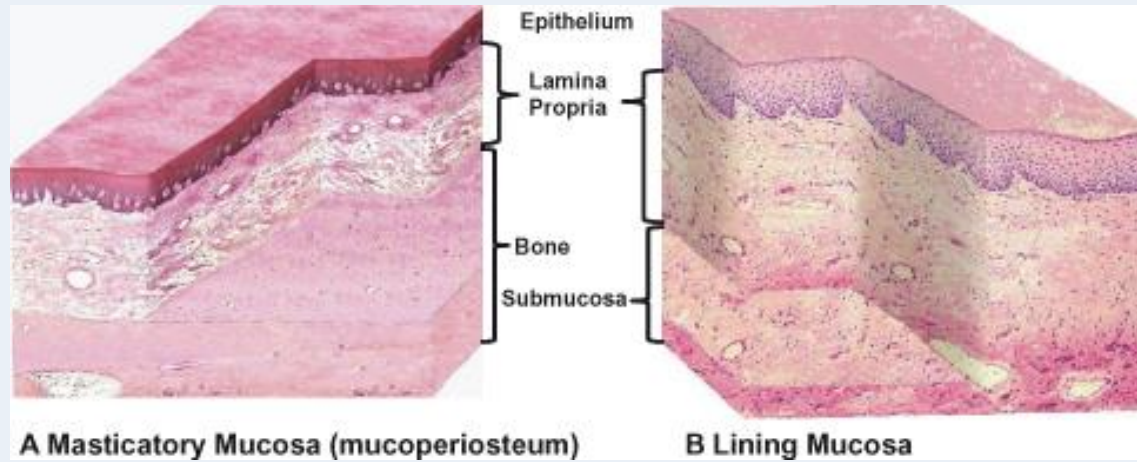
Structures of the hard and soft palate

- mucous membrane
- palatine glands
- bone / muscles

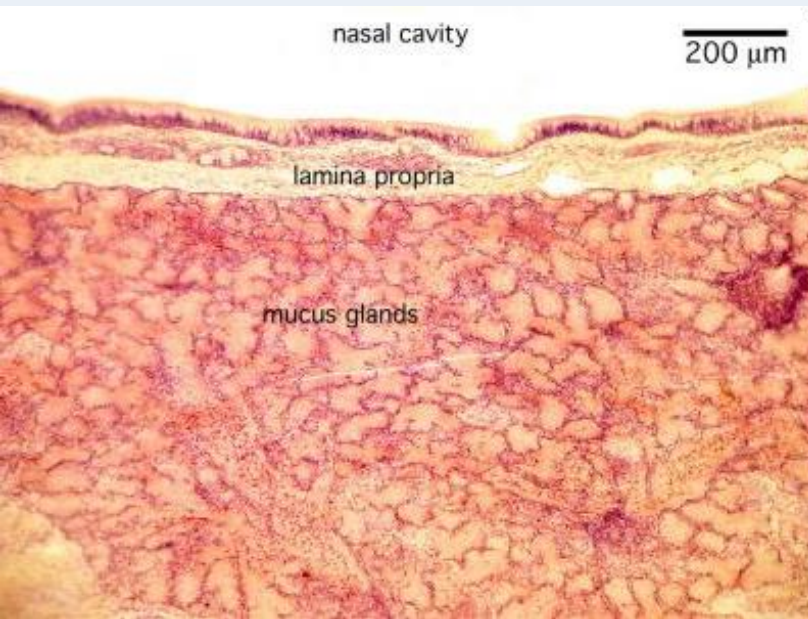


Histology of the hard palate

Mucoperiosteum



Histology of the soft palate

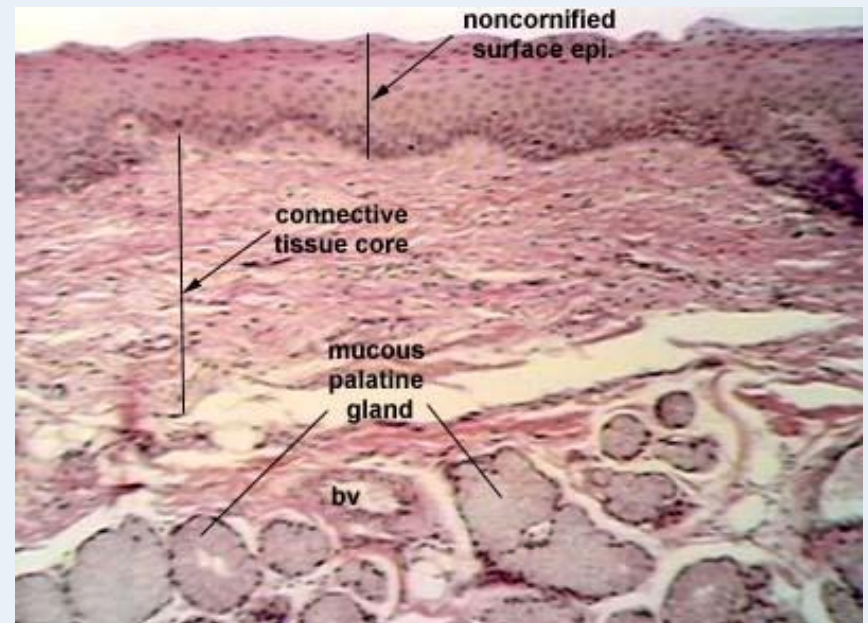


