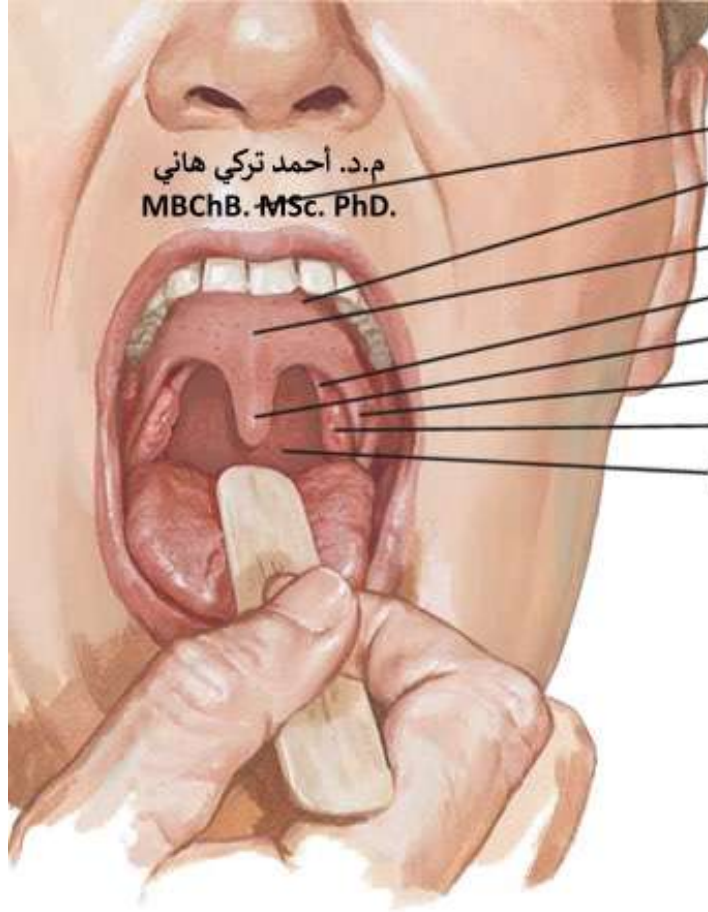




Head & Neck Anatomy

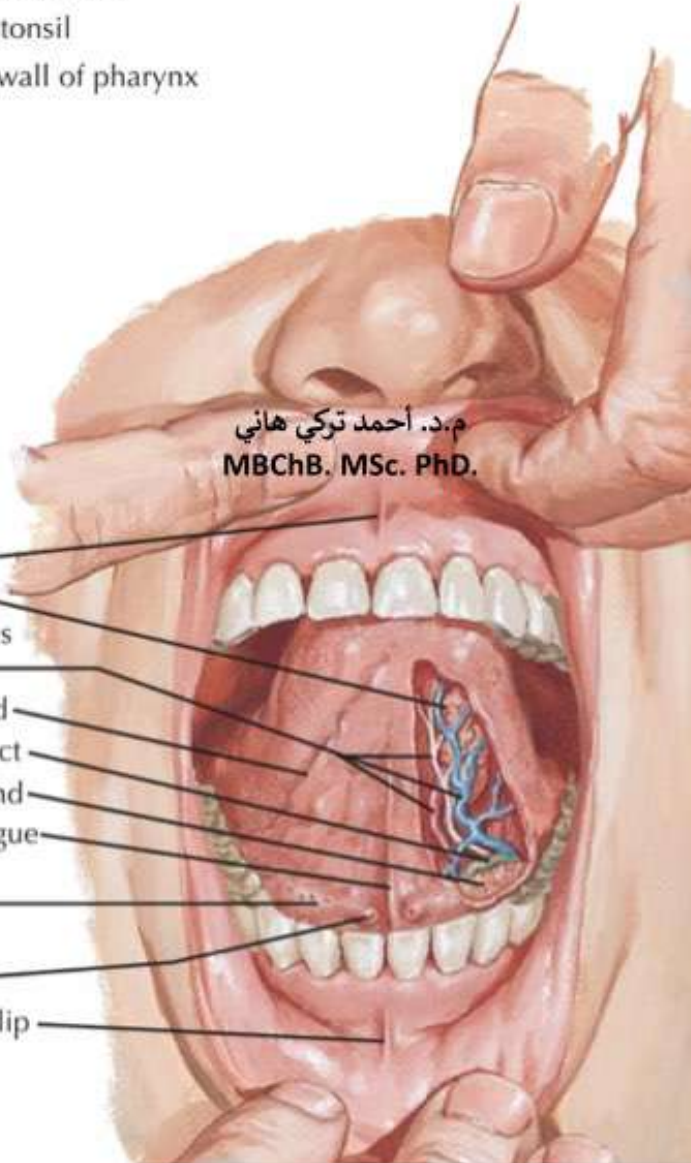
The Oral Cavity

م.د. أحمد تركي هاني
MBChB. MSc. PhD.



م.د. أحمد تركي هاني
MBChB. MSc. PhD.

- Philtrum of lip
- Vestibule
- Soft palate
- Palatopharyngeal arch
- Uvula
- Palatoglossal arch
- Palatine tonsil
- Posterior wall of pharynx

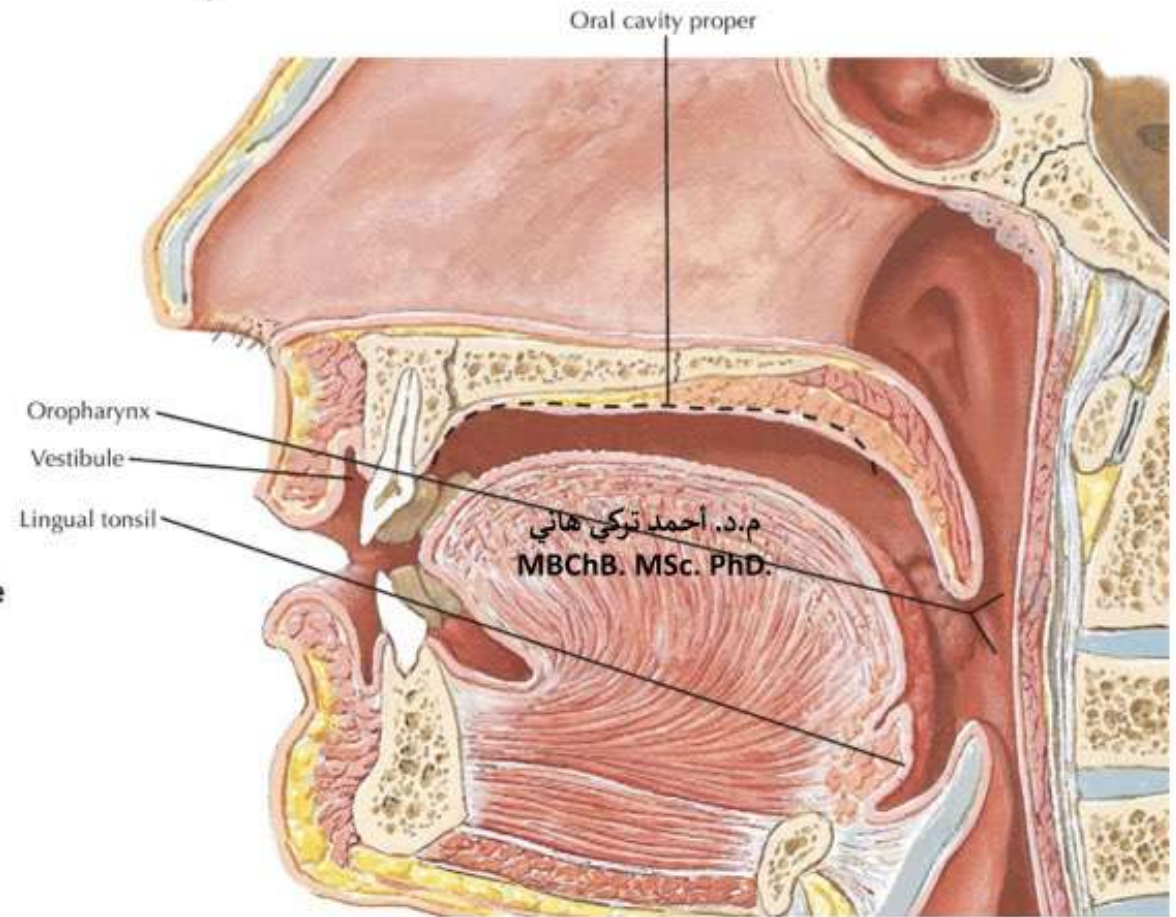
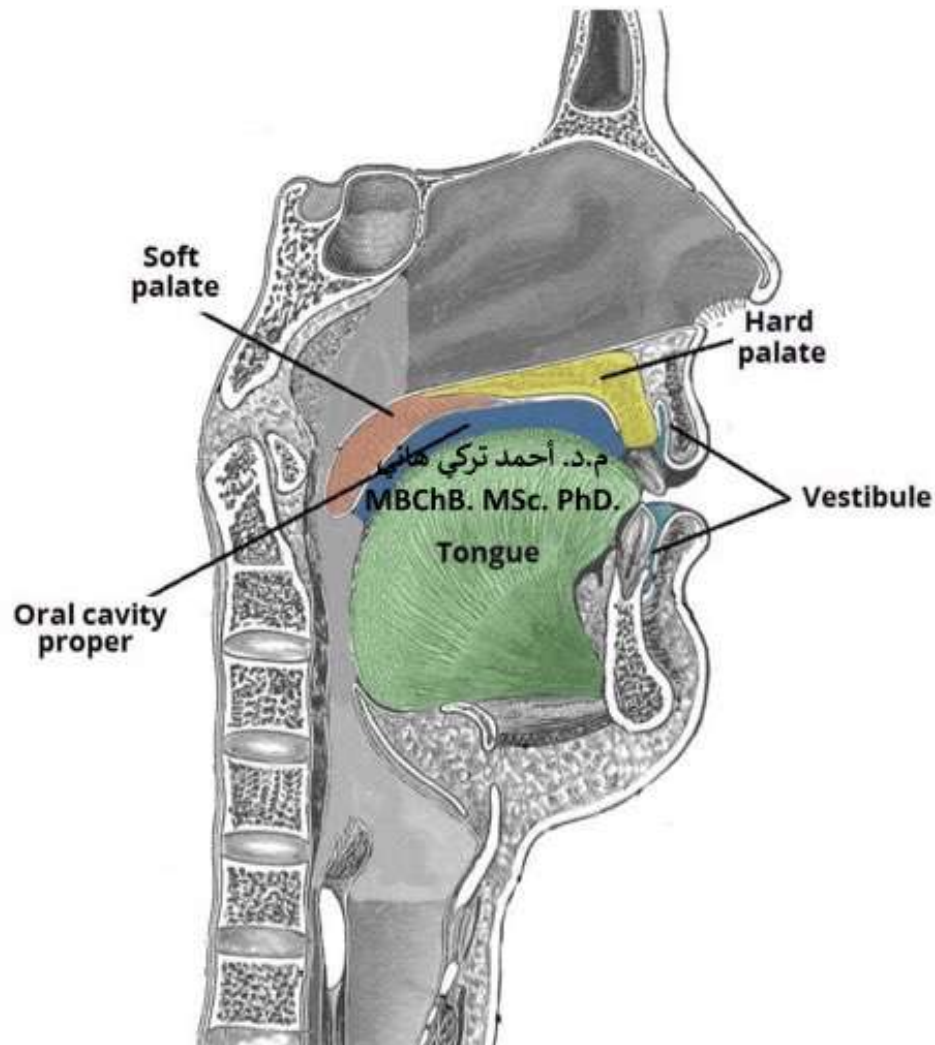


م.د. أحمد تركي هاني
MBChB. MSc. PhD.

