

وسهلا



أهلا

يُمنع أخذ السلايدات بدون
إذن المحرر واي اجراء
يخالف ذلك يقع تحت طائلة
المسؤولية القانونية
جميع المعلومات للاستخدام
التعليمي فقط

الأستاذ الدكتور يوسف حسين

رئيس قسم التشريح والأنسجة والأجنة

كلية الطب - جامعة مؤتة - الأردن

دكتورة من جامعة كولونيا المانيا

Prof. Dr. Youssef Hussein Anatomy - YouTube

الواتس 00201224904207

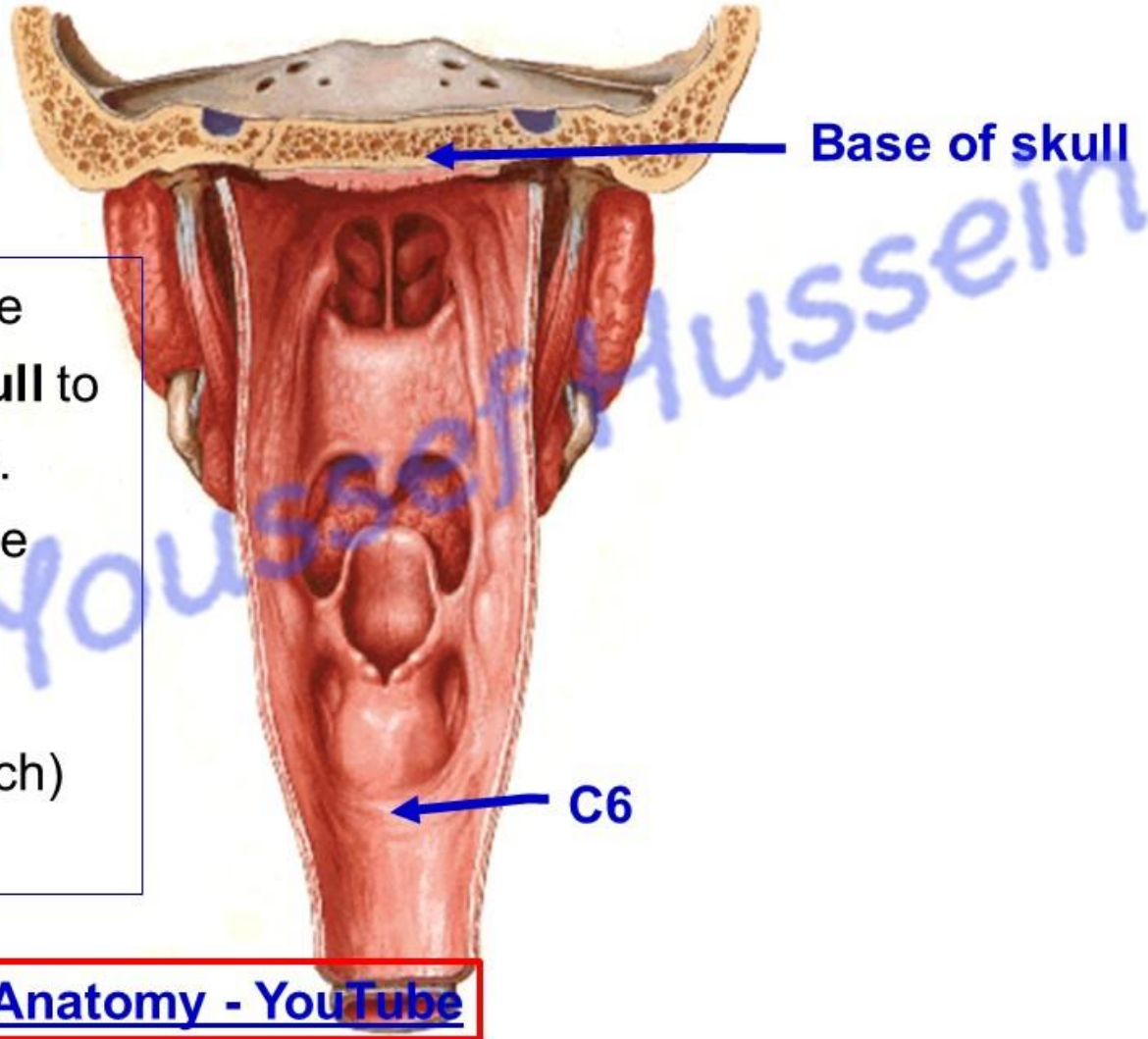
dr_youssefhussein@yahoo.com

Pharynx

اليو تيوب د. يوسف حسين

Prof. Dr. Youssef Hussein Anatomy - YouTube

اليوتيوب د. يوسف حسين



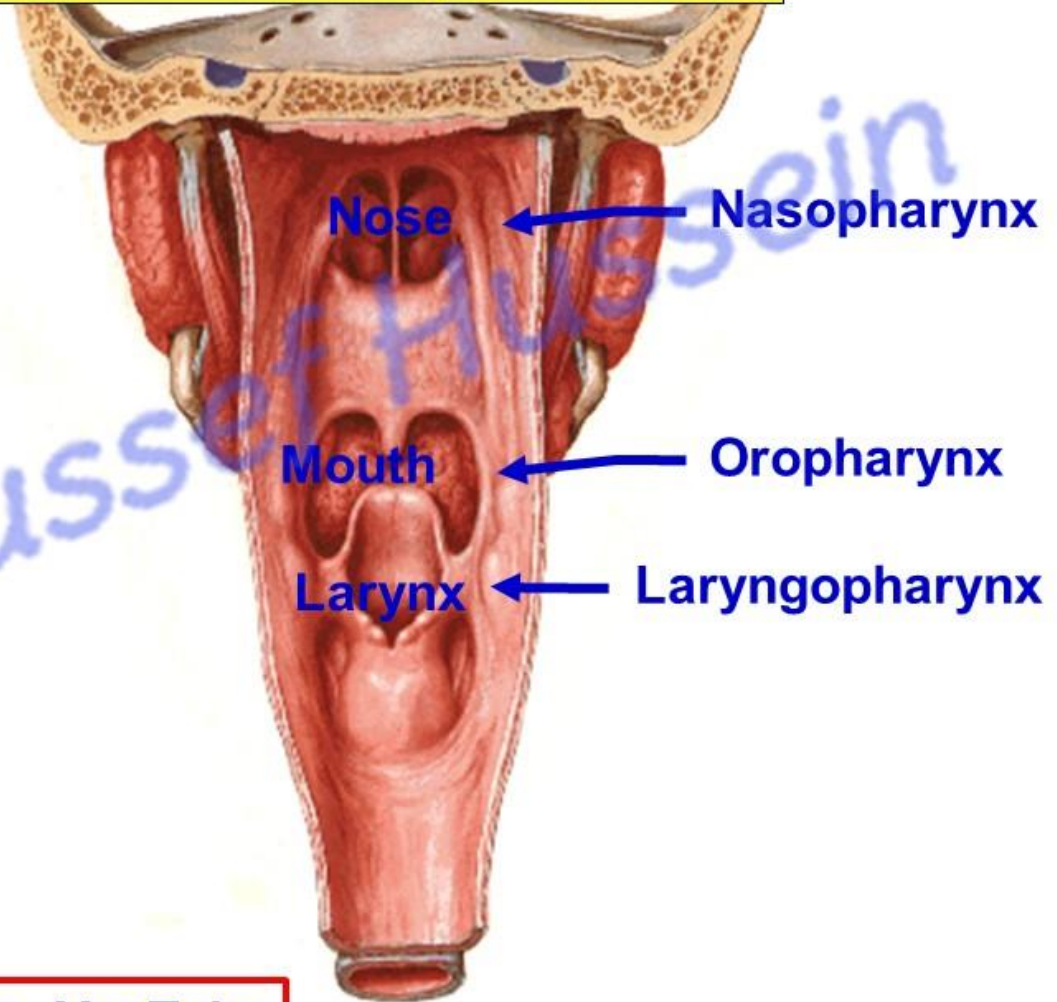
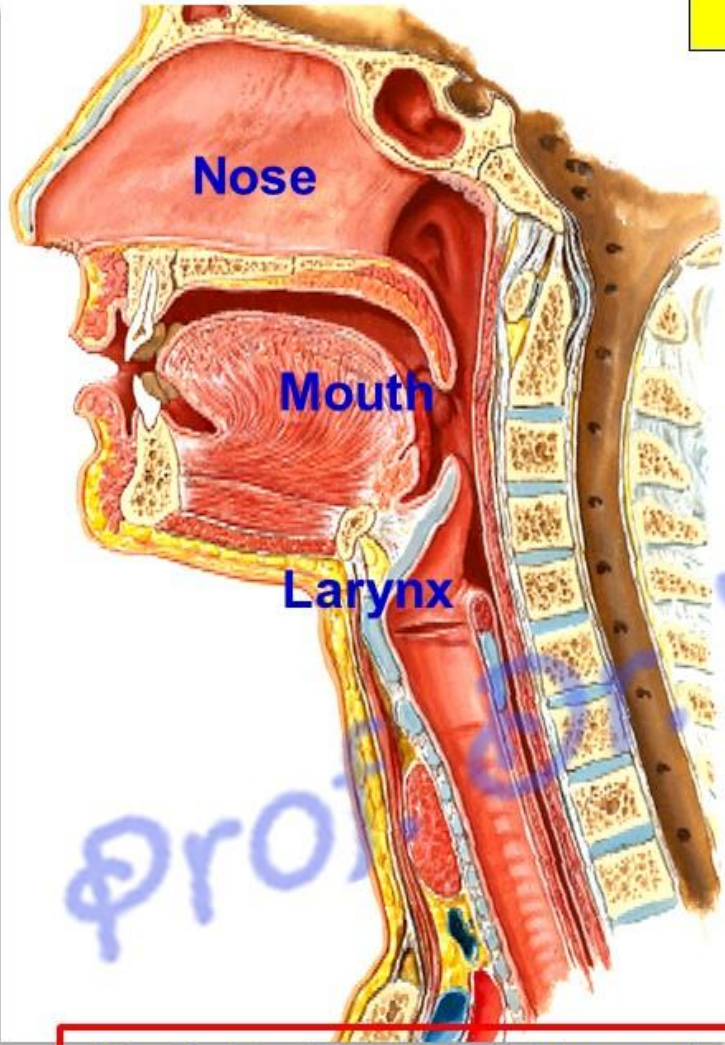
Base of skull