NASAL SURFACE

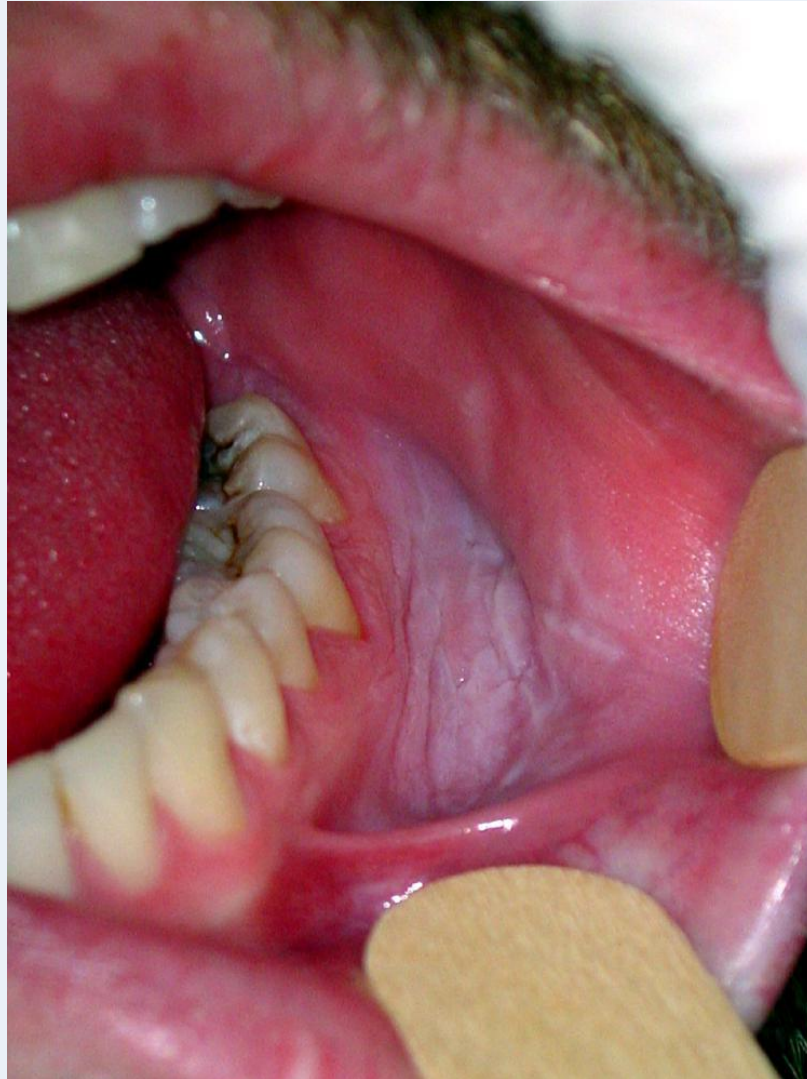
- pseudostratified ciliated columnar epithelium
- lamina propria
- mucous glands
- striated muscle

ORAL SURFACE

- stratified squamous non keratinized epithelium



Leukoplakia (precancerosal stage!!!)