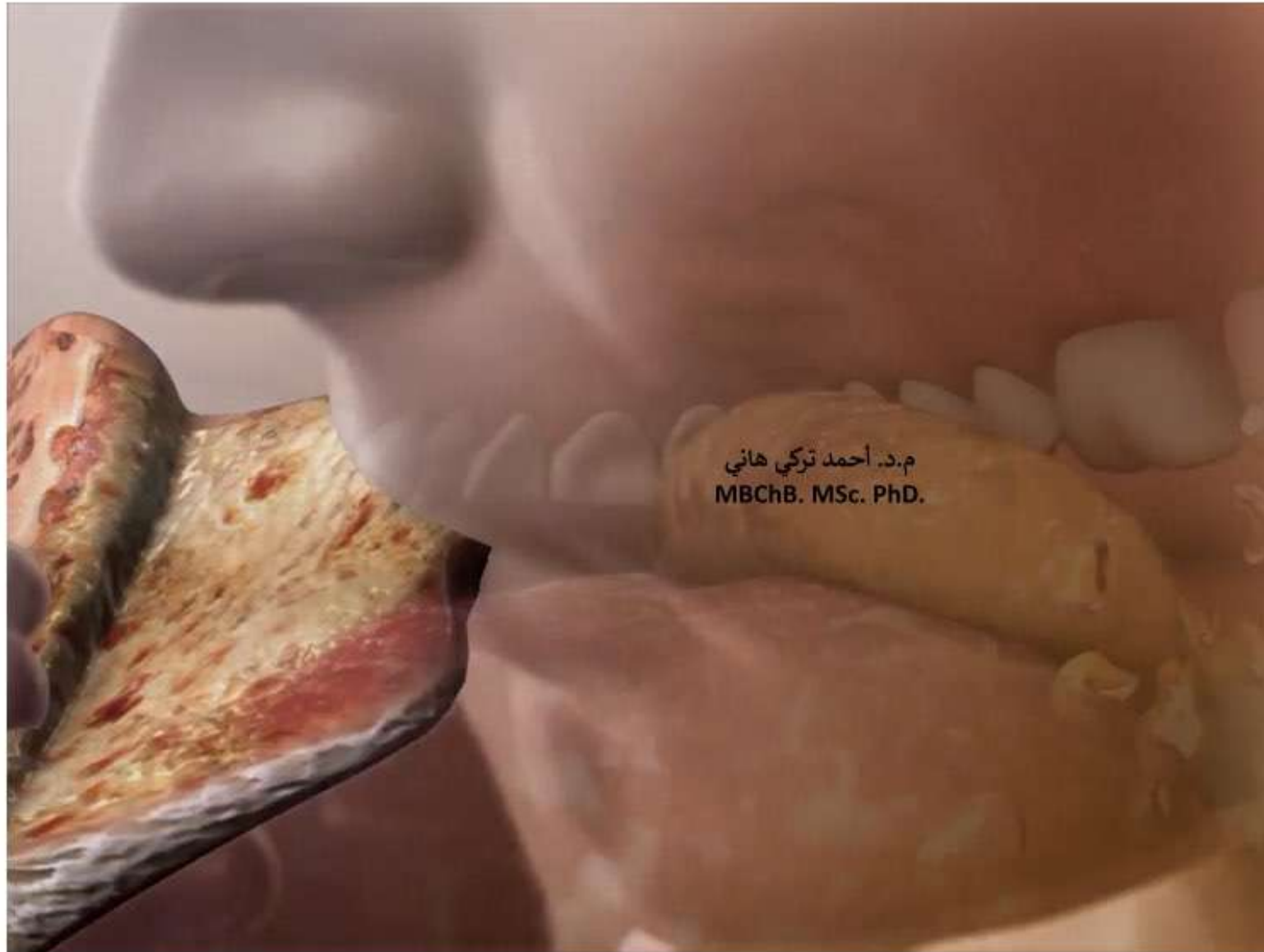
- Frenulum of upper lip
- Lingual minor salivary gland
- Deep lingual artery and veins and lingual nerve
- Fimbriated fold
- Submandibular duct
- Sublingual gland
- Frenulum of tongue
- Sublingual fold with openings of sublingual ducts
- Sublingual caruncle with opening of submandibular duct
- Frenulum of lower lip

م.د. أحمد تركي هاني
MBChB. MSc. PhD.

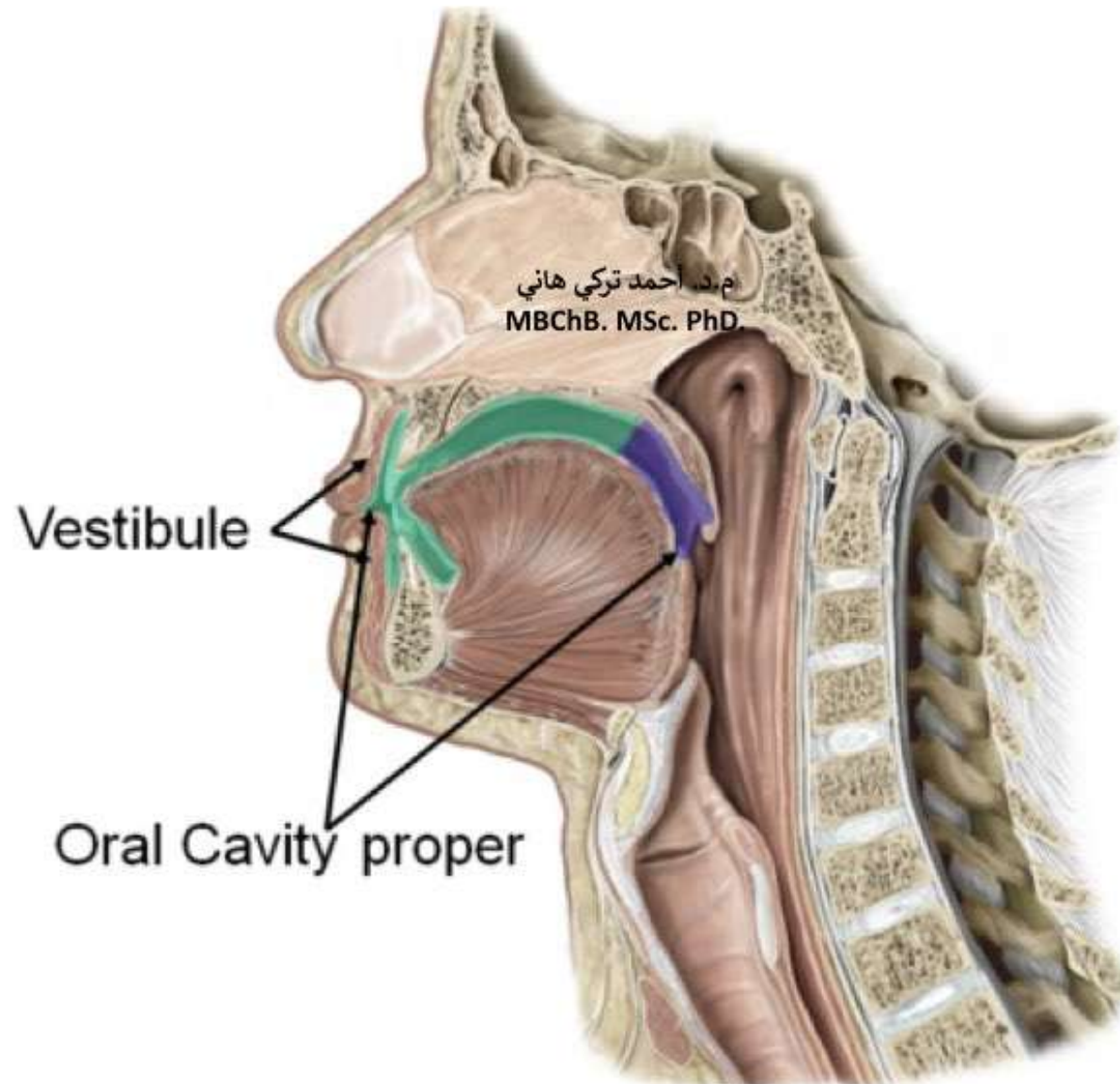
Definition: The first part of the digestive tract, extending from the lips/cheeks anteriorly to the palatoglossal arches posteriorly.



Functions: Ingestion, mastication (chewing), deglutition (swallowing), taste, and speech.

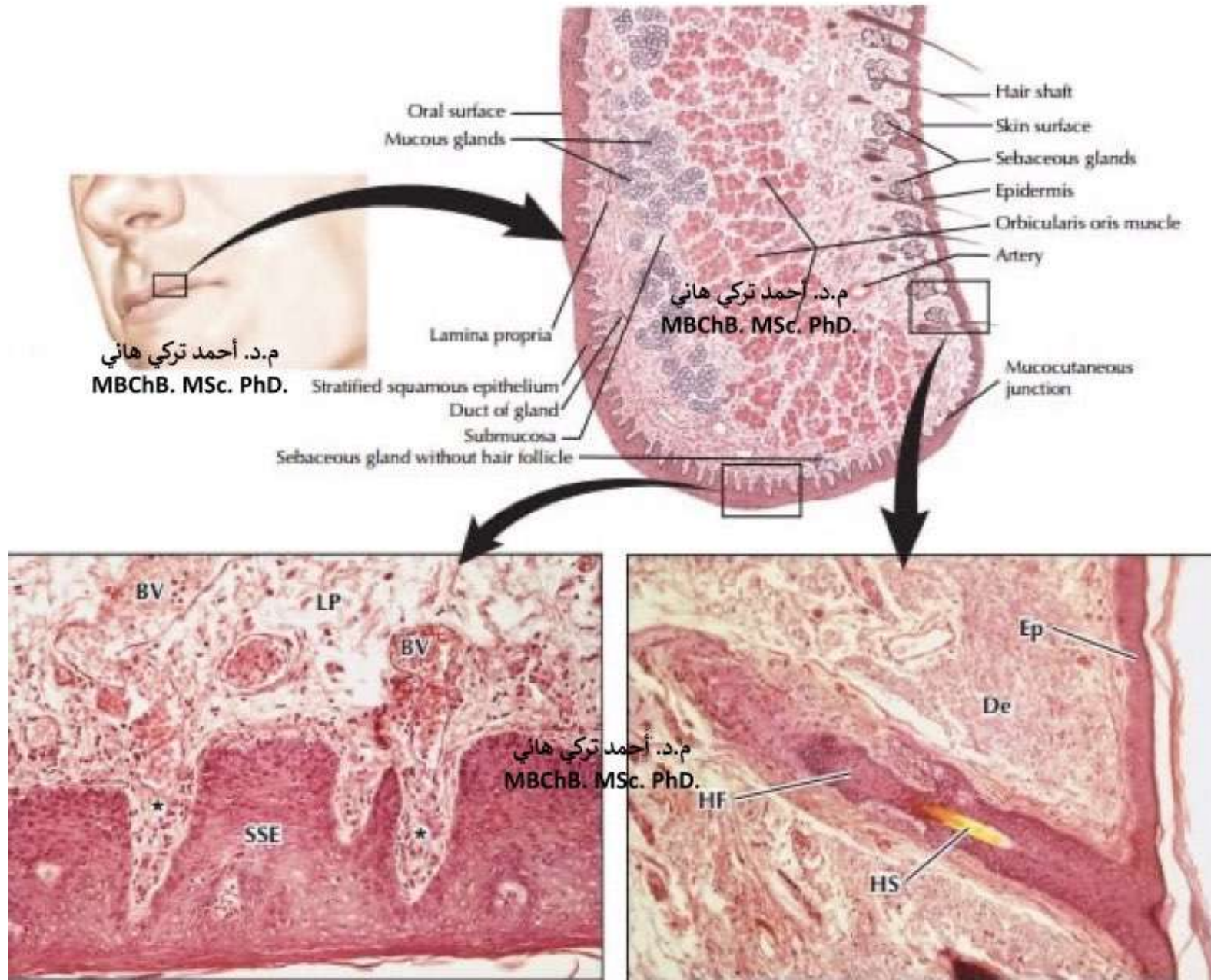


Divided into two main parts: The Oral Vestibule and the Oral Cavity Proper.



