Anatomy Lab 1

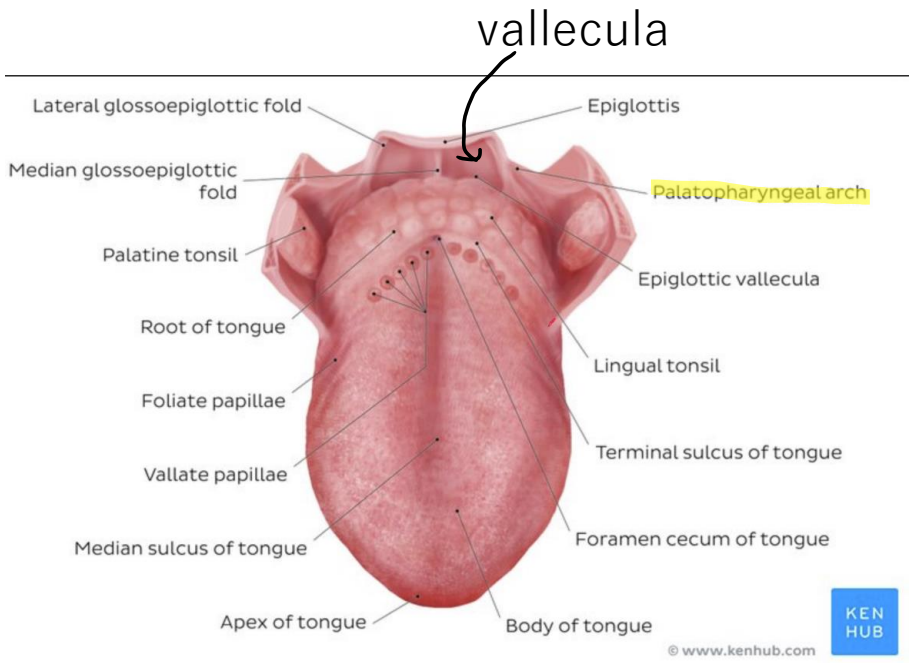
Done by: ميس قشّوع

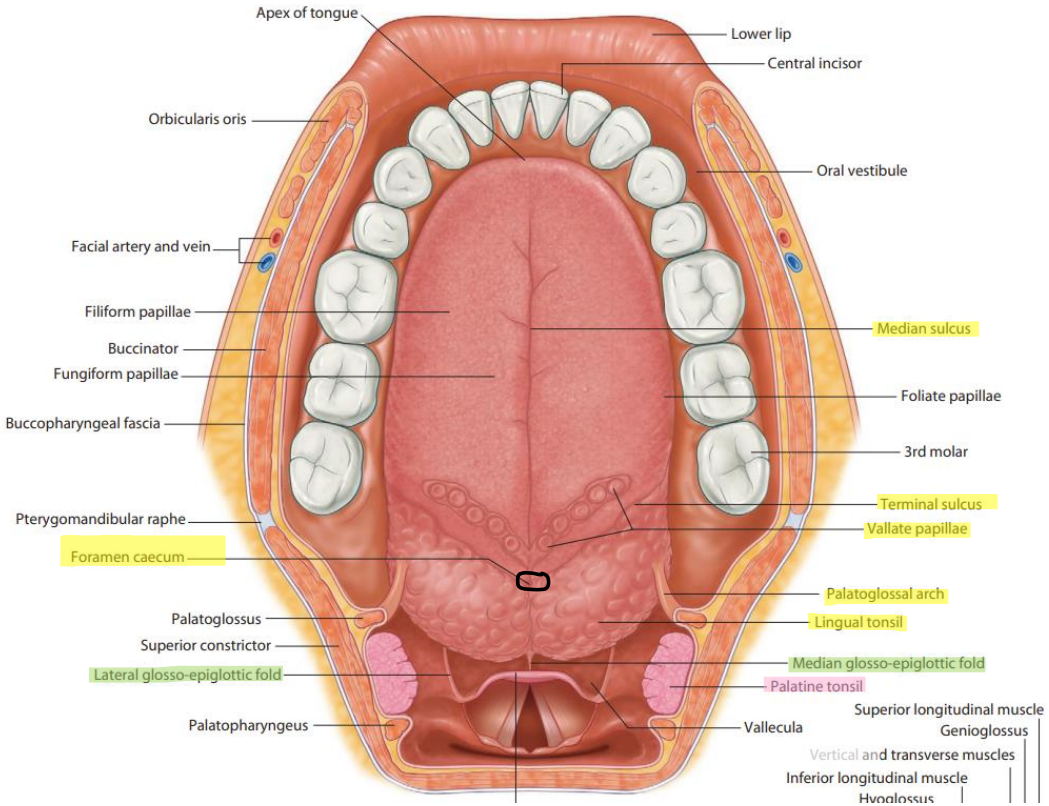
☆pictures from checklist

● Extra information

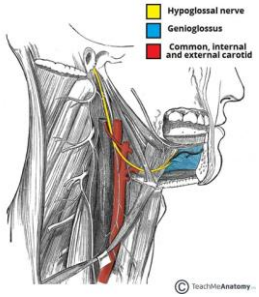
❑ Tongue

1. Foramen cecum
2. Sulcus terminalis
3. Median sulcus
4. Circumvallate papilla
5. Glossoepiglottic folds
6. Palatopharyngeal & palatoglossal arches