C6

- **Extension:** It is a muscular tube extending from the **base of skull** to the lower border of **C6** vertebra.
- **Shape:** funnel-shaped with base upwards.
- **Length:** 12-14 cm long,
 - Its diameter, upper part (one inch)
 - Lower part (1/2 inch).

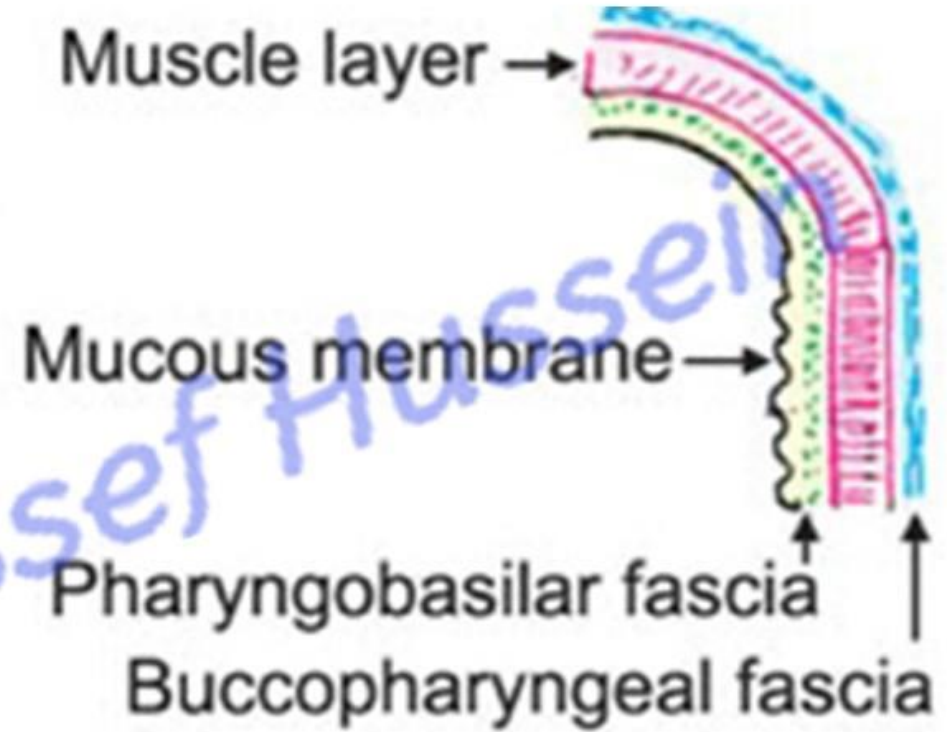
[Prof. Dr. Youssef Hussein Anatomy - YouTube](#)

Subdivision of the pharynx



Pharynx

- The wall arranged from inside outward
 1. Mucous membrane
 2. Pharyngobasilar fascia.
 3. Pharyngeal muscles.
 4. Buccopharyngeal fascia.



اليو تيوب د. يوسف حسين

[Prof. Dr. Youssef Hussein Anatomy - YouTube](#)

dr_youssefhussein@yahoo.com

Muscles of Pharynx

اليو تيوب د. يوسف حسين

Prof. Dr. Youssef Hussein Anatomy - YouTube

MUSCLES OF THE PHARYNX

External (outer) circular muscles

- Superior constrictor
- Middle constrictor
- Inferior constrictor

Internal (inner) longitudinal Muscles

- Palatopharyngeus
- **Stylopharyngeus**
- Salpingopharyngeus

- All the muscles of the pharynx supplied by pharyngeal nerve plexus except stylopharyngeus muscle supplied by the glossopharyngeal nerve.