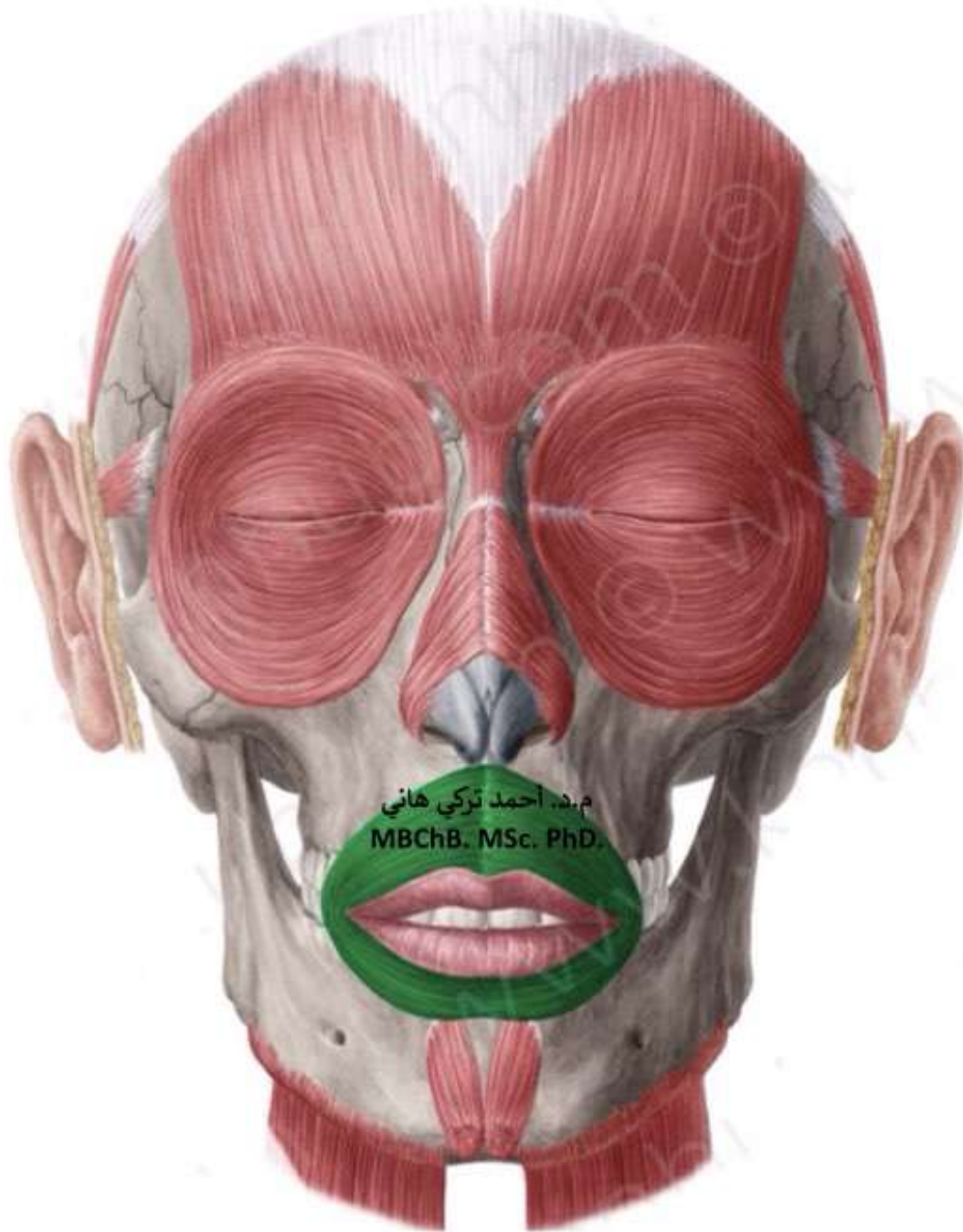
The Lips (Labia)

Structure: Muscular folds covered externally by skin and internally by mucous membrane.



Orbicularis Oris

Muscles of the lips: Mainly the orbicularis oris (sphincter muscle) which controls the opening and closing of the mouth.

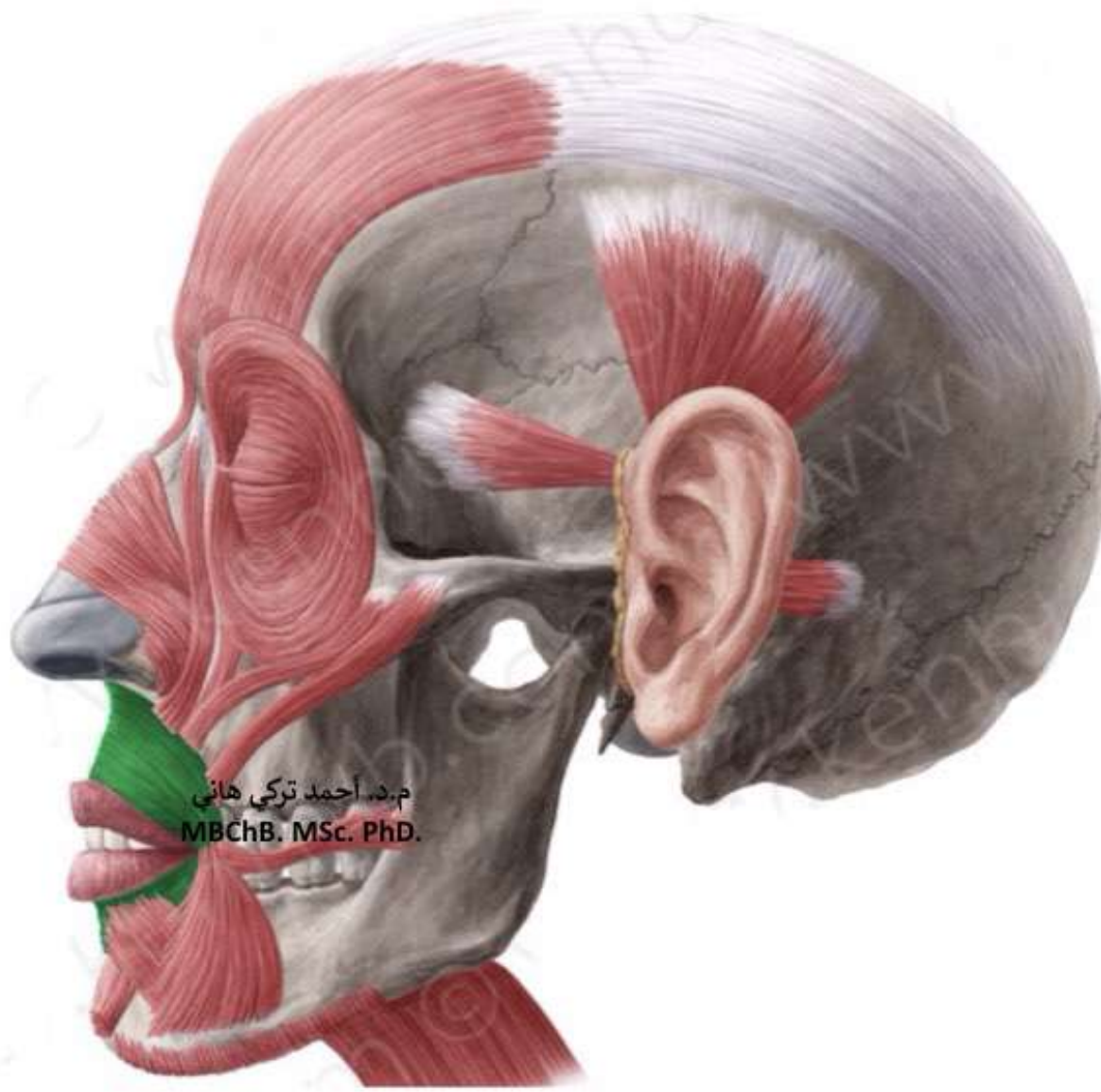


م.د. أحمد تركي هاني
MBChB. MSc. PhD.

(sphincter muscle) which controls the opening and closing of the mouth.

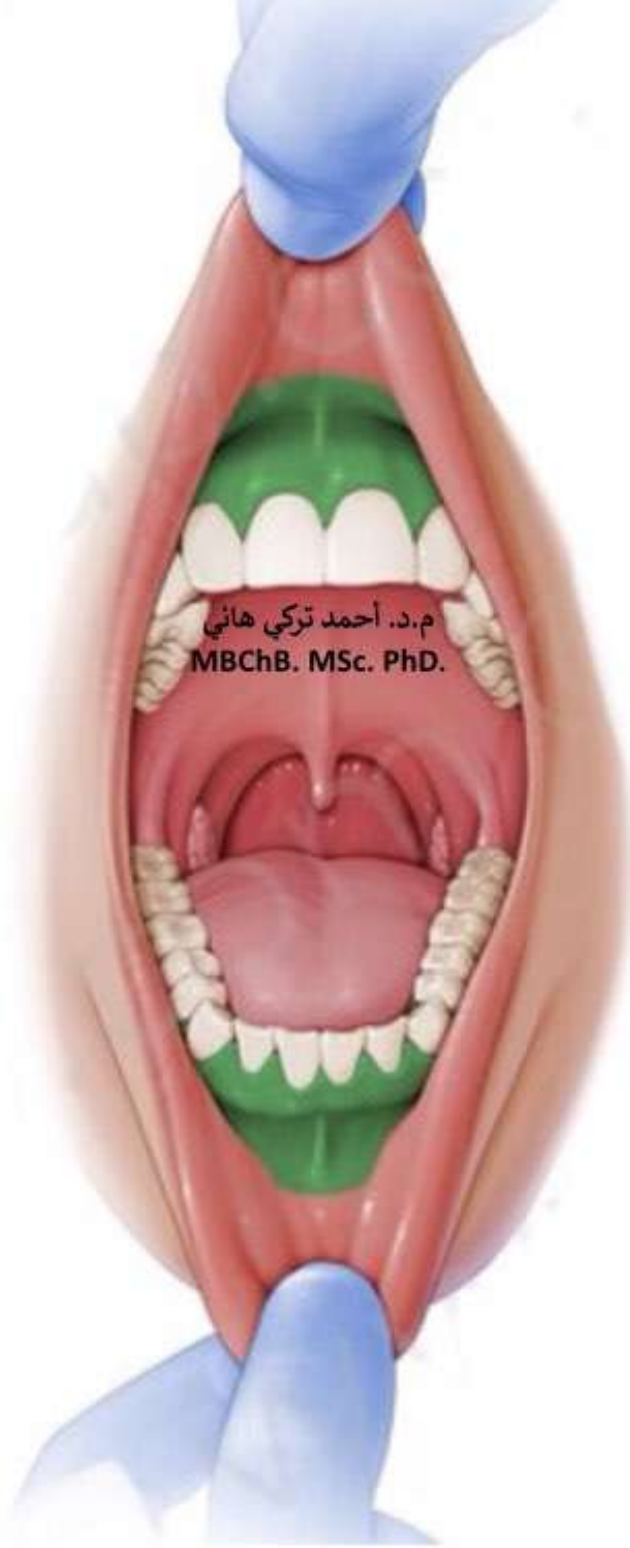
م.د. أحمد تركي هاني
MBChB. MSc. PhD.