7. Lingual tonsils & palatine tonsils





8. Hypoglossal nerve

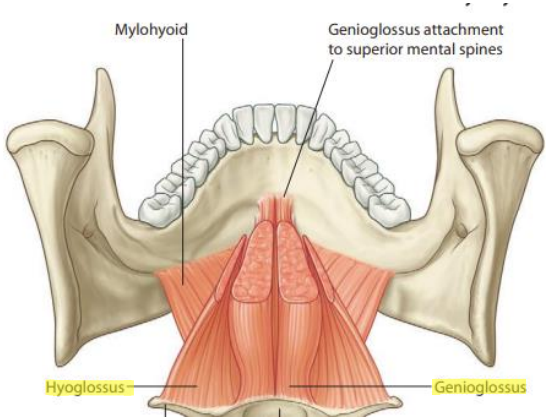


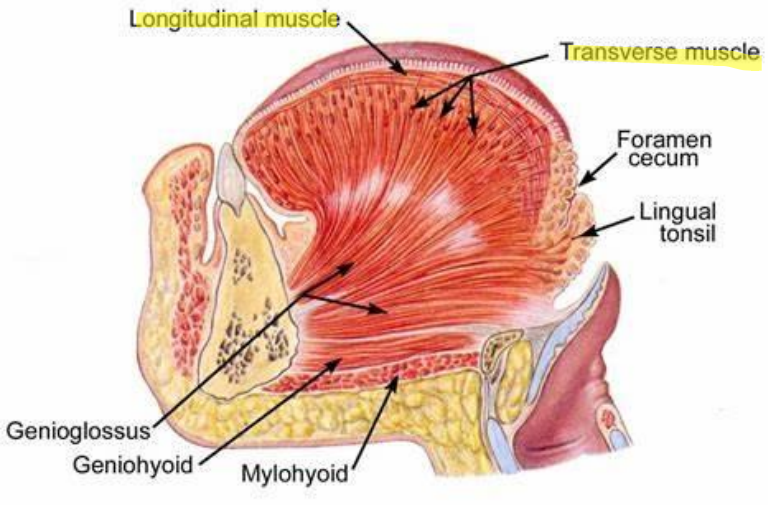
9. Intrinsic and extrinsic muscles of the tongue

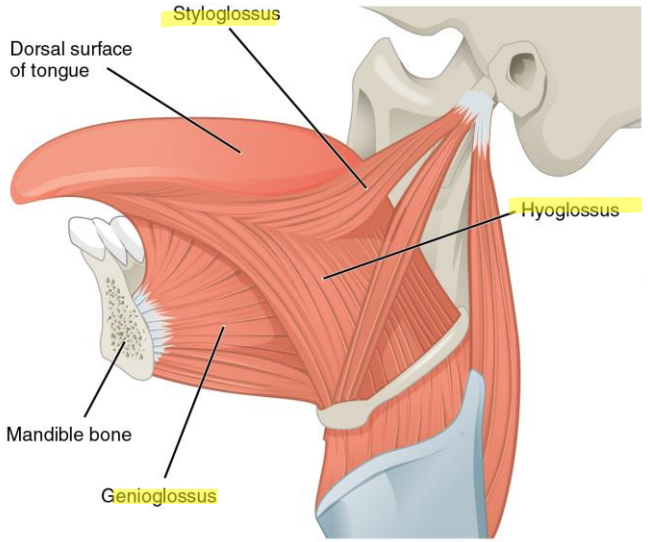
- Intrinsic Muscles (These muscles are confined to the tongue and are not attached to bone). They consist of longitudinal, transverse, and vertical fibers.