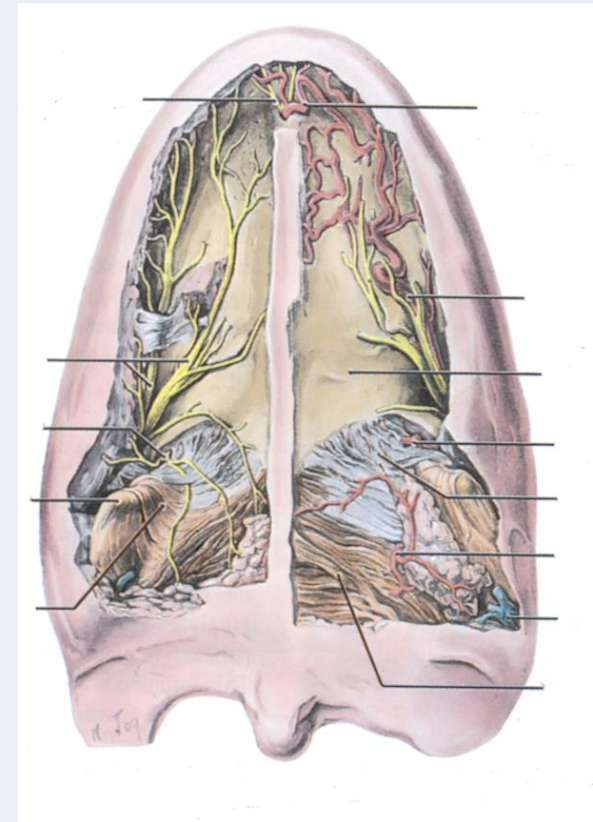
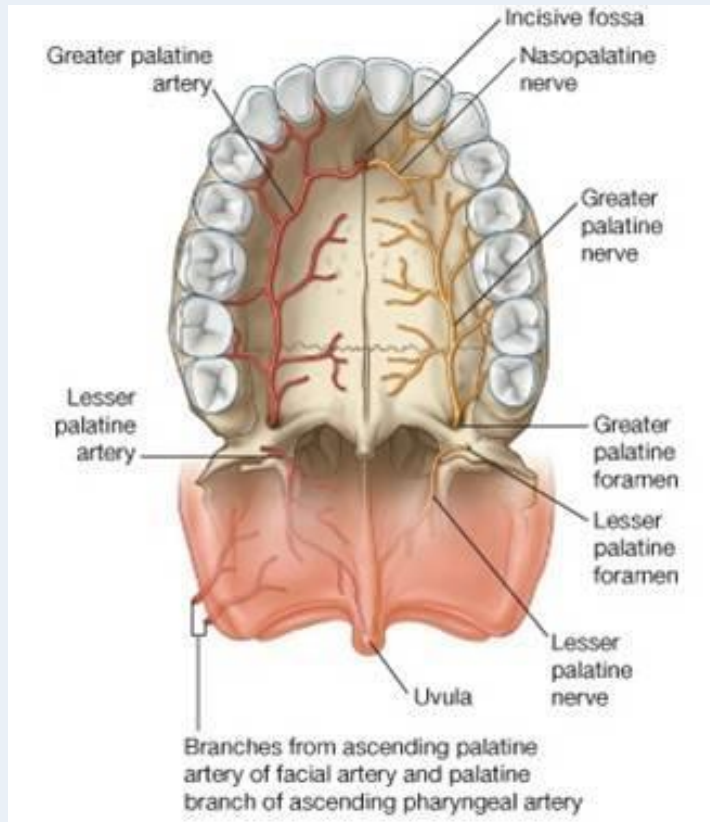
Allergic reaction