Functions of the lips: Grasping food, retaining saliva, articulation (speech), and facial expression



م.د. أحمد ترکی هانی
MBChB. MSc. PhD.

Oral Cavity Vestibule and Proper

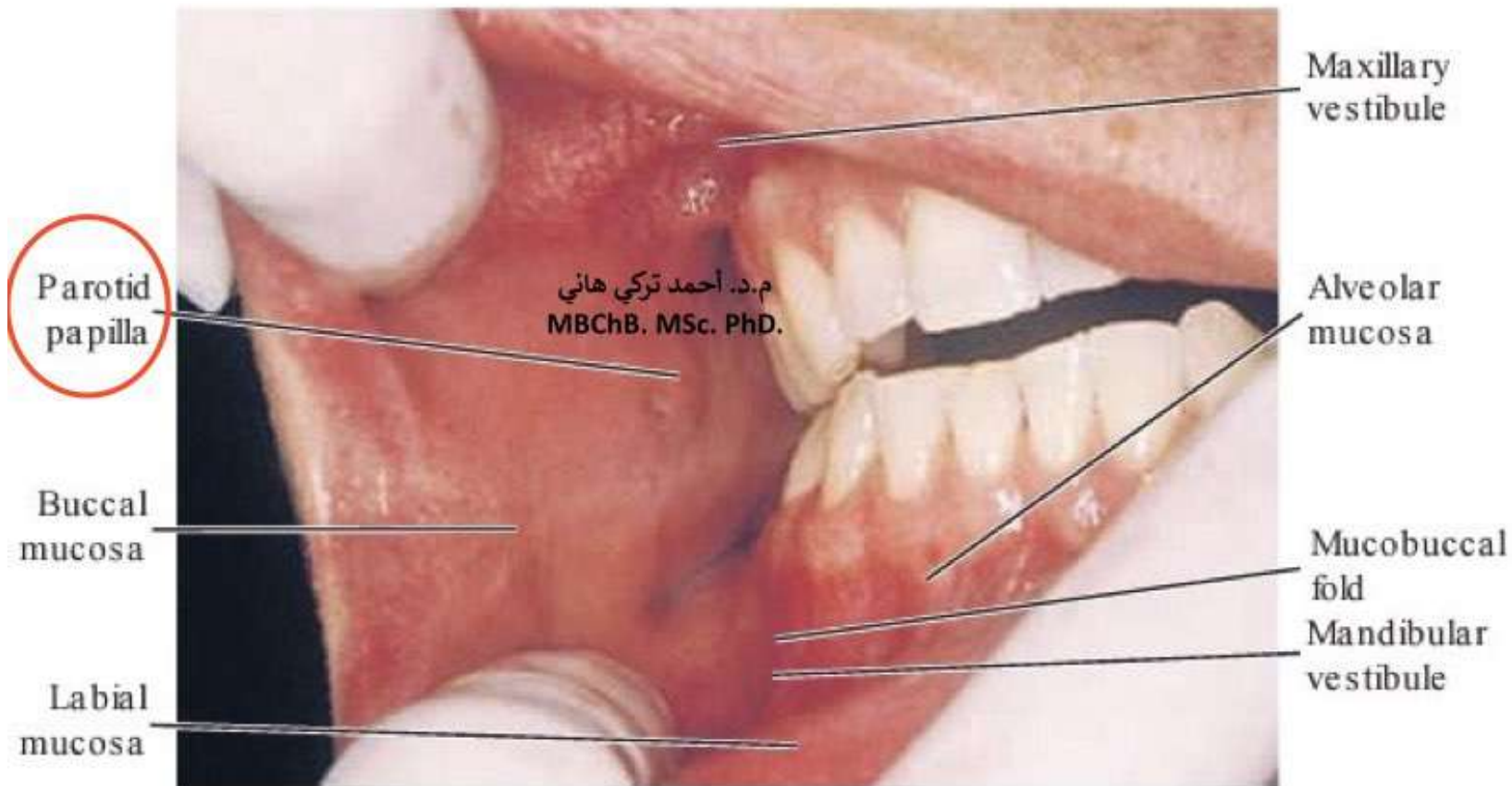


1. Oral Vestibule

Location: The slit-like space between the gums/teeth and the lips/cheeks.

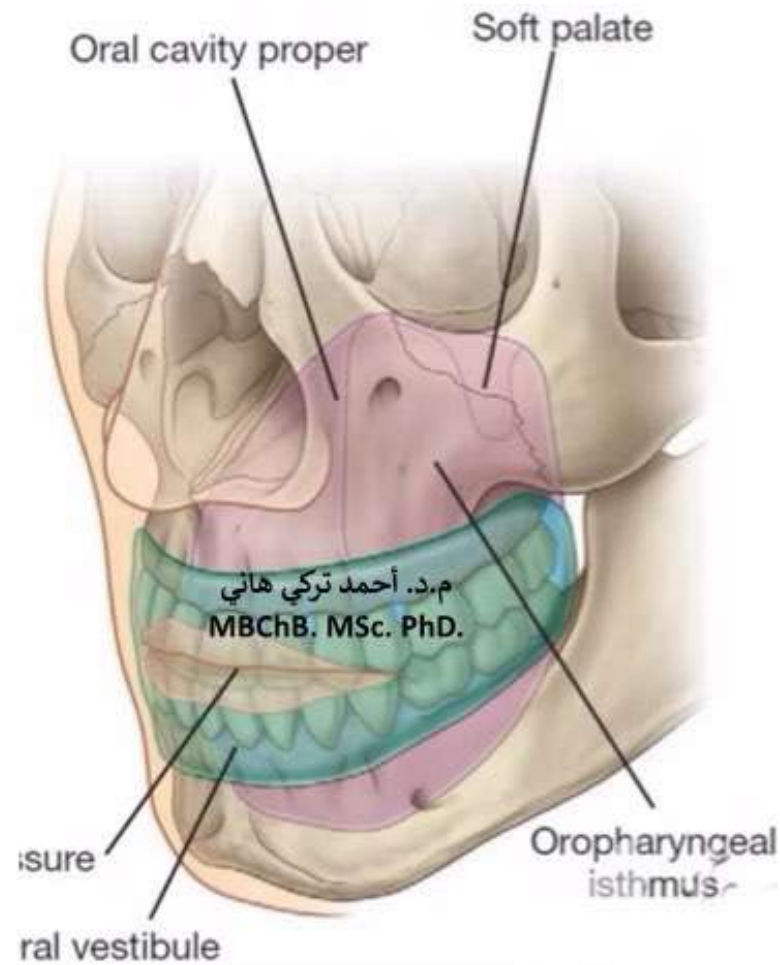
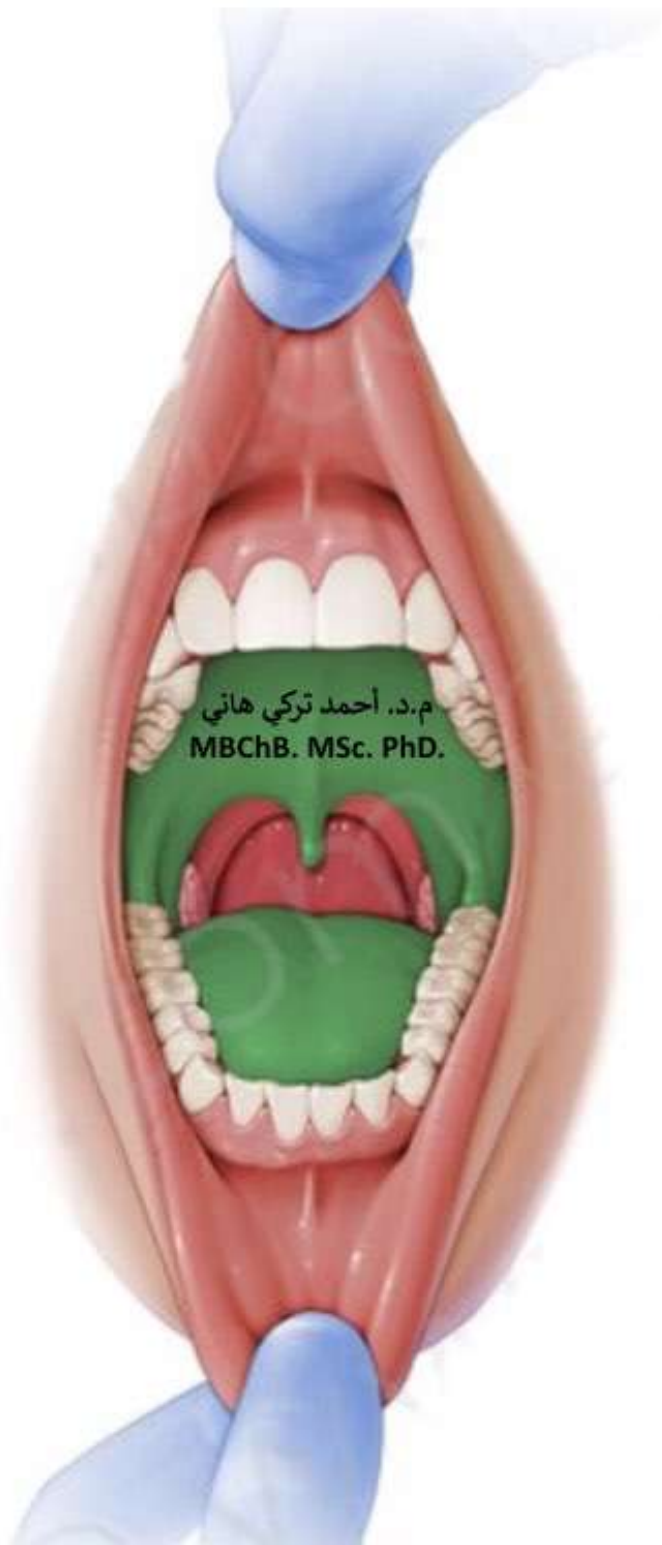
Connection: Communicates with the exterior through the oral fissure (the mouth opening).