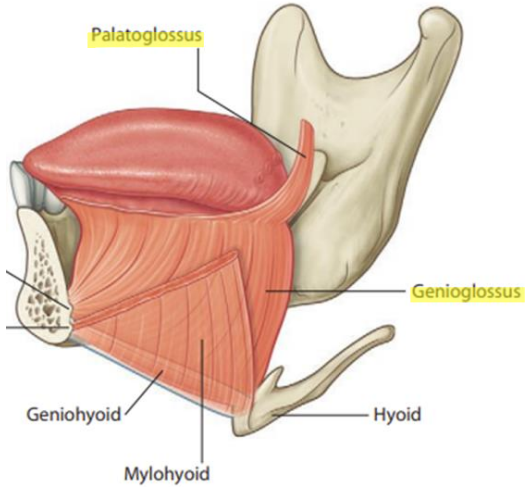
- Extrinsic muscles (they have attachments outside the tongue)

Genioglossus, hyoglossus ,styloglossus and palatoglossus muscles.









- Identify the structures that pass between hyoglossus and mylohyoid muscle?

sublingual gland, submandibular duct, submandibular ganglion , lingual nerve, and the hypoglossal nerve.

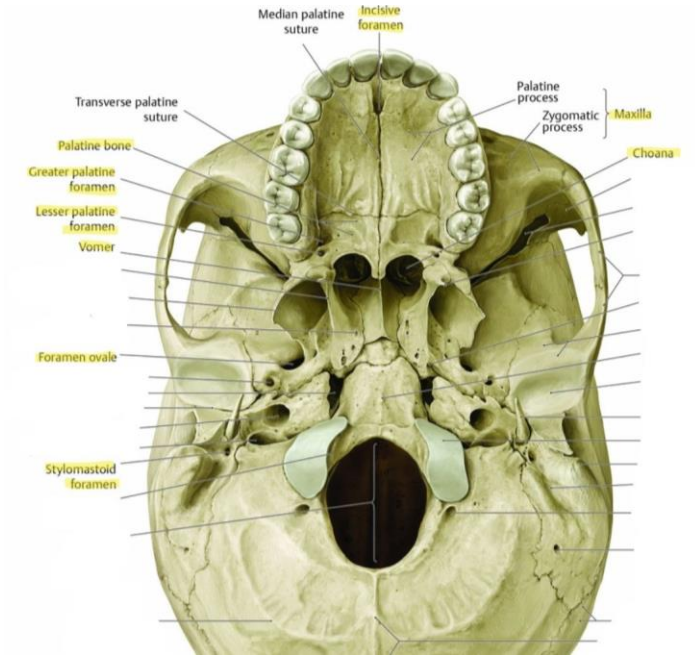
✔ Very important note :

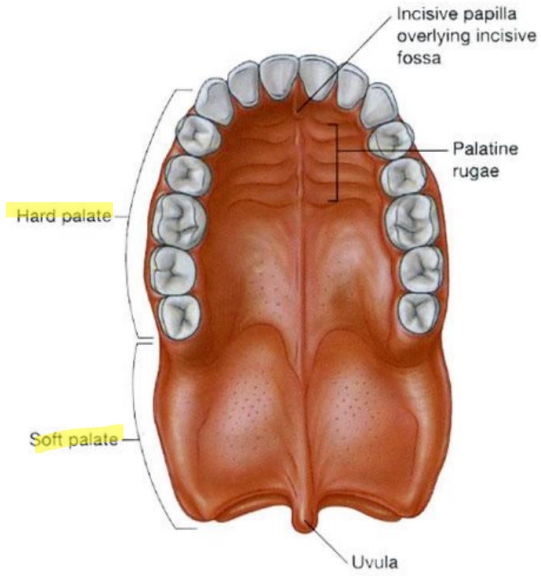
☆ Injury to the hypoglossal nerve leads to deviation of the tongue to the paralyzed side during the protrusion of the tongue. The affected muscle is genioglossus muscle .