اليوتيوب د. يوسف حسين

Posterior border of
Medial pterygoid plate

Pterygoid Hamulus

Pterygomandibular
ligament

Posterior end of
mylohyoid line

Stylohyoid ligament

Lesser horn of hyoid bone

Greater horn of hyoid bone

Oblique line of thyroid cartilage

Side of cricoid cartilage

Pharyngeal tubercle

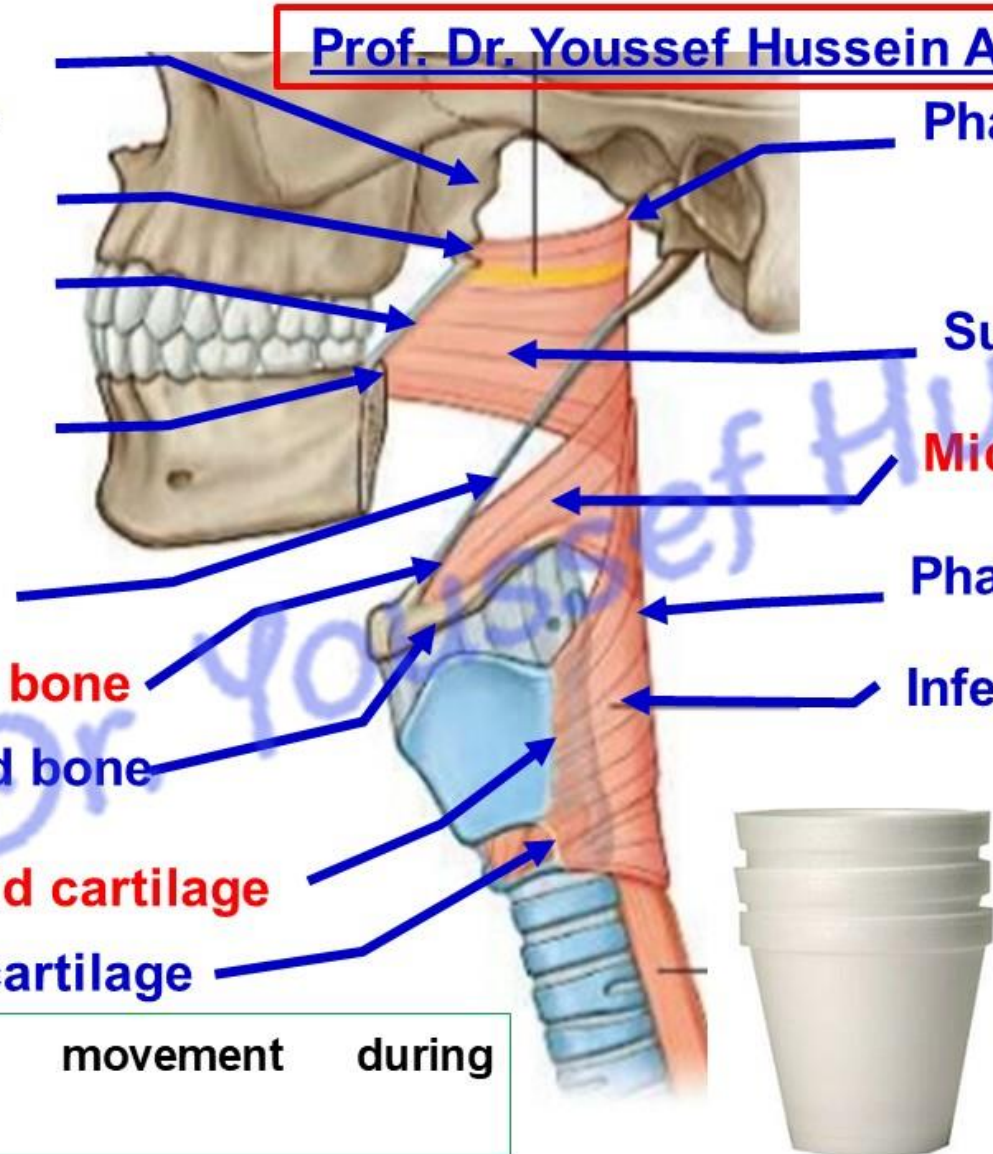
Superior constrictor

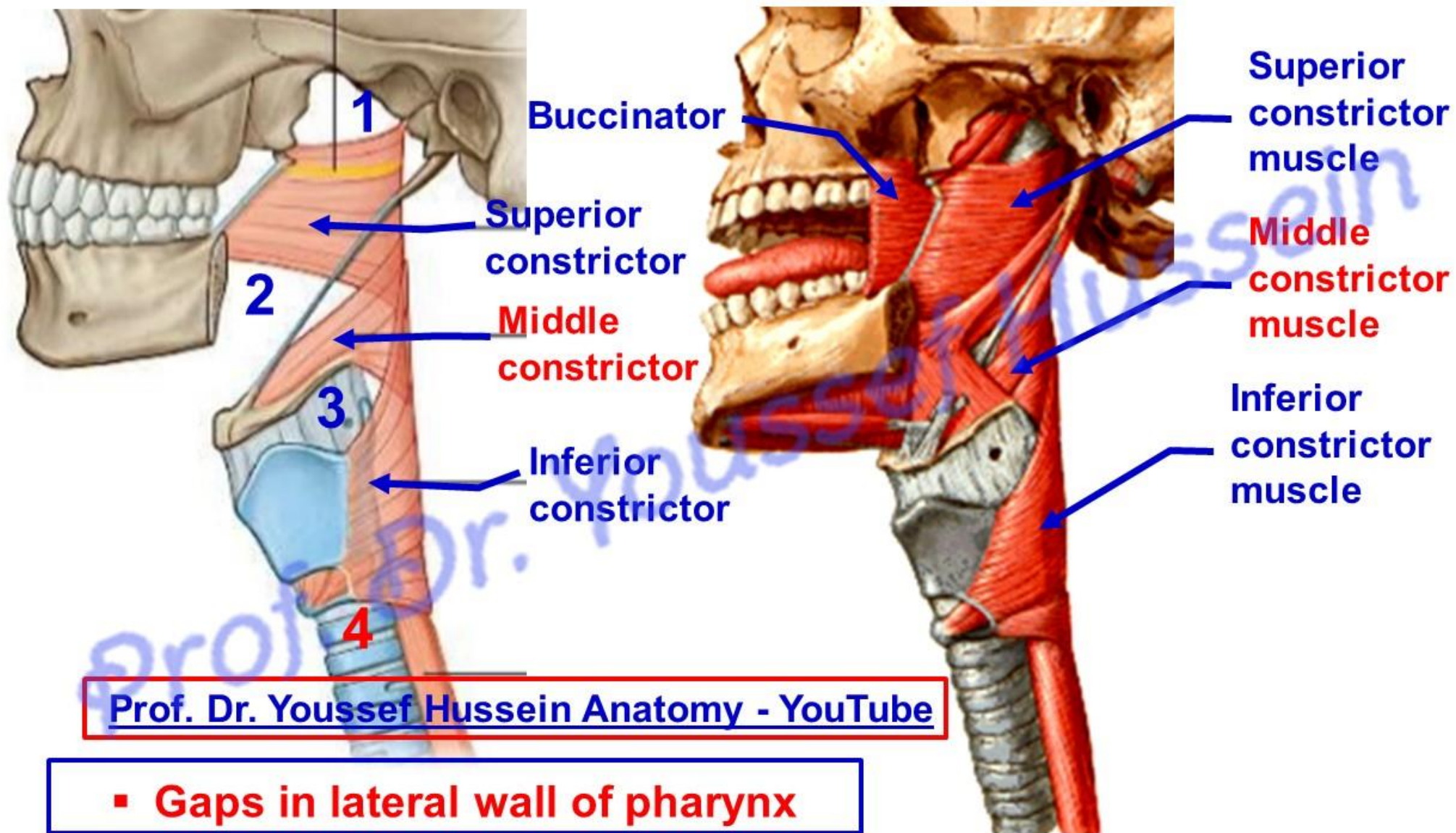
Middle constrictor

Pharyngeal Raphe

Inferior constrictor

- Actions, peristaltic movement during swallowing.