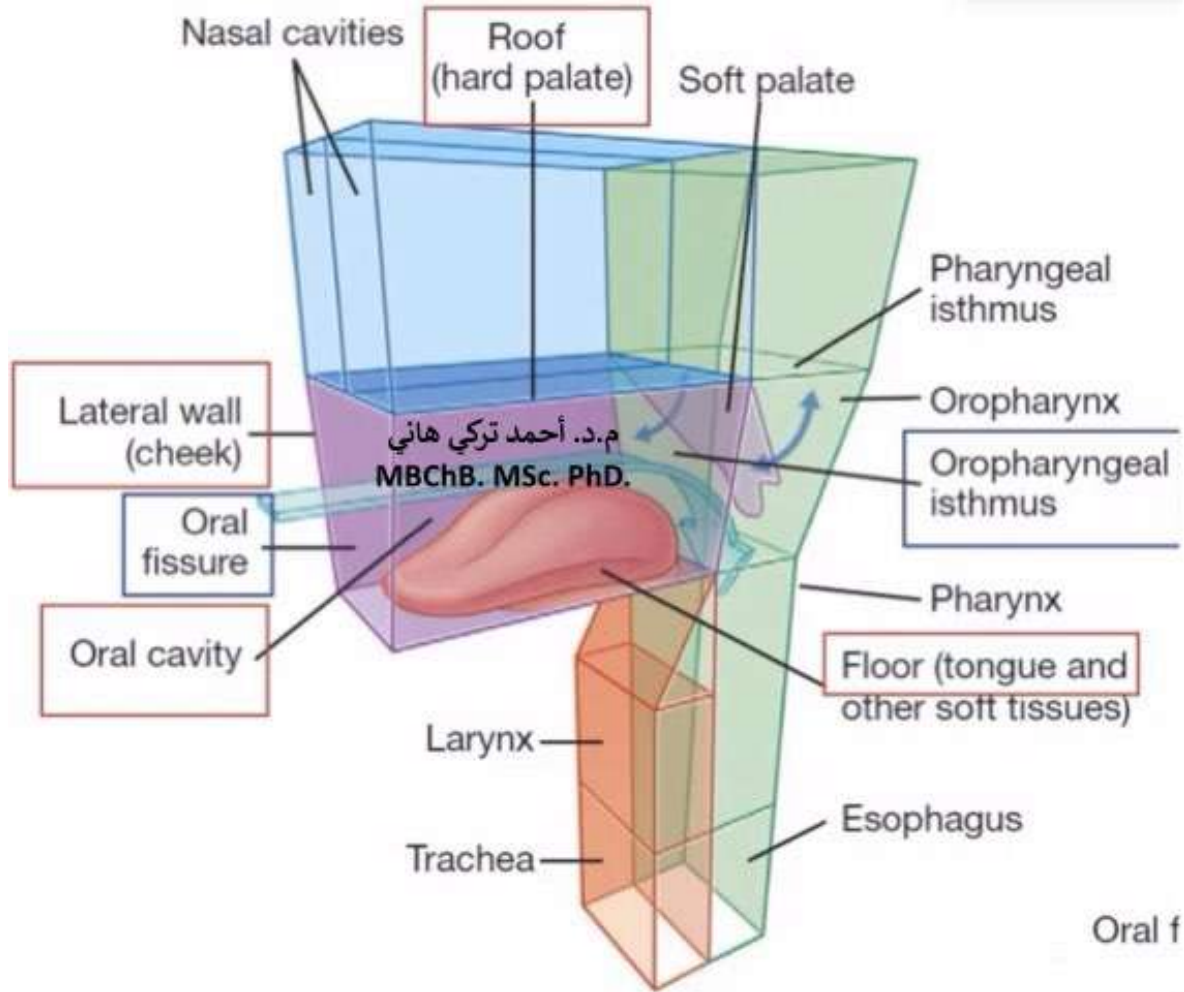
Duct Opening: The parotid (salivary) duct opens onto a small papilla opposite the upper second molar tooth.



2. Oral Cavity Proper

Location: The space internal to the teeth and gums.





Boundaries:

- **Roof:** Hard and Soft Palates.

- **Posteriorly:**

Communicates with the oropharynx via the oropharyngeal isthmus (bounded by the palatoglossal arches).

- **Floor:** Primarily the tongue and the mucous membrane covering the sublingual glands.

Sensory Innervation of the Mouth

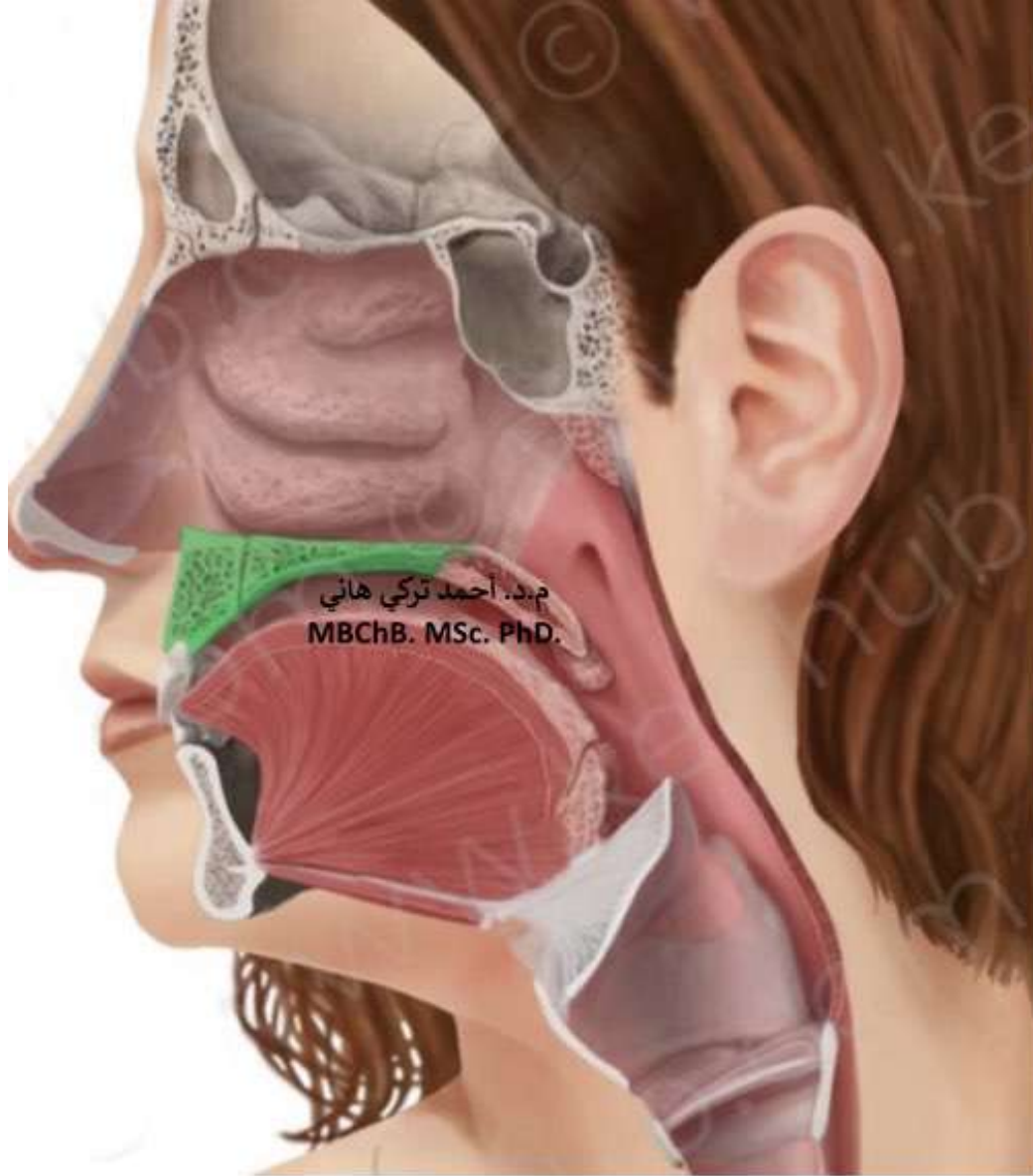
General Sensory (Touch, Pain, Temperature):

- **Upper Jaw/Teeth/Gums/Hard Palate:** Branches of the Maxillary Nerve (V₂).
- **Lower Jaw/Teeth/Gums/Floor of Mouth/Anterior 2/3 of Tongue:** Branches of the Mandibular Nerve (V₃) (specifically the lingual nerve).

Special Sensory (Taste):

- **Anterior 2/3 of Tongue:** Facial Nerve (CN VII) via the Chorda Tympani branch.
- **Posterior 1/3 of Tongue:** Glossopharyngeal Nerve (CN IX).

Palate

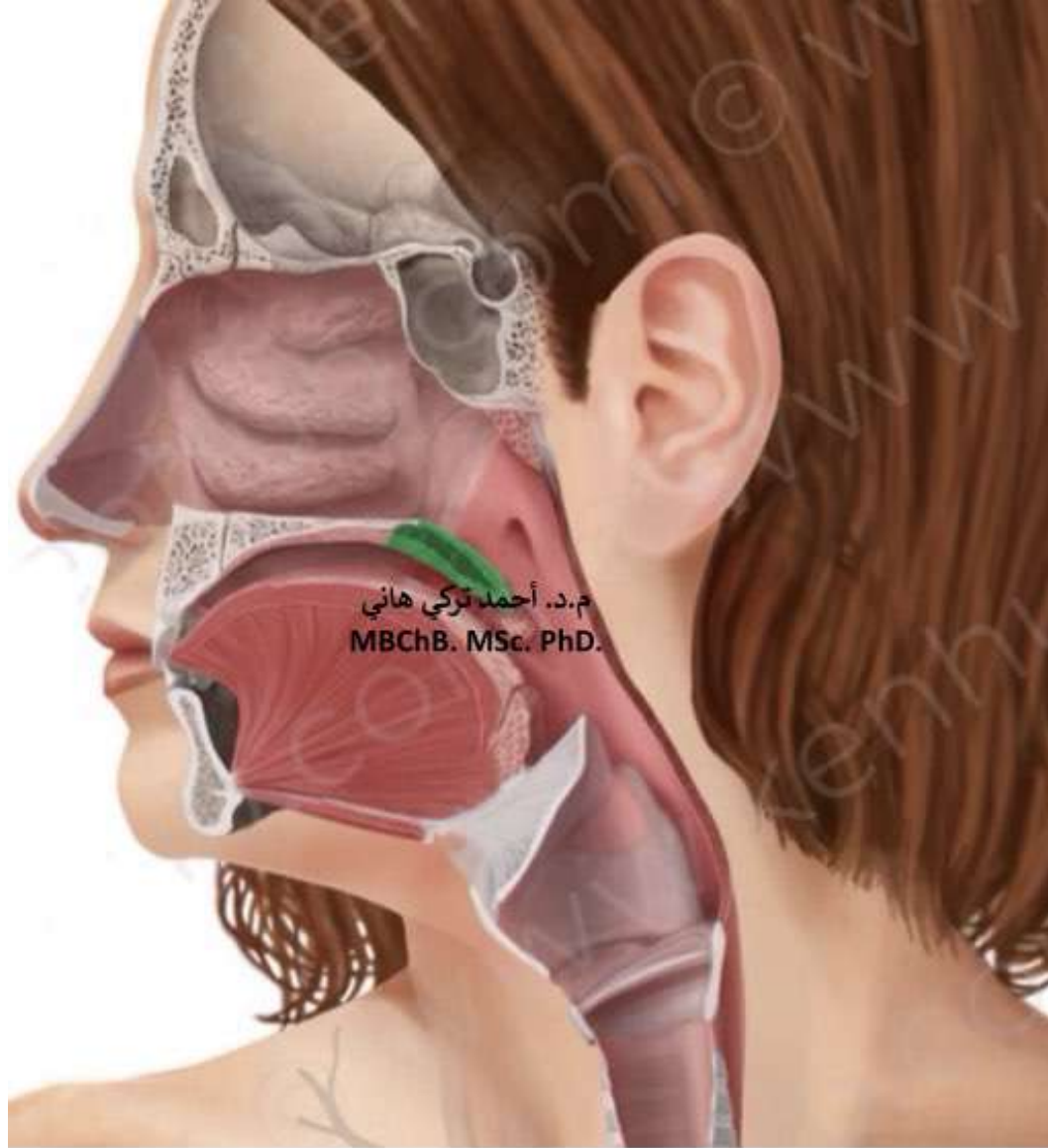


1. Hard Palate

Location: The anterior two-thirds of the palate.

Structure: Formed by the palatine processes of the maxillae and the horizontal plates of the palatine bones.

Function: Provides a rigid surface for the tongue during feeding (mastication and swallowing).



2. Soft Palate

Location: The posterior one-third of the palate, a mobile fold of mucosa and muscle.

Features: Has a free posterior border from which the conical uvula hangs.