❑ Palate

A. Hard palate:

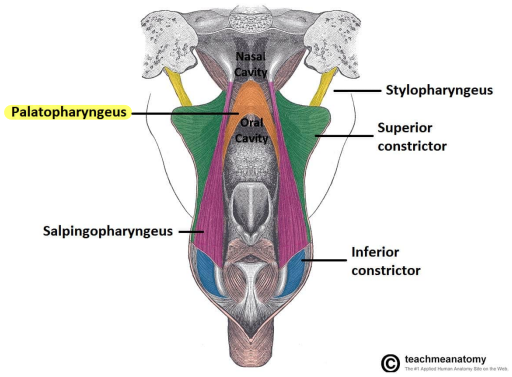
1. Form by 2 bones (maxillary & palatine)
2. Notice on the base of the skull: vomer/ choana/
3. stylomastoid foramen & foramen ovale
4. Incisive foramen
5. Lesser and greater palatine foramen

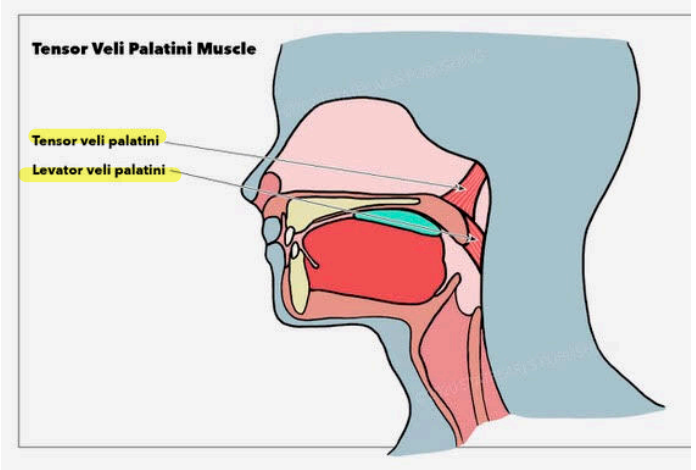


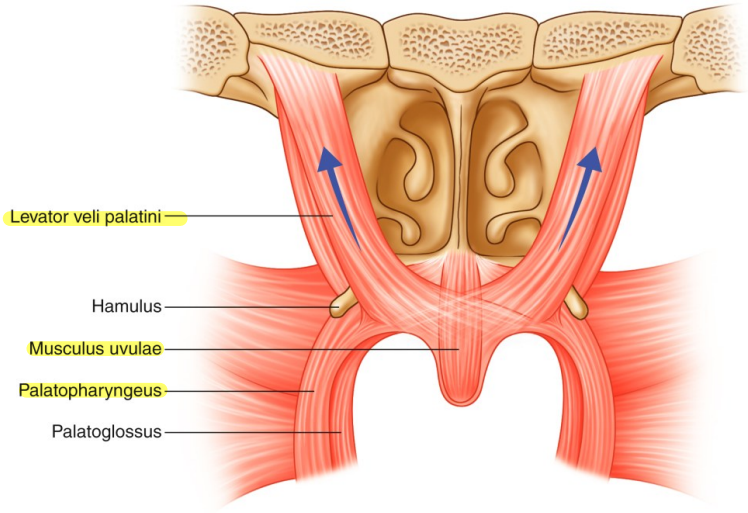


B. Soft palate: determine the muscles of soft palate

Musculus uvulae,Tensor veli palatini, Levator veli palatini and Palatopharyngeus.







- Identify nerves and vessels that pass through the foramina

Incisive foramen >> nasopalatine nerve, which is a branch of the maxillary nerve (a branch of the trigeminal nerve)