Blood supply and innervation of the hard and soft palate

- greater and lesser palatine nerves (maxillary nerve)
- nasopalatine nerve

greater and lesser palatine arteries



ISTHMUS OF THE FAUCES

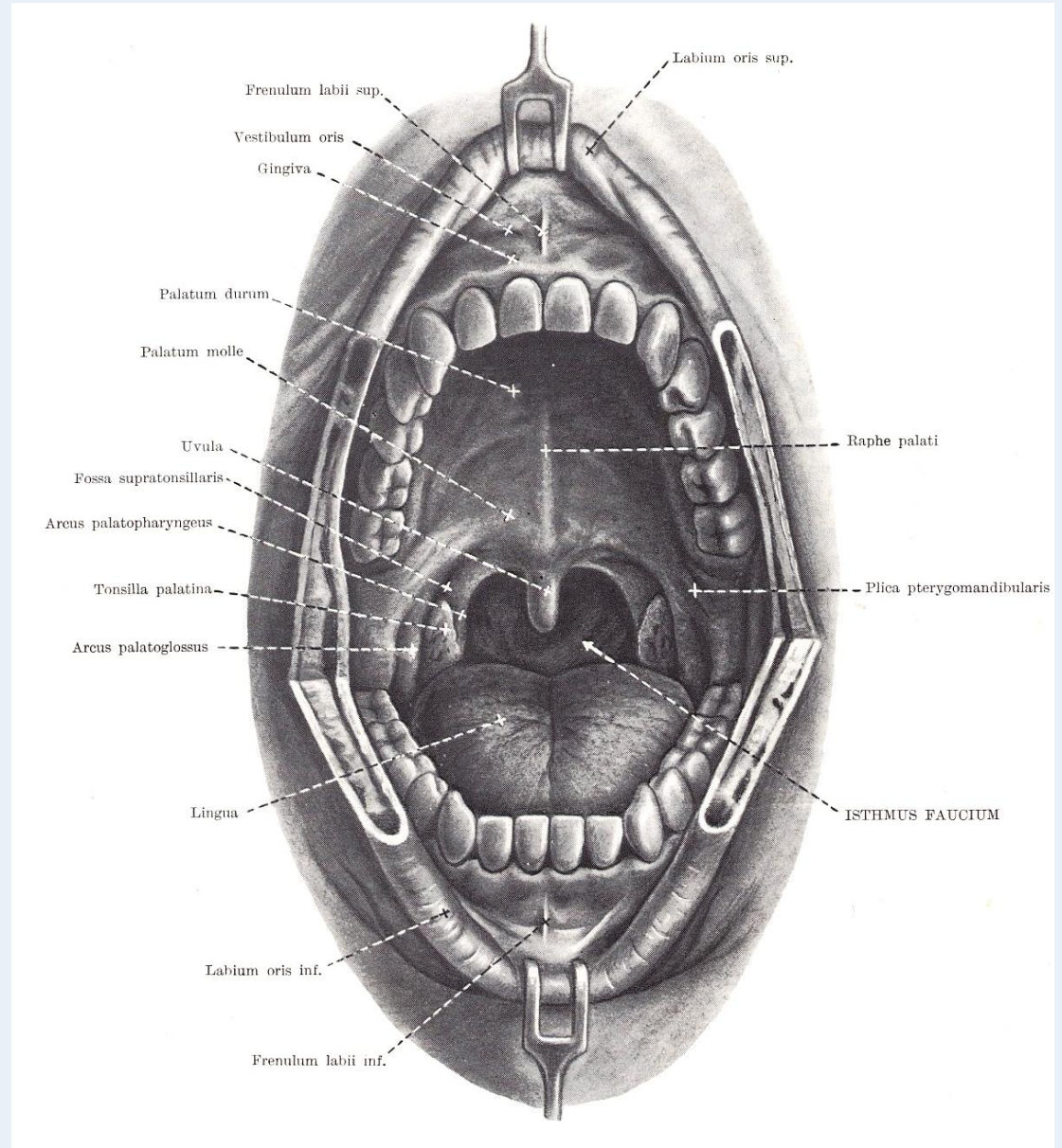
Borders:

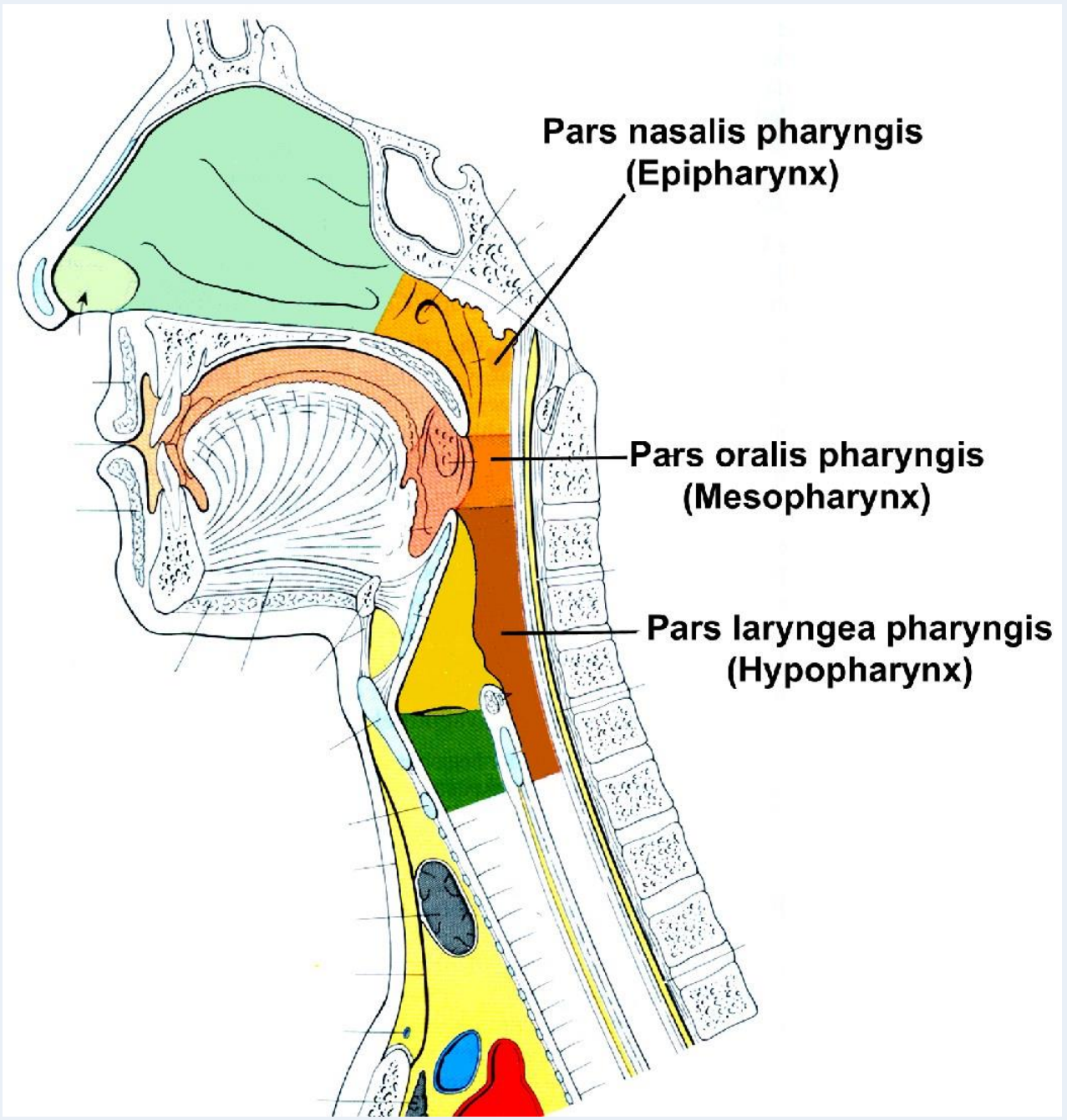
superior: soft palate

inferior: root of the tongue

lateral: palatoglossal and

palatopharyngeal arch / fold