[Prof. Dr. Youssef Hussein Anatomy - YouTube](#)

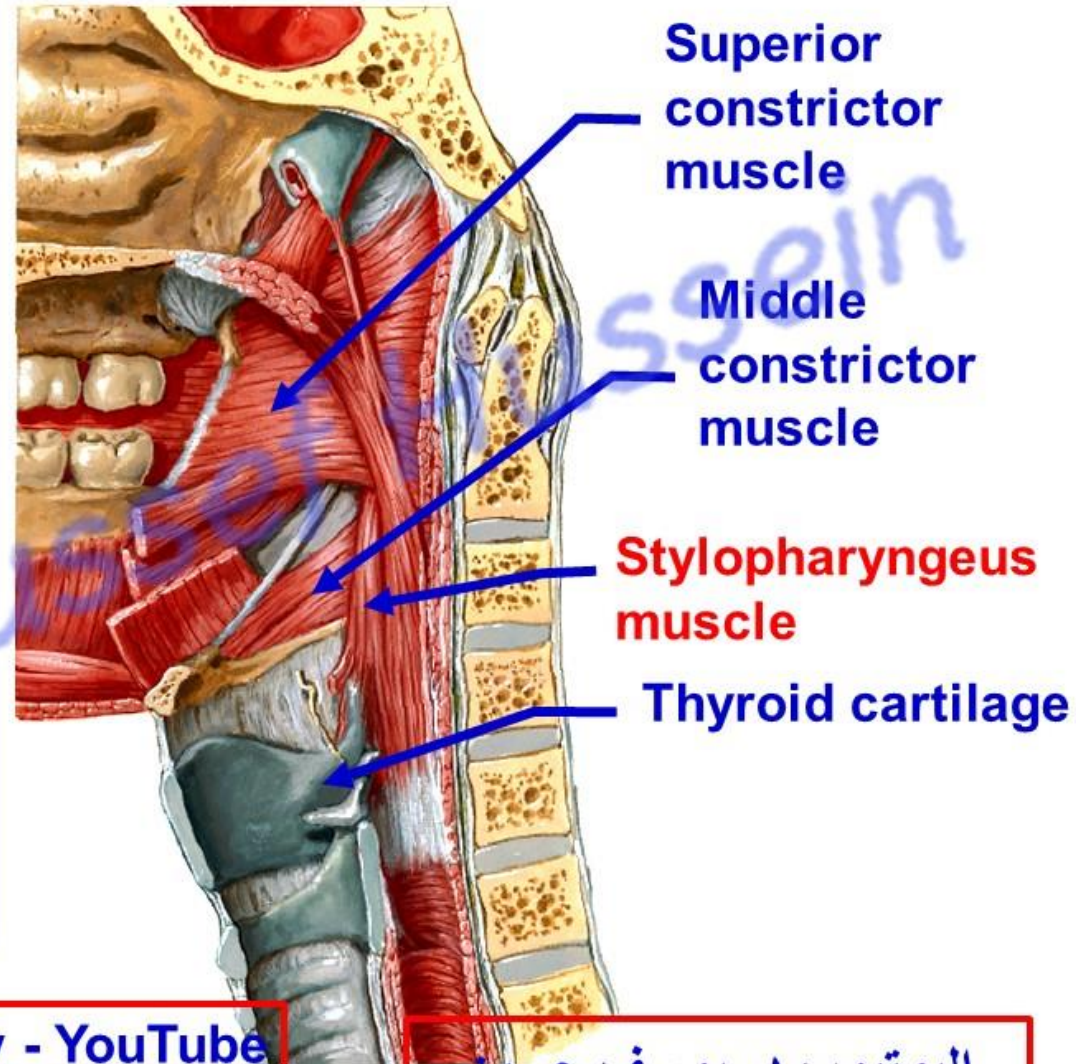
▪ Gaps in lateral wall of pharynx

▪ Gaps in the lateral wall of the pharynx

- **1) First gap:** between base of skull and upper border of superior constrictor muscle. - **It contains:**
 - 1) **2 Palati muscles;** Tensor palati muscle, and levator palati muscle.
 - 2) **2 ascending arteries;** ascending palatine (facial artery) and ascending pharyngeal arteries (ECA).
 - 3) **Eustachian tube.**
- 2) Second gap:** between superior and middle constrictor muscles.
- **It contains:** 1) stylopharyngeus muscle. 2) glossopharyngeal nerve.
- 3) Third gap:** between middle and inferior constrictor muscles.
- **It contains** 1) Superior laryngeal vessels. 2) Internal laryngeal nerve.
- 4) The fourth gap:** below lower border of inferior constrictor muscle,
- **It contains** 1) Inferior laryngeal vessels. 2) Recurrent laryngeal nerve.

• Stylopharyngeus muscle

- **Origin**; styloid process near its base.
- **Course** ^{بداية} _(Between) descends obliquely downwards and forwards **between** external and internal carotid arteries with the glossopharyngeal nerve.
- Then, it passes **between** superior and middle constrictors muscles of pharynx.
- **Insertion**: wall of the pharynx and posterior border of thyroid cartilage.
- **Action**: elevates the pharynx and larynx during swallowing.



فقط • **Salpingopharyngeus muscle**

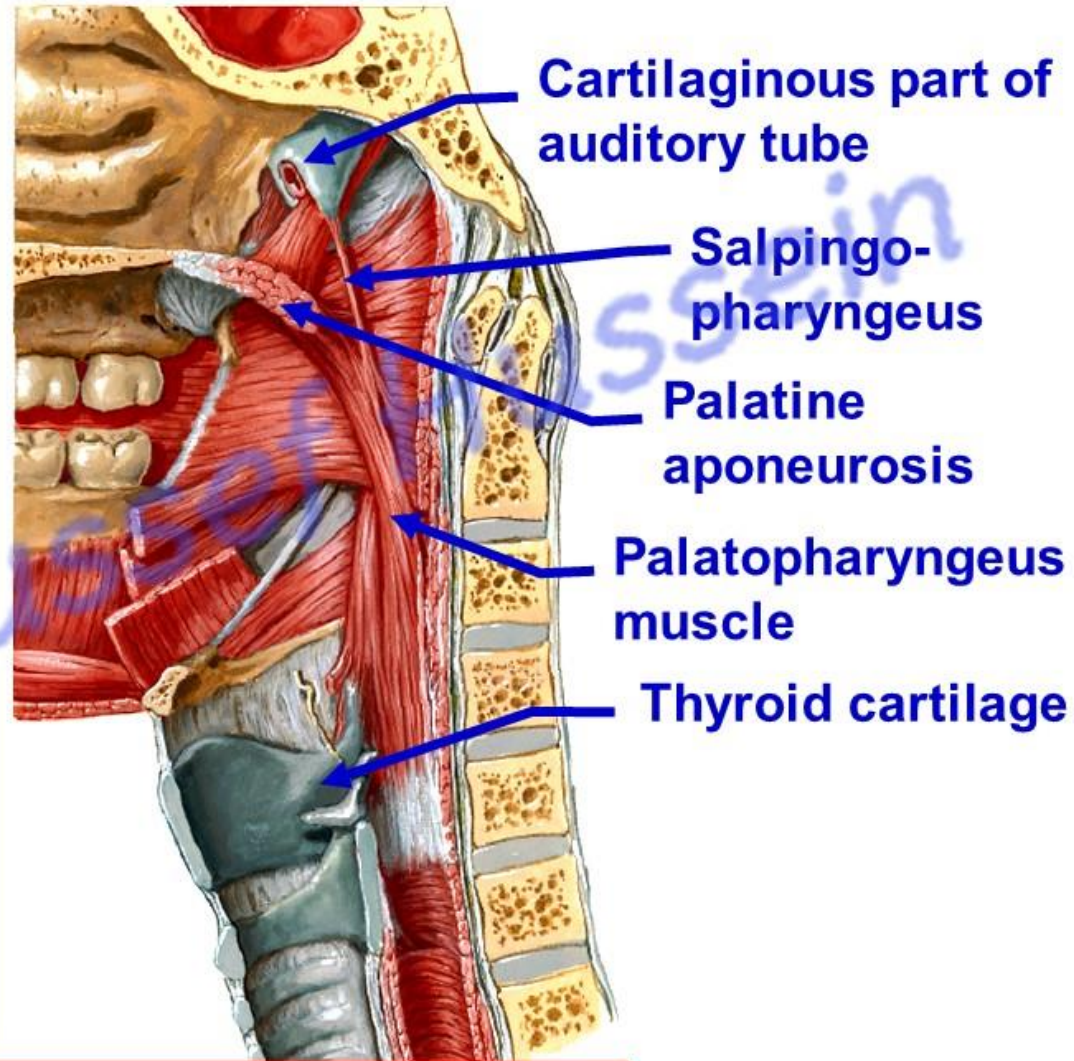
action

- **Origin**, from cartilaginous part of auditory tube.
- **Insertion**: wall of the pharynx and posterior border of thyroid cartilage.
- **Action**: 1) elevates pharynx and larynx during swallowing.
2) Keep Eustachian tube patent.