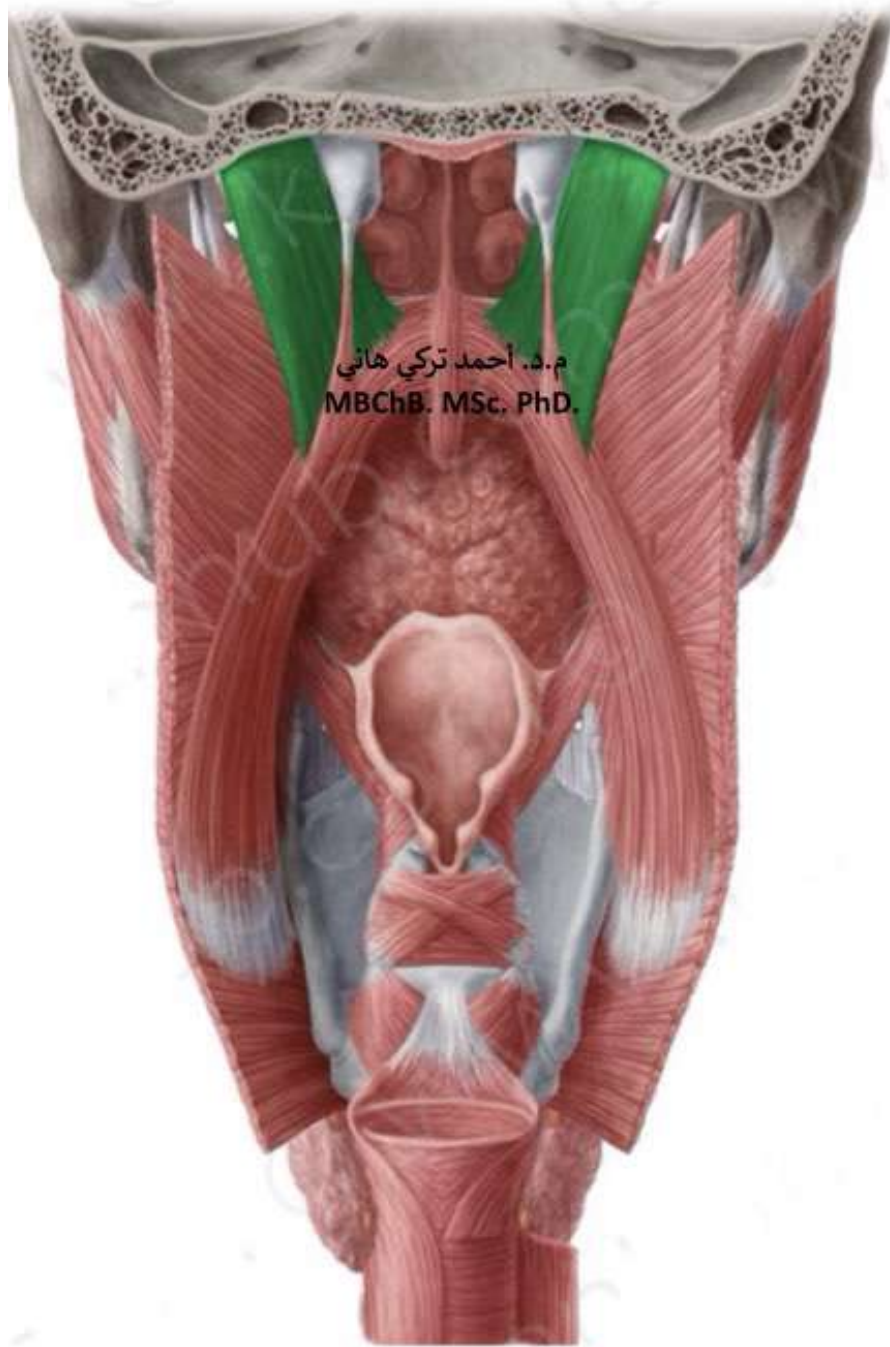
Function: Elevates during swallowing to seal off the nasopharynx, preventing food from entering the nasal cavity.

Muscles of the Soft Palate

Muscles of the Soft Palate

MUSCLE	ORIGIN	INSERTION	NERVE SUPPLY	ACTION
Tensor veli palatini	Spine of sphenoid, auditory tube	With muscle of other sides, forms palatine aponeurosis	Nerve to medial pterygoid from mandibular nerve	Tenses soft palate
Levator veli palatini	Petrous part of the temporal bone, auditory tube	Palatine aponeurosis	Pharyngeal plexus (vagus nerve)	Raises soft palate
Palatoglossus	Palatine aponeurosis	Side of the tongue	Pharyngeal plexus (vagus nerve)	Pulls root of the tongue upward and backward, narrows oropharyngeal isthmus
Palatopharyngeus	Palatine aponeurosis	Posterior border of thyroid cartilage	Pharyngeal plexus (vagus nerve)	Elevates wall of the pharynx, pulls palatopharyngeal folds medially
Musculus uvulae	Posterior border of the hard palate	Mucous membrane of the uvula	Pharyngeal plexus (vagus)	Elevates uvula

Levator Veli Palatini

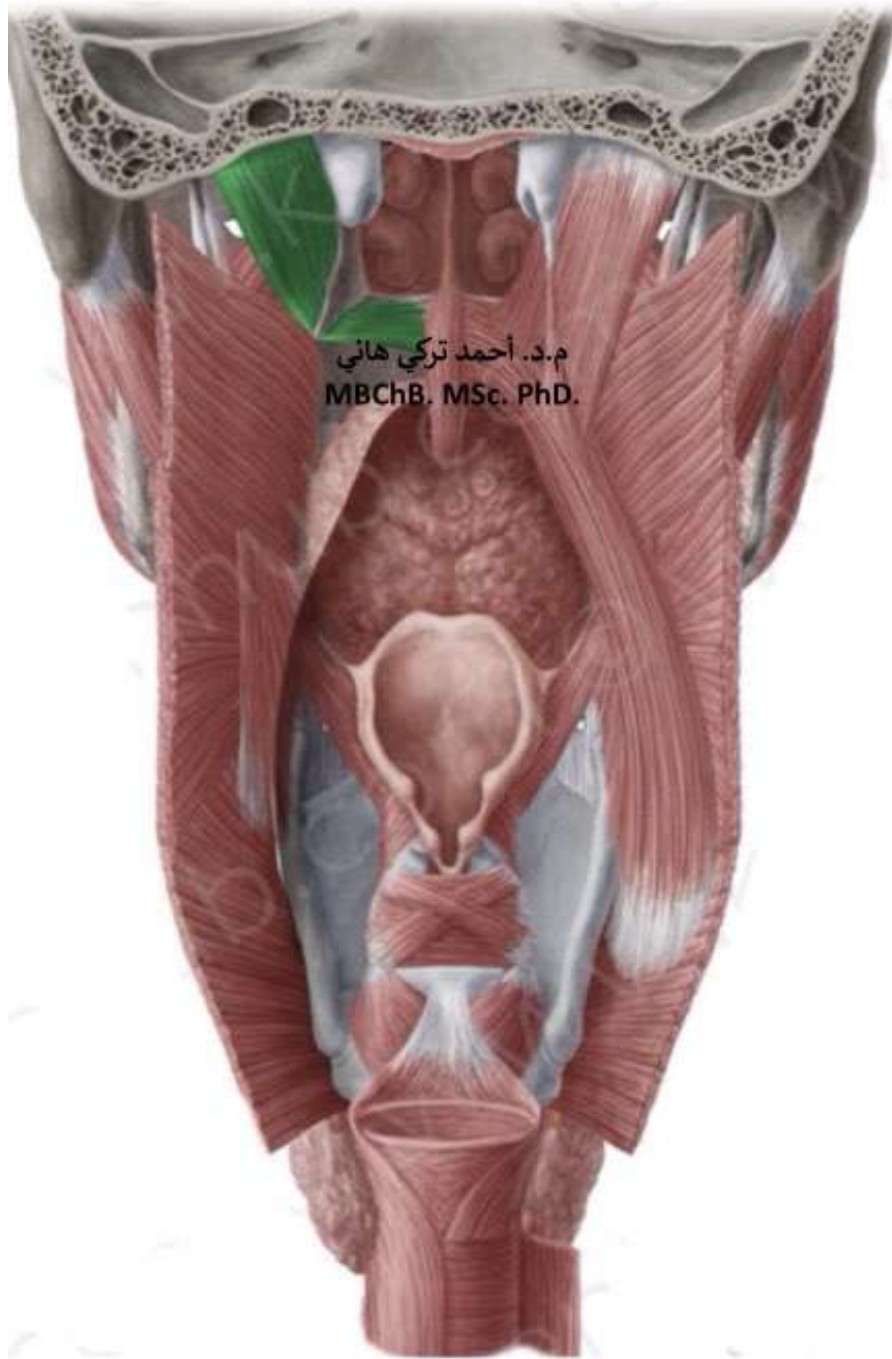


م.د. أحمد تركي هاني
MBChB. MSc. PhD.

Raises soft palate

م.د. أحمد تركي هاني
MBChB. MSc. PhD.

Tensor Veli Palatini

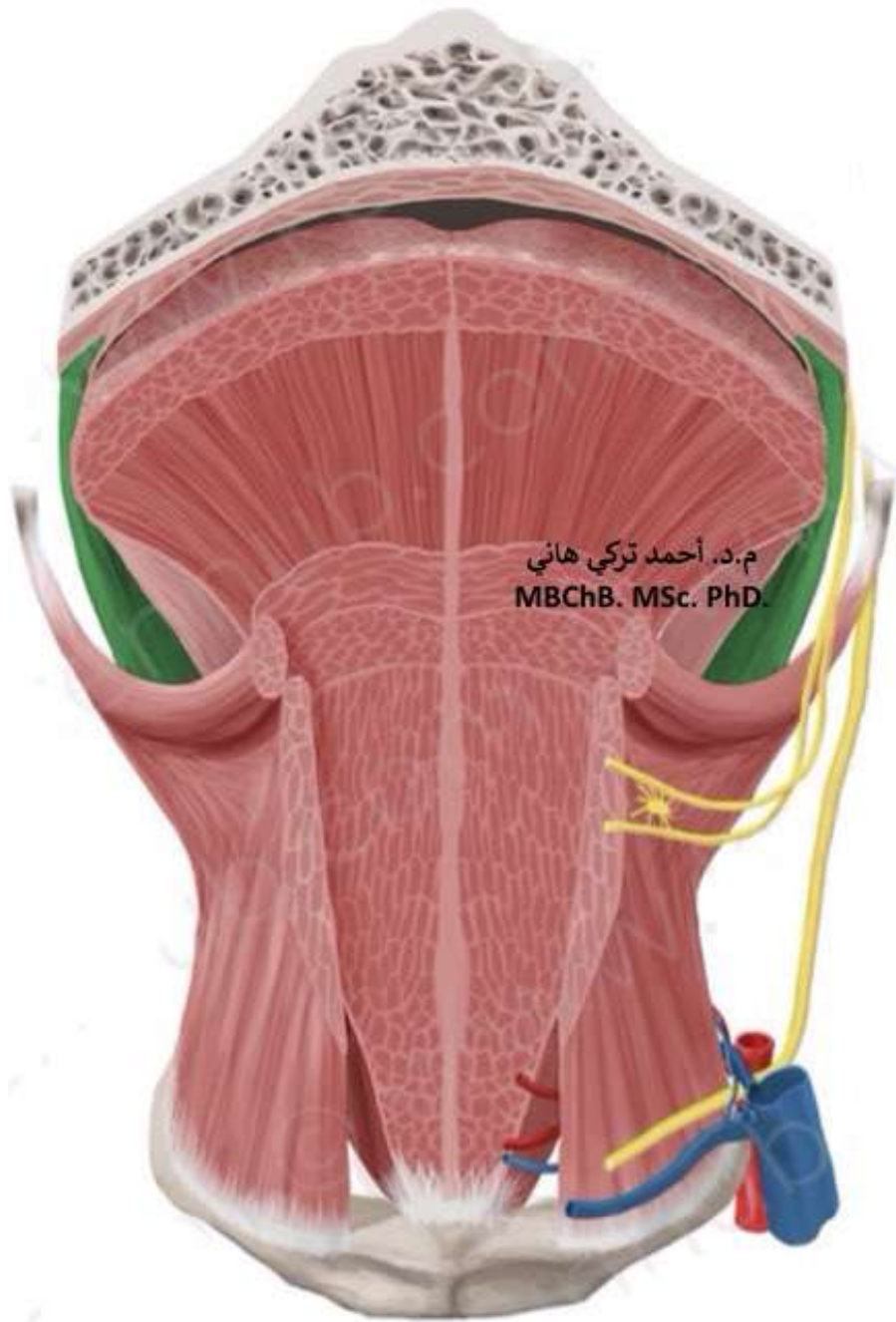


م.د. أحمد تركي هاني
MBChB. MSc. PhD.