stylomastoid foramen>> facial nerve

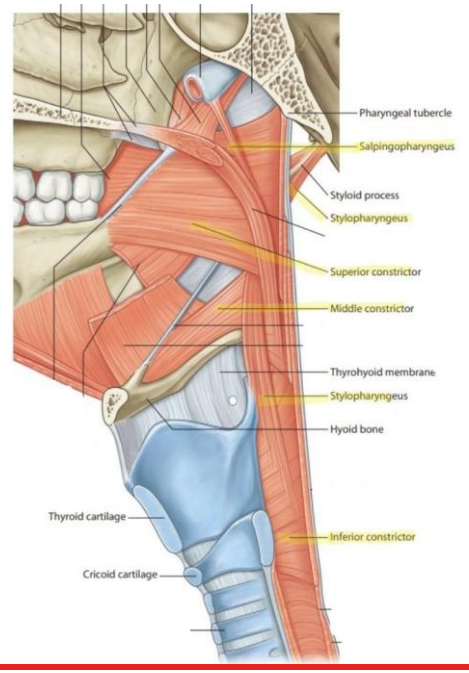
foramen ovale >> mandibular nerve

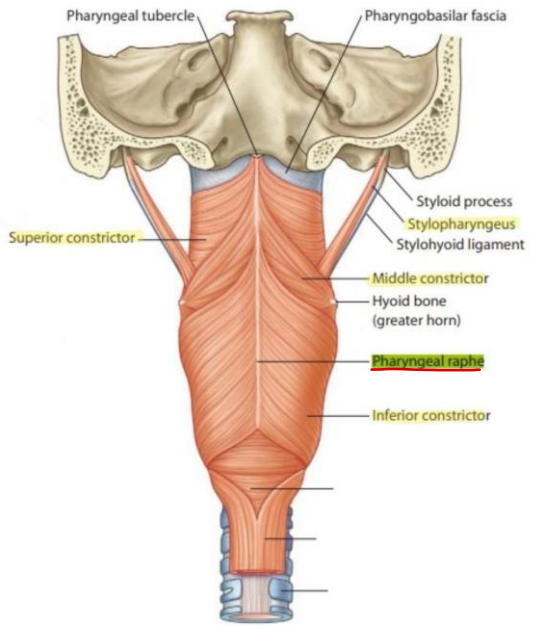
Lesser and greater palatine foramen>> lesser and geater palatine nerves, which are branches of the maxillary nerve (V2).

❑ Pharynx:

Begins at the base of skull
Pharyngeal raphe

Muscles of pharynx :
3 constrictor muscles(superior, middle and inferior) and 2 oblique muscles(stylopharyngeus and Salpingopharyngeus).