فقط • **Palatopharyngeus muscle**

action

- **Origin**: upper surface of the palatine aponeurosis.
- **Insertion**: wall of the pharynx and posterior border of thyroid cartilage
- **Action**: 1- Elevates pharynx and larynx during swallowing.
2- Contraction of both muscles closes the pharyngeal isthmus.



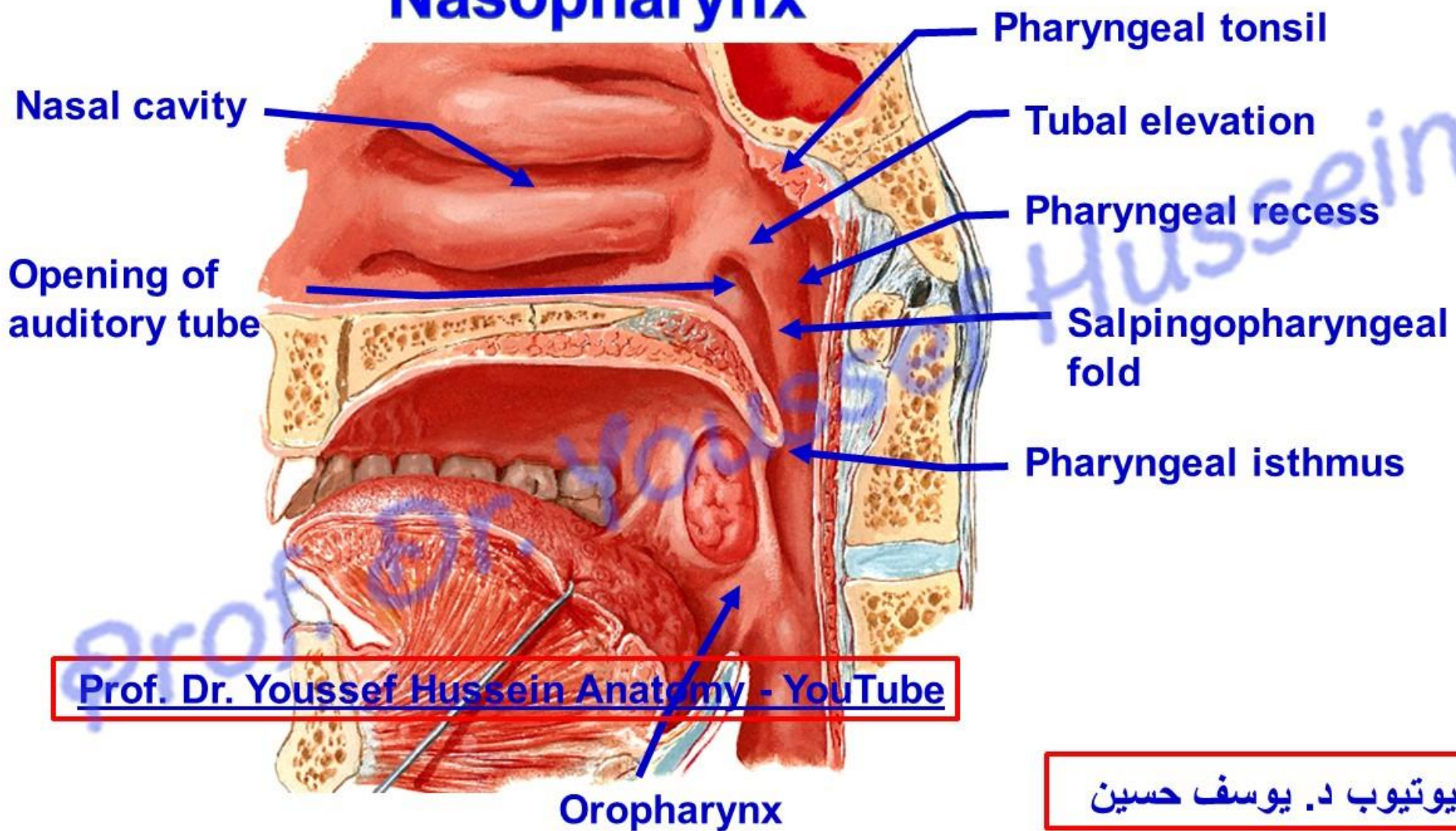
dr_youssefhussein@yahoo.com

Nasopharynx

اليو تيوب د. يوسف حسين

Prof. Dr. Youssef Hussein Anatomy - YouTube

Nasopharynx



Prof. Dr. Youssef Hussein Anatomy - YouTube

اليوثيوب د. يوسف حسين

- **Nasopharynx:**

فقط الاسماء
+ المعلومان الرئيسة

- It is the upper part of the pharynx (behind nasal cavity)

- **Features of the nasopharynx:**

- (1) **Opening of the auditory tube** (one on each side) connects the nasopharynx with the middle ear cavity.

- (2) **Tubal elevation:** upper and posterior lips of opening of auditory tube.

- (3) **Salpingopharyngeal fold:** by the salpingopharyngeus muscle.

- (4) **Pharyngeal recess:** a narrow space behind the salpingopharyngeal fold.

- (5) **Pharyngeal tonsil** collection of lymphoid tissue in the posterior wall.