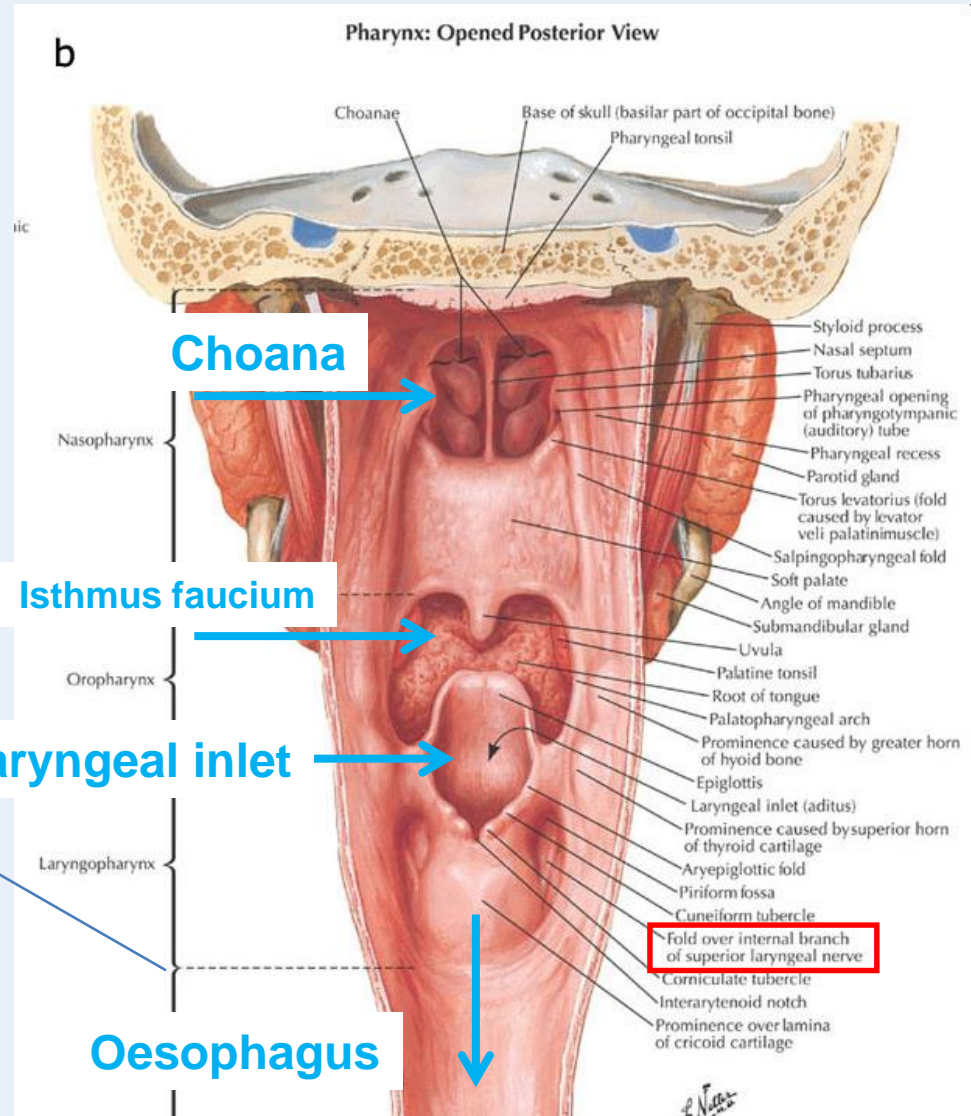
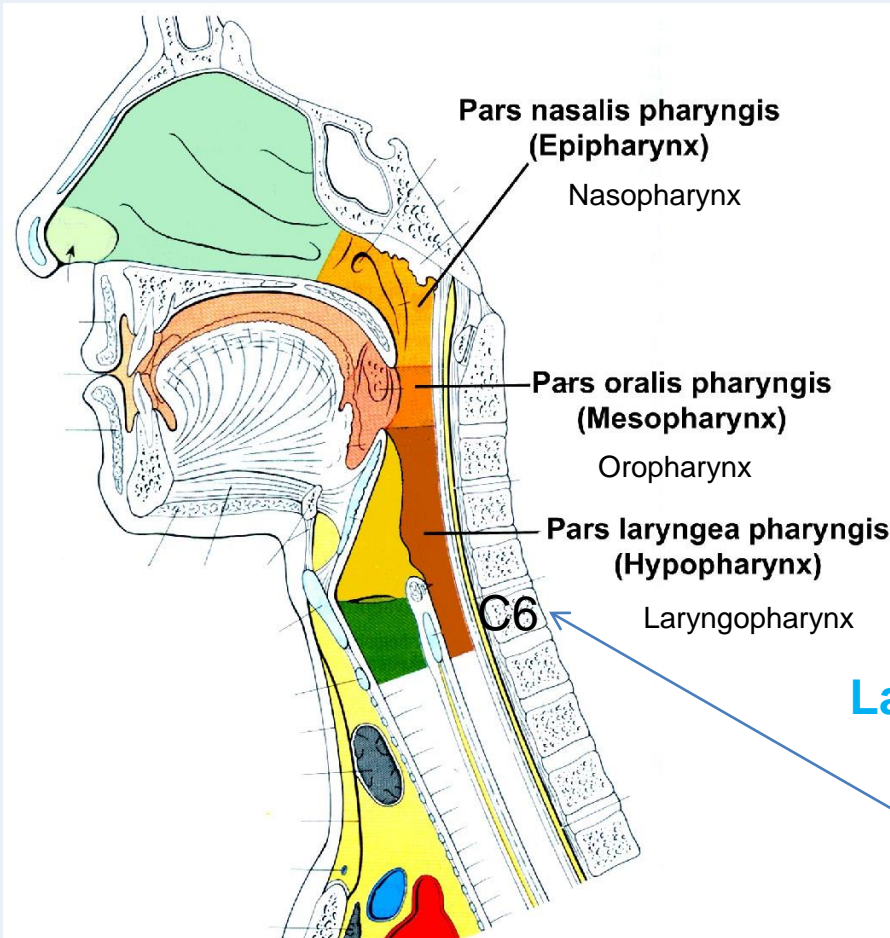
**Pars nasalis pharyngis
(Epipharynx)**