Tenses soft palate

م.د. أحمد تركي هاني
MBChB. MSc. PhD.

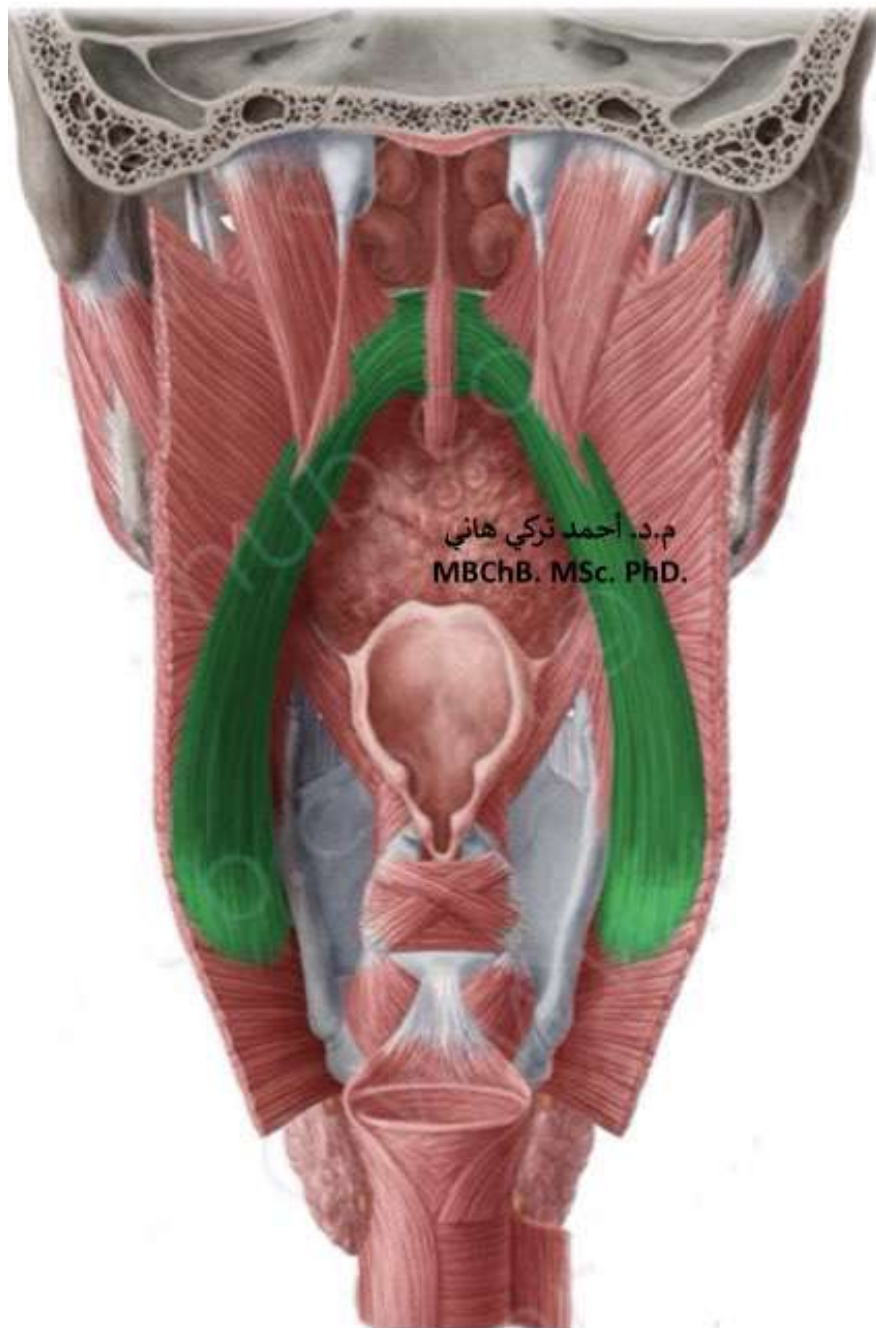
Palatoglossus



Pulls root of the tongue upward and backward.
Narrows oropharyngeal isthmus.

م.د. أحمد تركي هاني
MBChB. MSc. PhD.

Palatopharyngeus



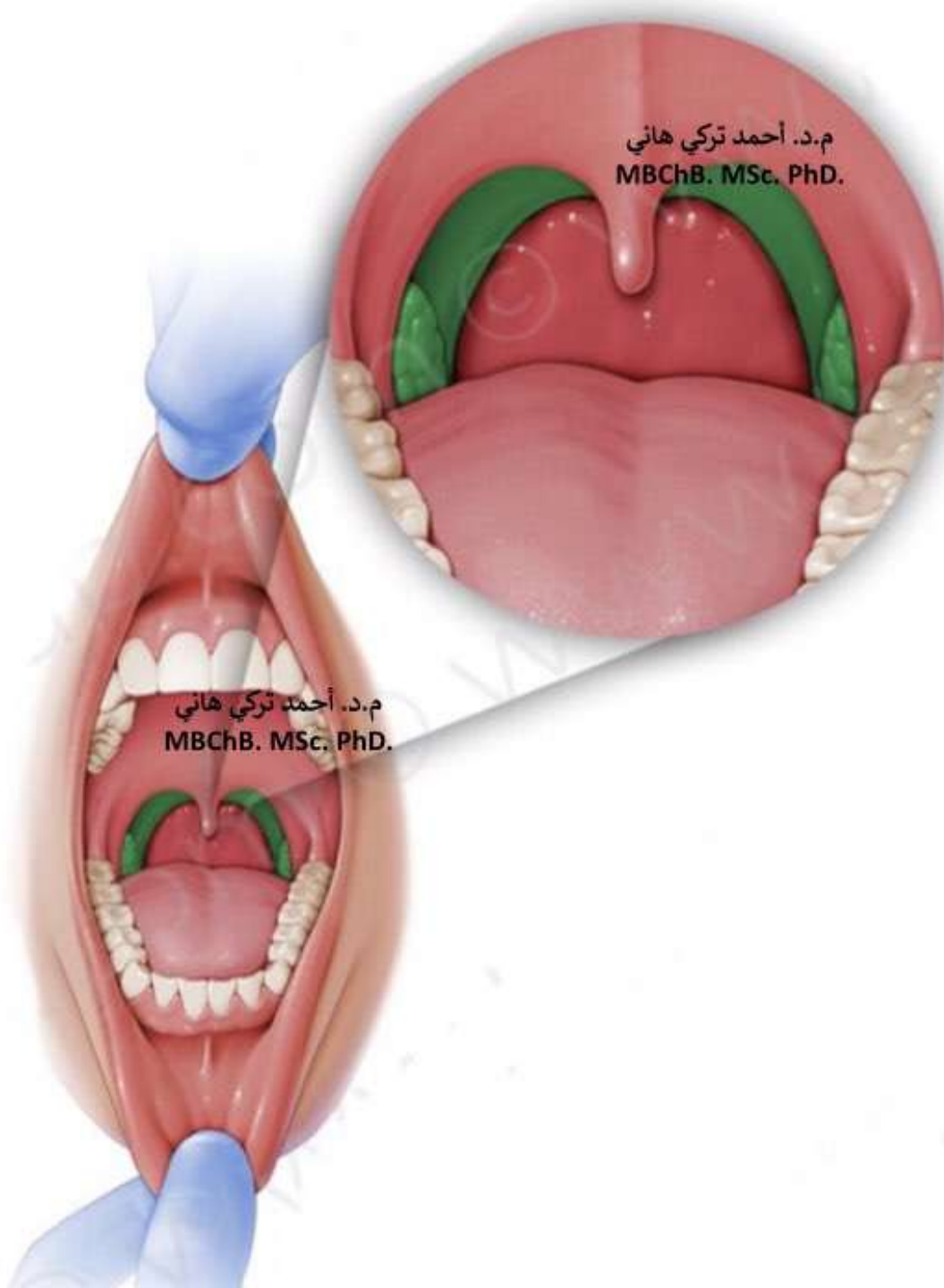
م.د. أحمد تركي هاني
MBChB. MSc. PhD.

Elevates wall of the pharynx.
Pulls palatopharyngeal folds medially

م.د. أحمد تركي هاني
MBChB. MSc. PhD.

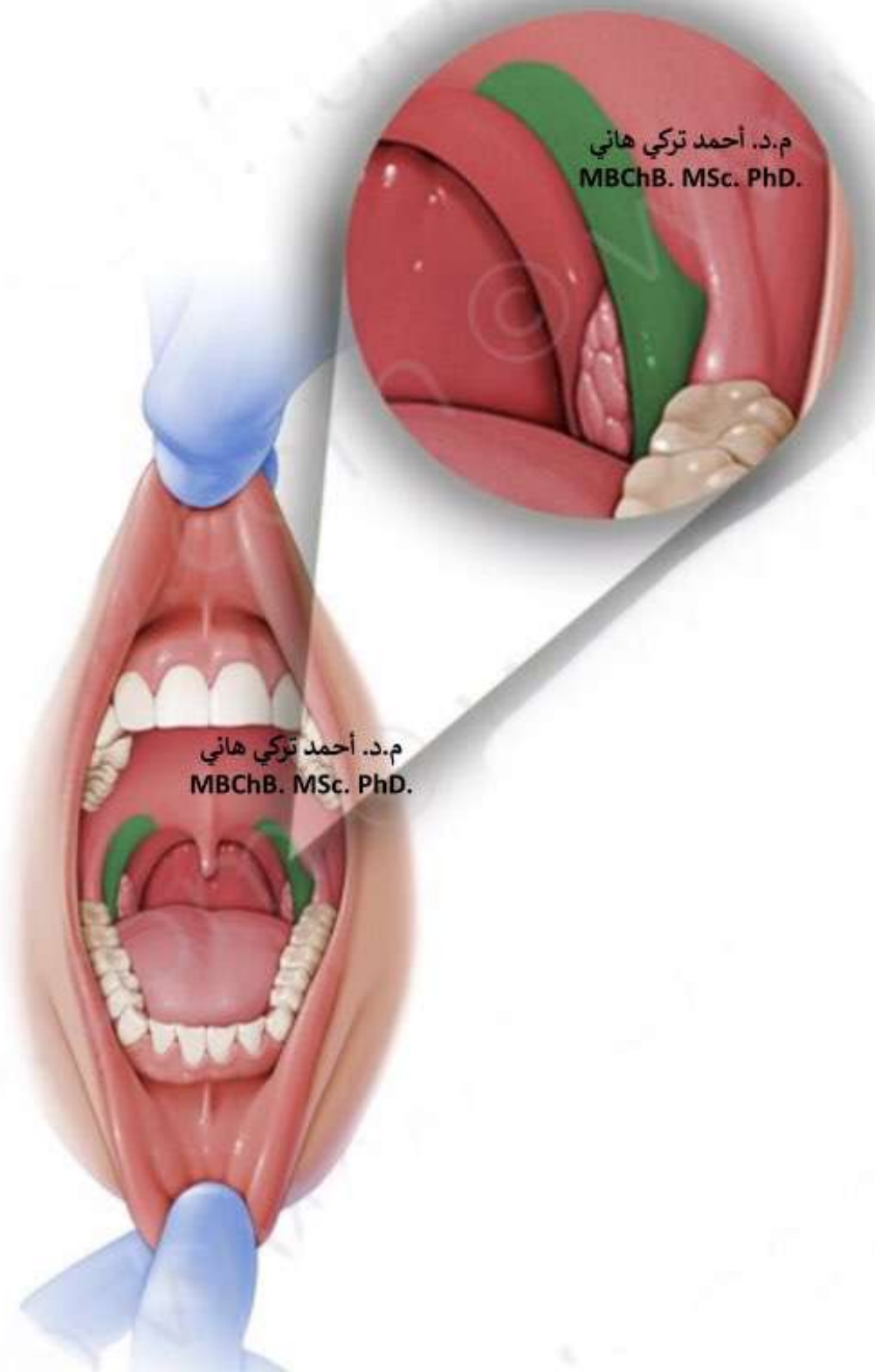
Palatoglossal Arch & Palatopharyngeal Arch

Oropharyngeal Isthmus



Palatoglossal Arch & Palatopharyngeal Arch

These two arches form the lateral boundaries of the **oropharyngeal isthmus**, the passageway between the oral cavity proper and the oropharynx.