- **Adenoid** enlargement of pharyngeal tonsil

- It causes **snoring** during sleep

- Difficult in nasal breathing and phonation

- It may block auditory tube causing otitis media



مطلوبه

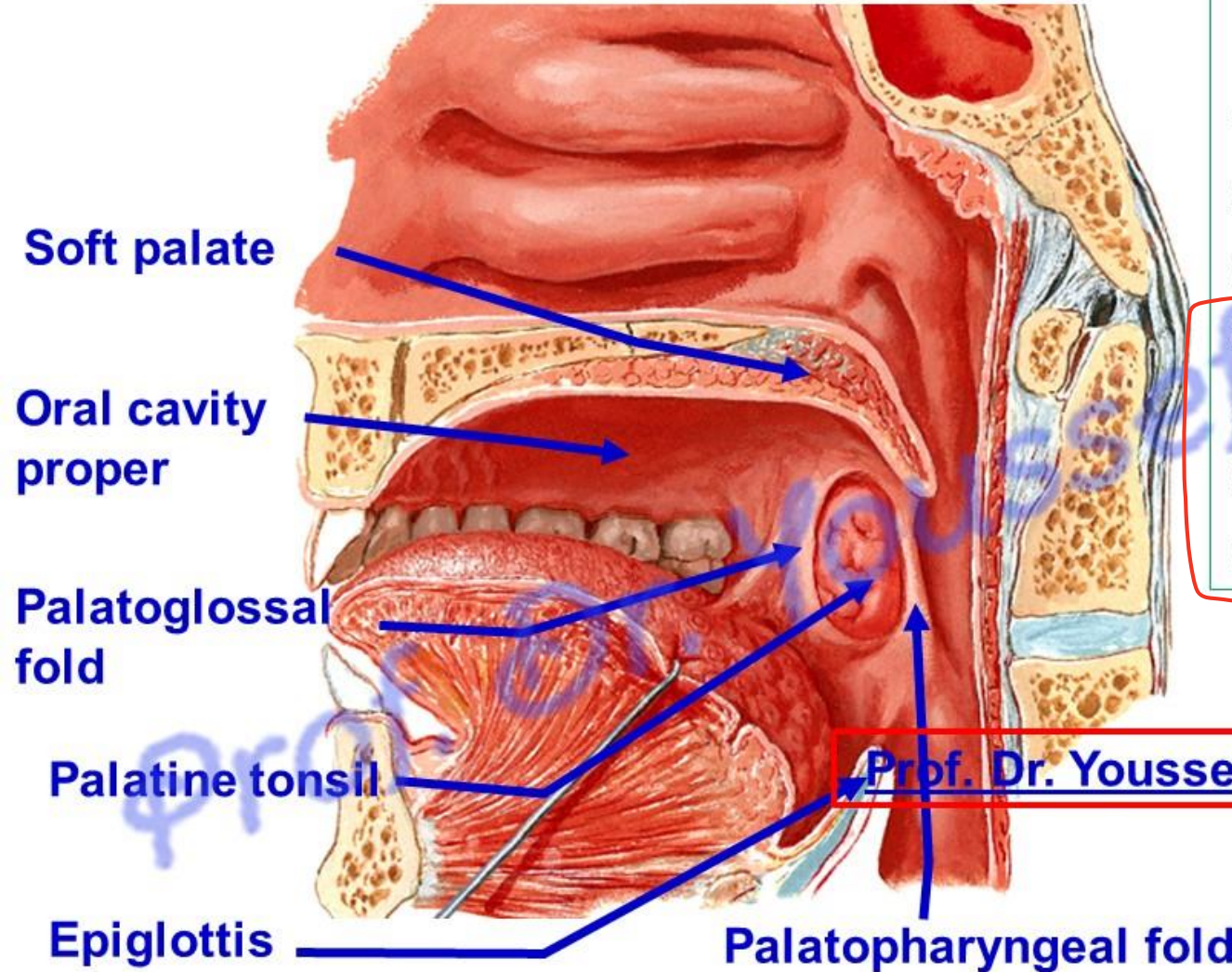
dr_youssefhussein@yahoo.com

Oropharynx Palatine tonsil

اليو تيوب د. يوسف حسين

Prof. Dr. Youssef Hussein Anatomy - YouTube

Oropharynx



- Boundaries of tonsillar fossa;
 - 1- Anteriorly, palatoglossal arch.
 - 2- Posteriorly, palatopharyngeal arch.
 - 3- Laterally (floor), superior constrictor muscle which separates it from the external carotid and facial artery..

للحوضه

[Prof. Dr. Youssef Hussein Anatomy - YouTube](#)

اليوتيوب د. يوسف حسين

Medial

Lateral

Intratonsillar cleft

Tonsillar crypts

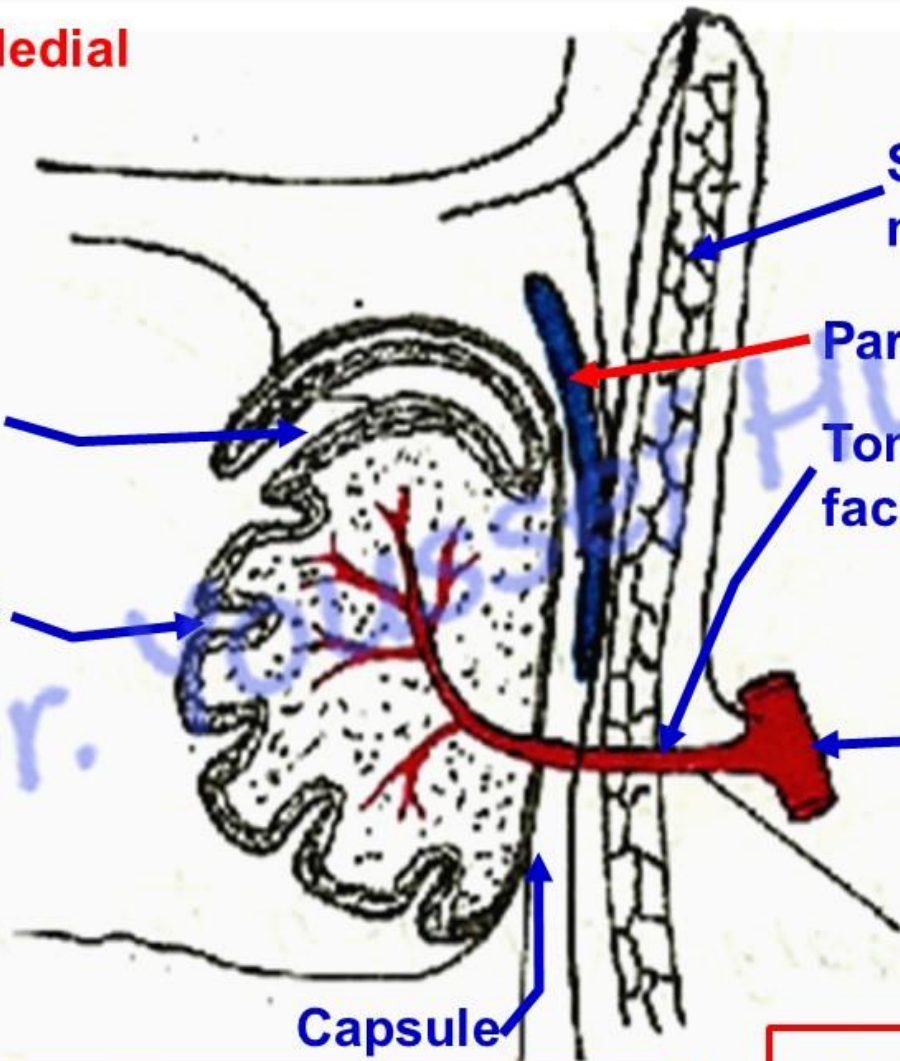
Capsule

Superior constrictor muscle

Para tonsillar vein

Tonsillar branch of facial artery

Facial artery



• **Palatine tonsil**

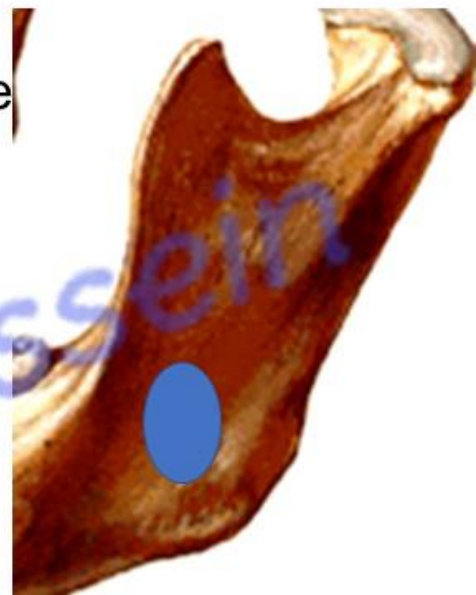
- **Structure**: it is a mass of lymphoid tissue surrounded by capsule.
- **Shape**: almond-shaped.
- **Site**: it lies in the **tonsillar fossa** on the lateral wall of oropharynx.
- **Surfaces of the tonsil (Features)** : it has 2 surfaces:
 1. **Medial** (free) surface: presenting 12-15 tonsillar **crypts**.
 - The upper part of the tonsil shows a deep cleft called **intratonsillar cleft** (within the substance of the tonsil).
 2. **Lateral** (deep) surface is covered by capsule which separates the tonsil from the superior constrictor muscle of the pharynx.
 - This surface is related to VAN
 - 1- Tonsillar artery (branch of facial artery).
 - 2- Paratonsillar vein.
 - 3- Glossopharyngeal nerve