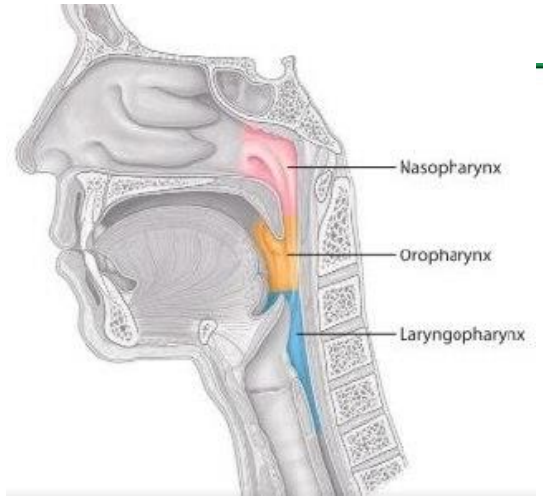


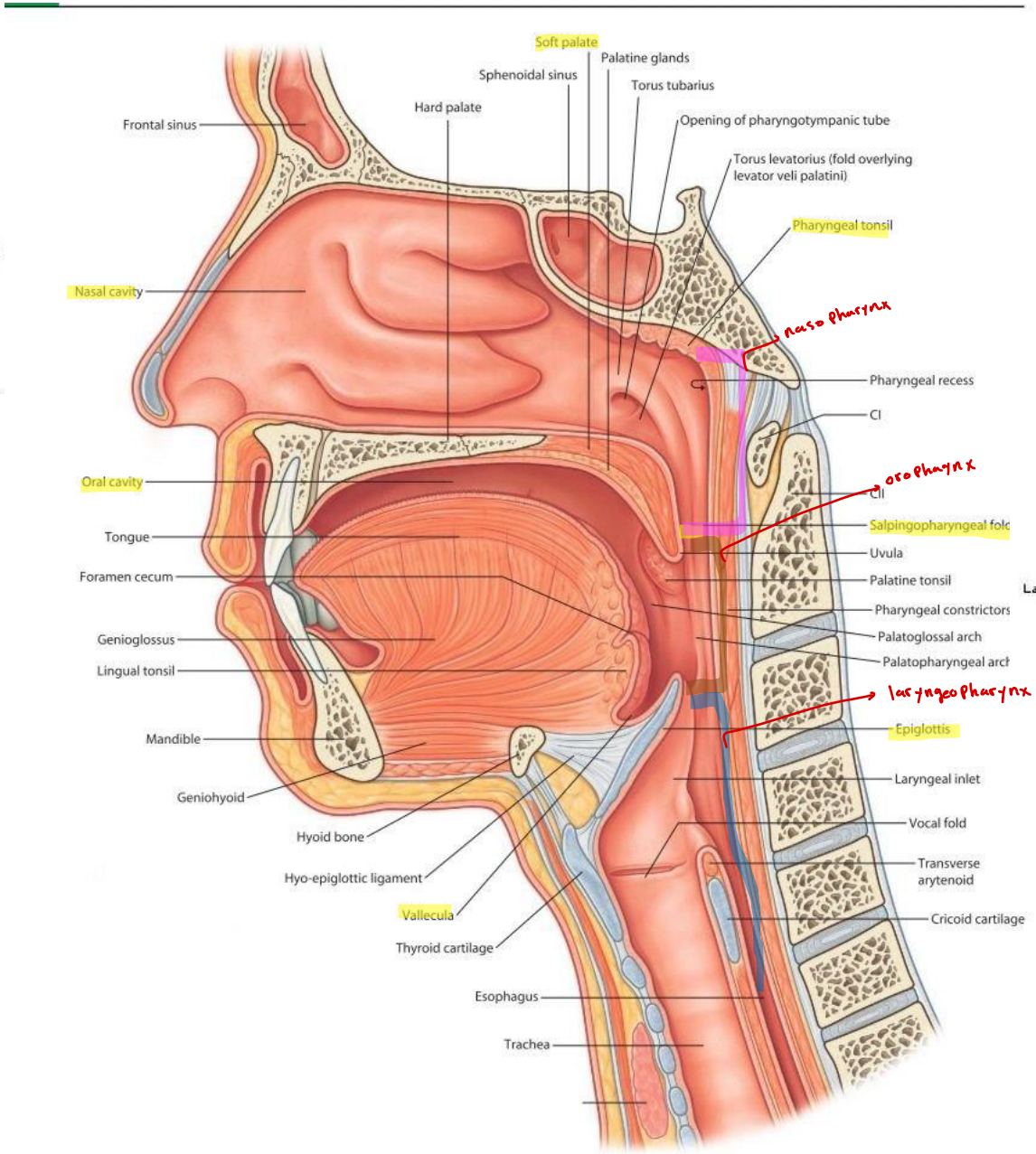


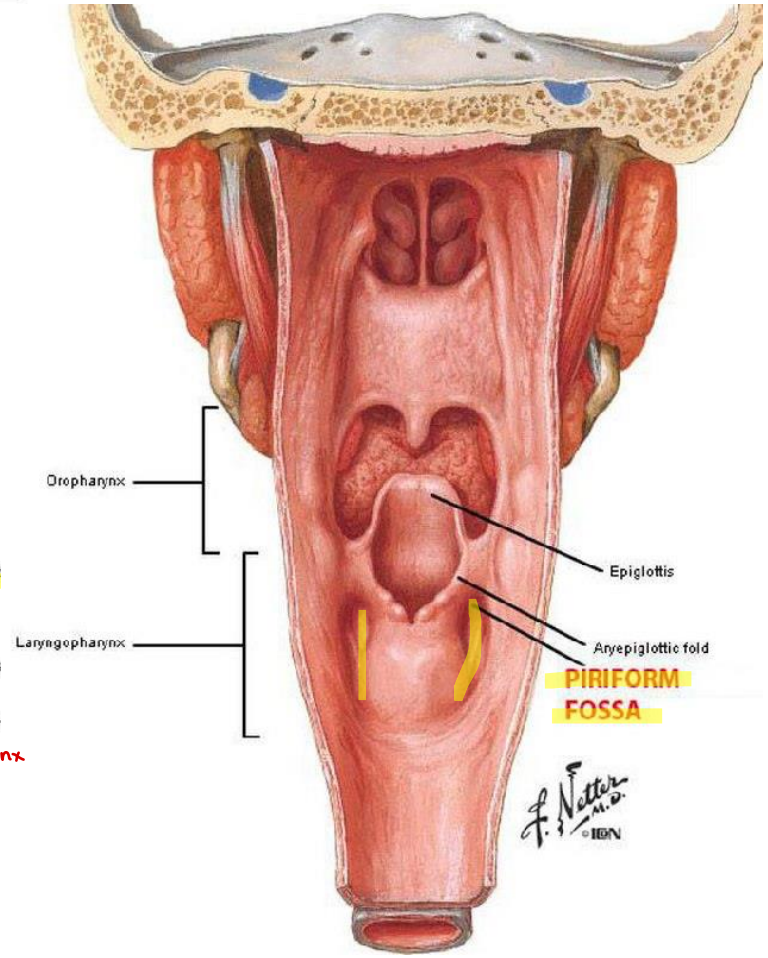
Interior of pharynx - 3 parts:
1. Nasopharynx (This lies above the soft palate and behind the nasal cavities / pharyngeal tonsil, The salpingopharyngeal fold).