1. Palatoglossal Arch

Anterior Arch: A mucosal fold covering the Palatoglossus Muscle.

Marks the boundary between the oral cavity and the oropharynx.

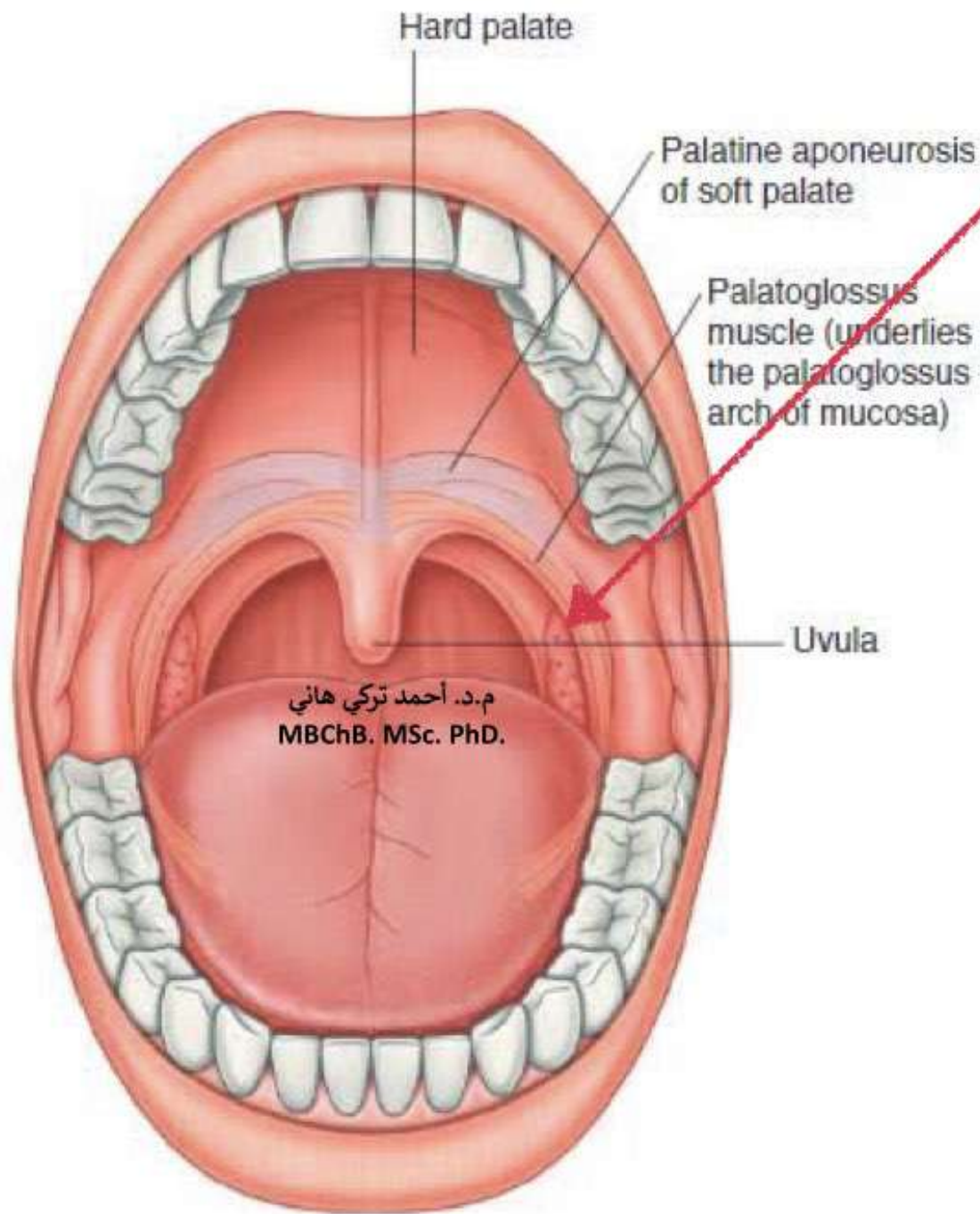
م.د. أحمد تركي هاني
MBChB. MSc. PhD.

2. Palatopharyngeal Arch

Posterior Arch: A mucosal fold covering the Palatopharyngeus Muscle.

Location: Lies posterior to the palatoglossal arch.

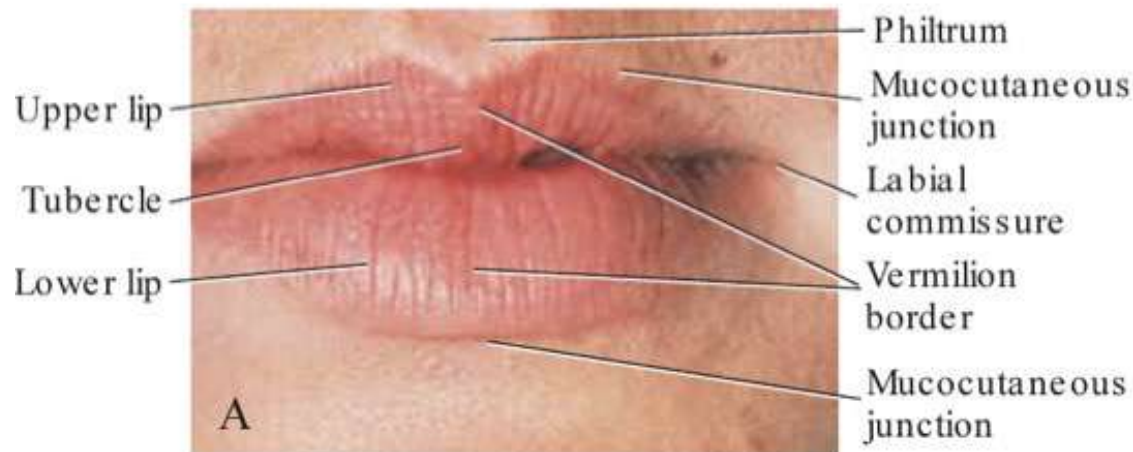
م.د. أحمد تركي هاني
MBChB. MSc. PhD.



Tonsillar Fossa:
The triangular recess between the palatoglossal and palatopharyngeal arches; it houses the Palatine Tonsil.

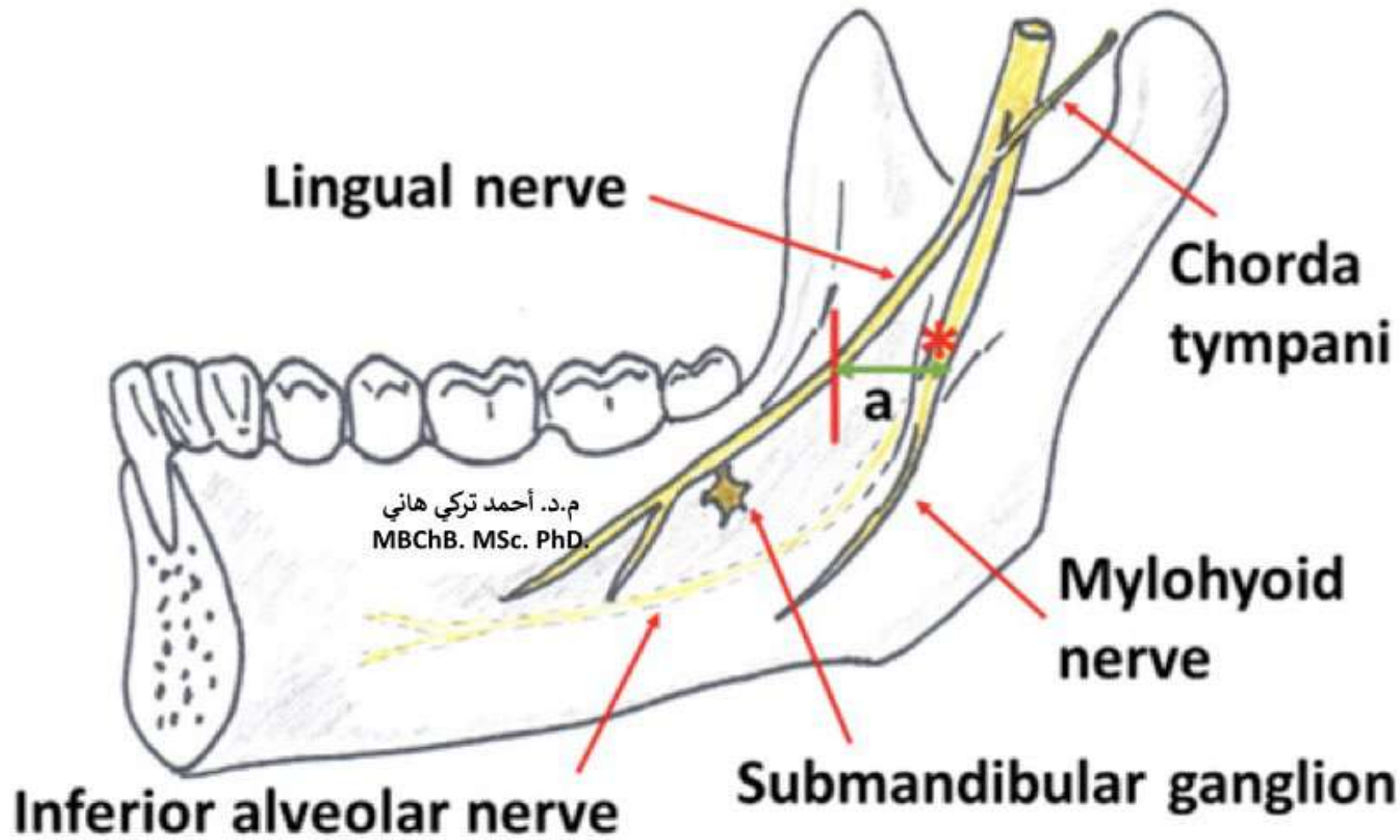
Clinical Significance of Oral Examination

The oral examination is clinically significant because it's a routine procedure requiring the medical professional to recognize all visible structures and normal mucous membrane variations.



Frontal view of the lips within the oral region (A) with bidigital palpation of the lips during an intraoral examination (B).

Crucially, one must know the sensory nerve supply and lymph drainage; specific anatomical points like the close relation of the lingual nerve to the lower third molar.



Giant Sialolith in Wharton's Duct



Intraoral view showing the anterior bulbous portion and the posterior extension of the swelling in the right half of the floor of the mouth.

and the proximity of the submandibular duct to the floor of the mouth (which allows palpation of a calculus during swelling) are essential knowledge for clinical practice.