[Prof. Dr. Youssef Hussein Anatomy - YouTube](#)

اليوتيوب د. يوسف حسين

• Palatine Tonsil

- **Nerve supply:** Glossopharyngeal nerve and lesser palatine nerve (maxillary).
- **Arterial supply:** tonsillar branch of
 - 1- Tonsillar artery (branch of Facial artery, main blood supply).
 - 2- Ascending palatine artery (facial artery).
 - 3- Ascending pharyngeal artery (external carotid artery).
 - 4- Greater palatine artery (the 3rd part of maxillary artery).
- **Venous drainage:** Paratonsillar vein to the pharyngeal plexus of veins or common facial vein.
- **Lymphatic drainage,** to upper deep cervical lymph nodes
- **Surface anatomy,** it represents by an oval fossa over ramus of mandible, a little above and in front angle of mandible.



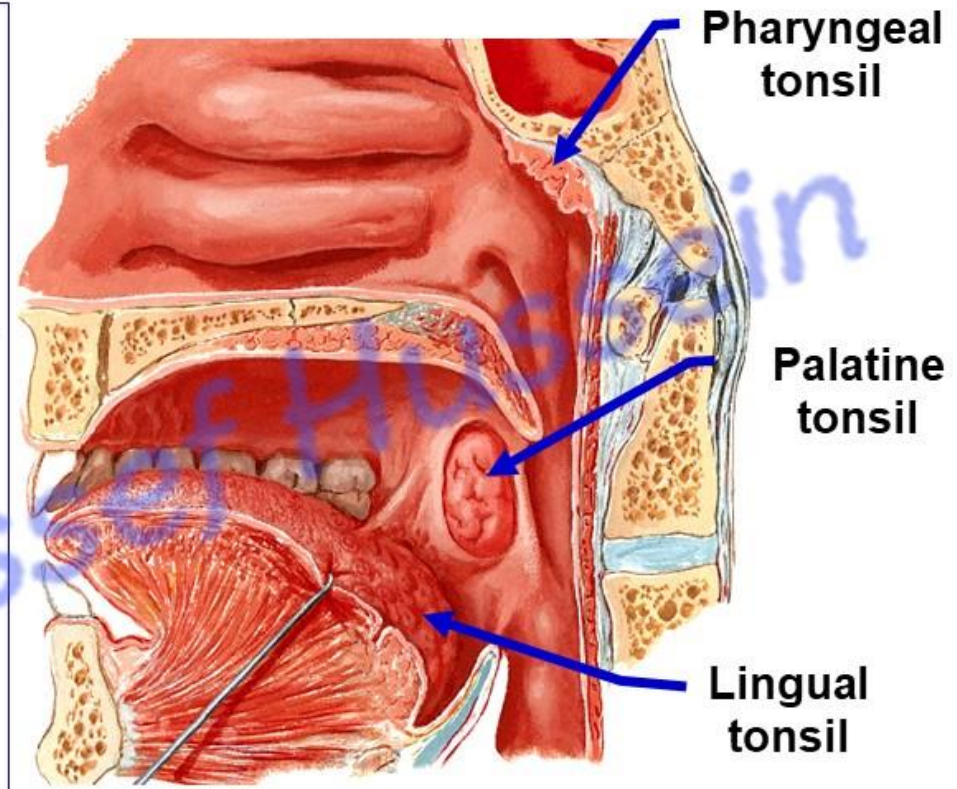
[Prof. Dr. Youssef Hussein Anatomy - YouTube](#)

اليوتيوب د. يوسف حسين

1- **Referred pain** to the middle ear during tonsillitis or after tonsillectomy because the **glossopharyngeal nerve** supplies both tonsil and middle ear (through tympanic branch).

2- **Severe haemorrhage** may follow tonsillectomy due to injury of paratonsillar vein or arteries.

3- **3 tonsils (palatine tonsil, pharyngeal tonsil or adenoid and lingual tonsil** in the dorsum of the posterior 1/3 of tongue) form a continuous ring of lymphoid tissue called **waldeyer's ring**. Protective incomplete ring of lymphoid tissue



Prof. Dr. Youssef Hussein Anatomy - YouTube

During tonsillectomy, glossopharyngeal nerve may be injured, causing loss of general sensation and taste sensation of the posterior one-third of the tongue.

dr_youssefhussein@yahoo.com

Laryngopharynx

الليوتوب د. يوسف حسين

Prof. Dr. Youssef Hussein Anatomy - YouTube

Laryngopharynx

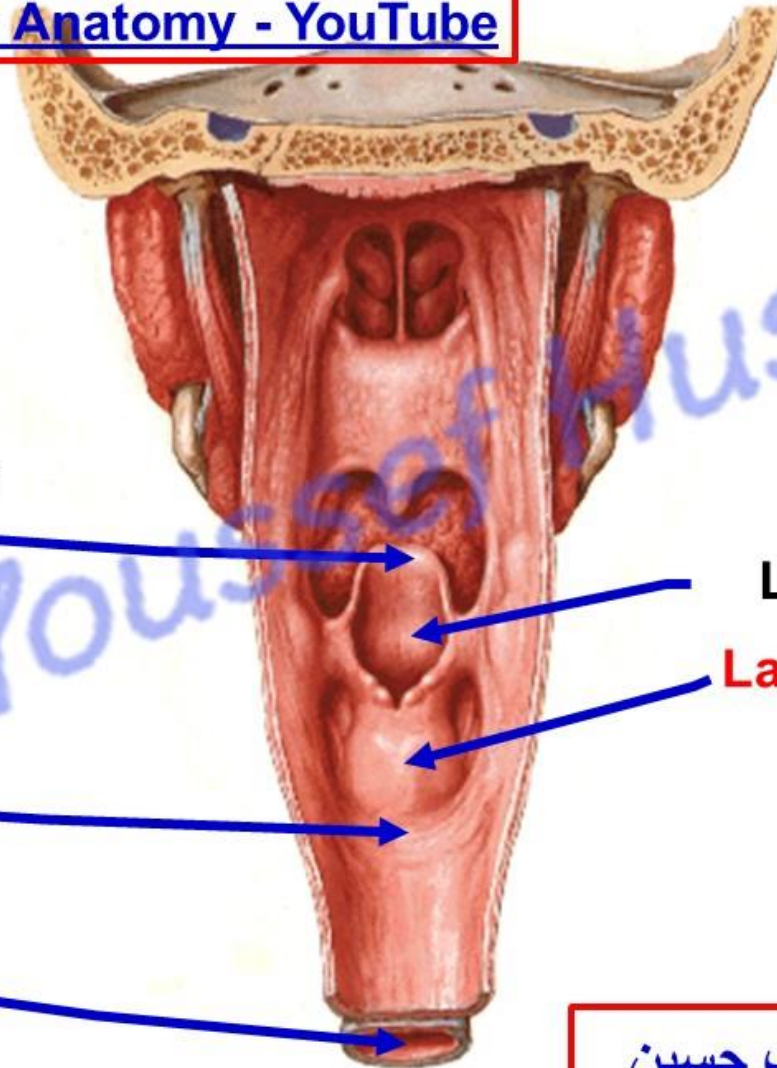
Begins, upper border of
epiglottis (C3)