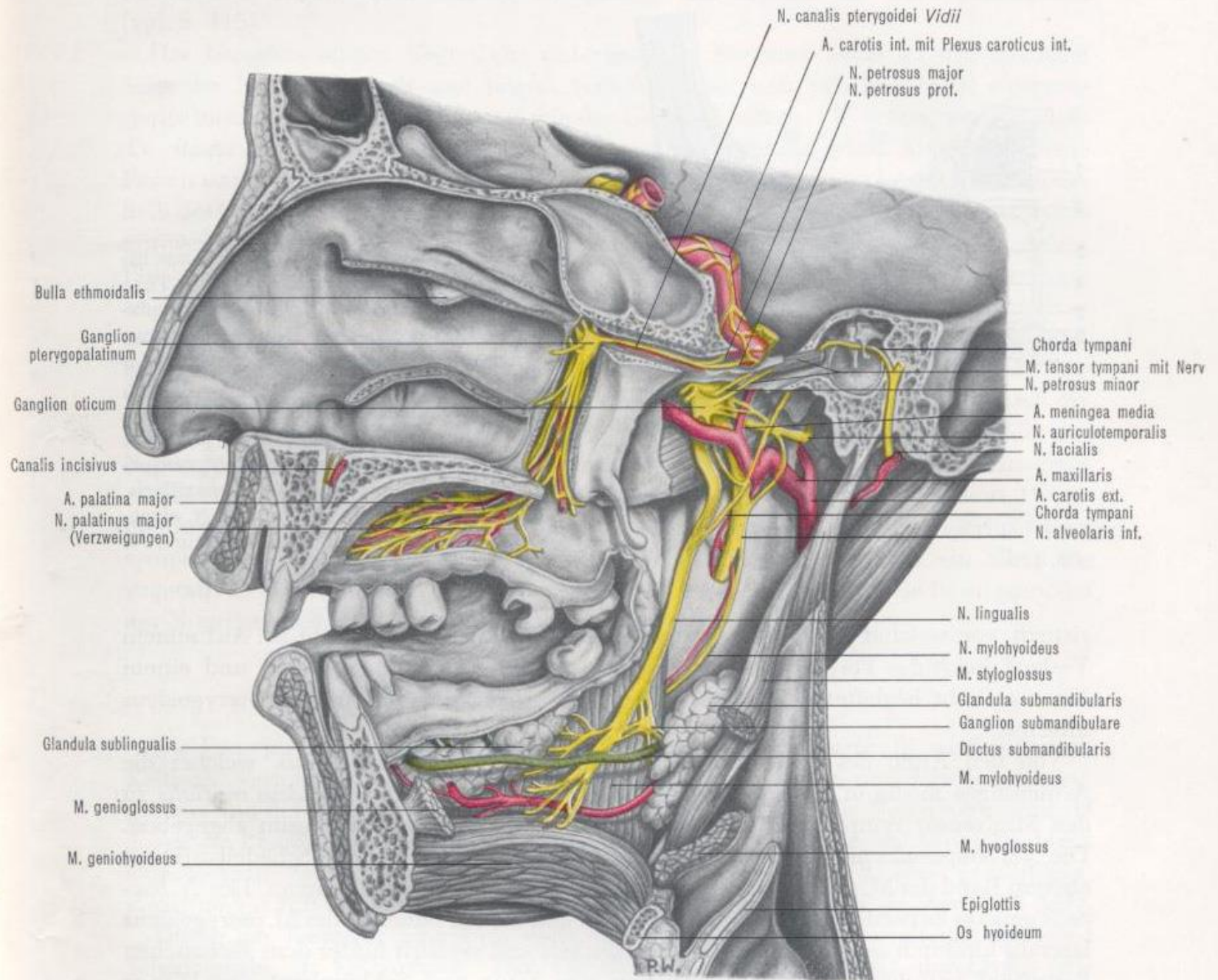
**Pars oralis pharyngis
(Mesopharynx)**

**Pars laryngea pharyngis
(Hypopharynx)**

Pharynx

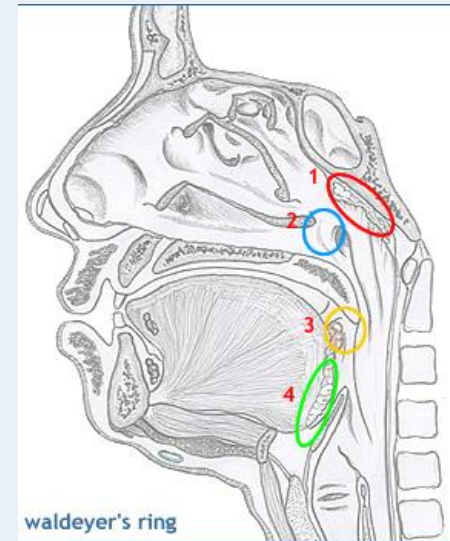
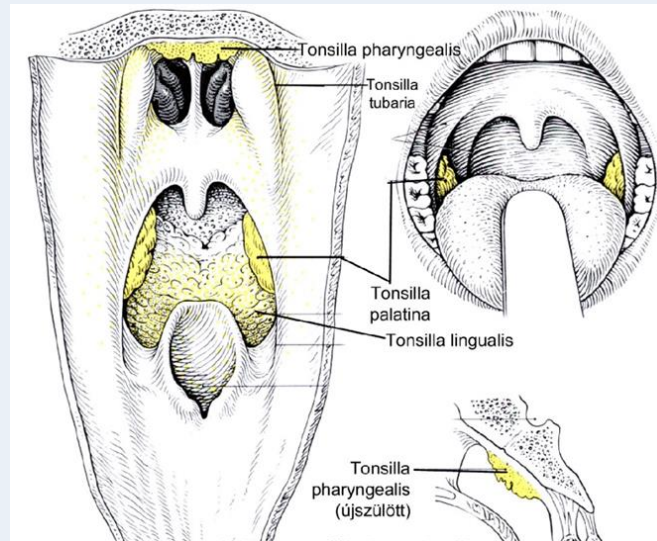
3 levels:



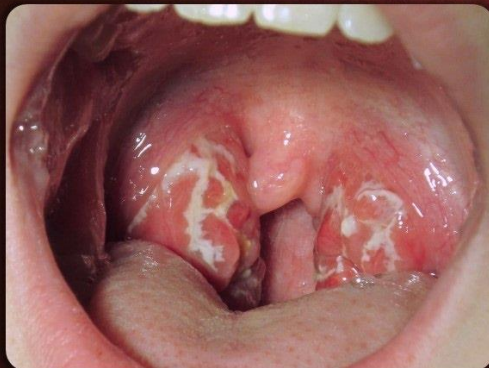


Waldeyer's lymphatic ring

- pharyngeal tonsil
- tubarian tonsils
- palatine tonsils
- lingual tonsil



Streptococcal Pharyngitis



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Viral Pharyngitis



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Blood supply of palatine tonsil:

- descending palatine artery (maxillary a.)
- ascending palatine a. (facial a.)
- ascending pharyngeal artery (external carotid)
- lingual artery (external carotid)

Thank you for your attention!