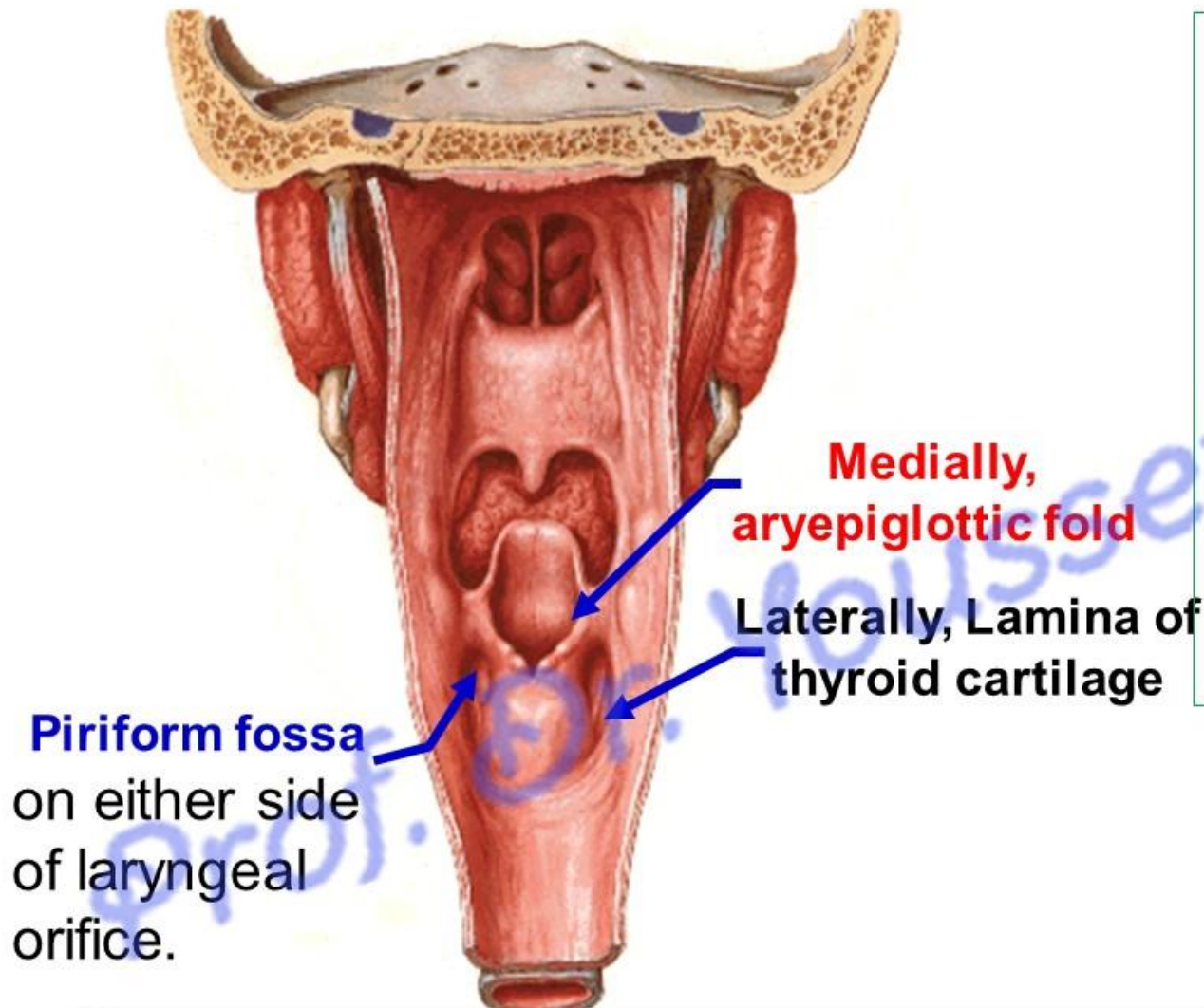
End, lower border of
cricoid cartilage (C6)

Trachea

Larynx

Laryngopharynx





❖ Piriform fossa

- In the floor of the fossa, there is the **internal laryngeal nerve**.
- During swallowing, foreign body may be lodged in fossa
- The nerve may be injured during removal of the foreign body.

• Mechanism of deglutition

- The process of deglutition passes through 3 successive stages:

A- First stage: voluntary.

- The **bolus** of food is formed by raising the tongue against the hard palate from tip and extending backwards by **styloglossus** and **palatoglossus** muscles.

B- Second stage: involuntary.

- 1- The soft palate is **raised** by the levator palati and **tense** by the tensor palati.
- At the same time, the pharyngeal isthmus is closed.
(by contraction of the palatopharyngeus muscles).

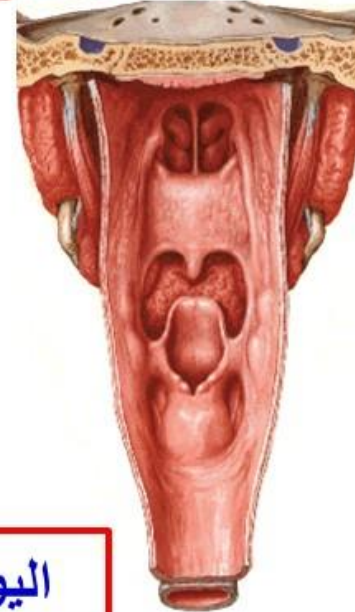
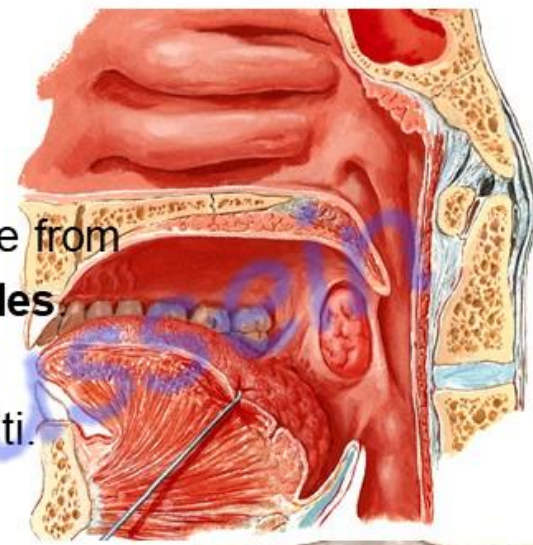
- 2- **The pharynx and larynx are drawn up behind the hyoid bone.**

(by **Salpingopharyngeus, Palatopharyngeus, and Stylopharyngeus**).

- At the same time, the laryngeal opening is closed.
(by approximation of the aryepiglottic folds).

C- Third stage: involuntary

- The bolus of food passes down through pharynx by peristaltic contraction of superior, middle, and inferior constrictor muscles to push the bolus of food down to the esophagus .



https://www.youtube.com/channel/UCVSNqbibj9UWYaJdd_cn0PQ

يُمنع أخذ السلايدات بدون
إذن المحرر واي اجراء
يخالف ذلك يقع تحت طائلة
المسؤولية القانونية
جميع المعلومات للاستخدام
التعليمي فقط

اليوتيوب د. يوسف حسين



<https://www.youtube.com/@ProfDrYoussefHusseinAnatomy/playlists>