2. Oropharynx (This lies behind the oral cavity, The floor is formed by the posterior one third of the tongue and the interval between the tongue and epiglottis / median and lateral glossoepiglottic fold / vallecula.

3. Laryngeopharynx (This lies behind the opening into the larynx/ Piriform fossa (important).
- A depression, antero-lateral to laryngopharynx
- Foreign bodies such as fish bones are lodged into.

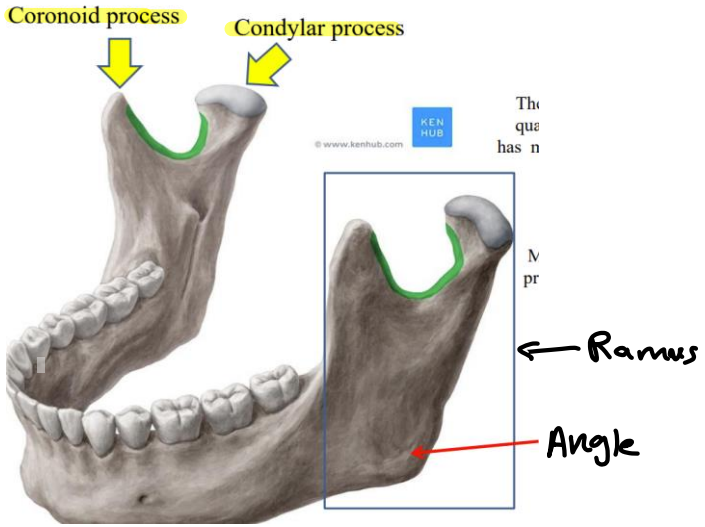

Nasopharynx
Oropharynx
Laryngopharynx

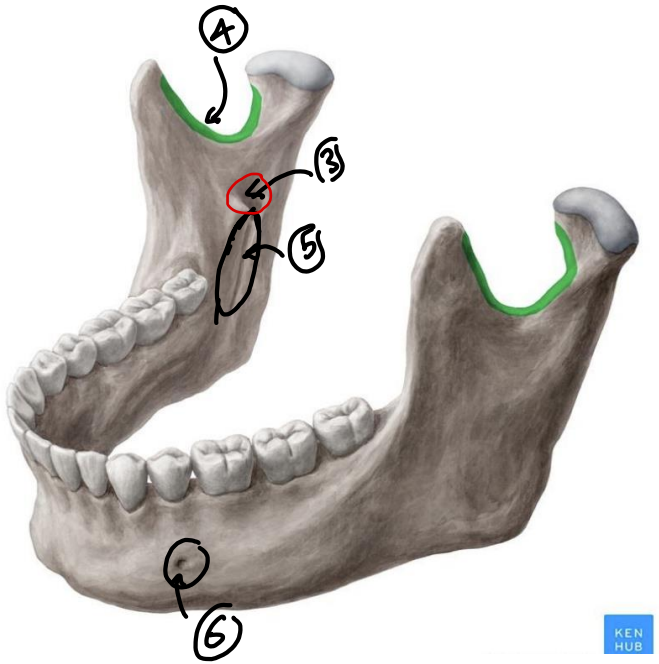

Soft palate
Palatine glands
Sphenoidal sinus
Torus tubarius
Hard palate
Frontal sinus
Opening of pharyngotympanic tube
Torus levatorius (fold overlying levator veli palatini)
Pharyngeal tonsil
Nasal cavity
naso pharynx
Pharyngeal recess
CI
Oral cavity
oropharynx
CII
Salpingopharyngeal fold
Tongue
Uvula
Foramen cecum
Palatine tonsil
Pharyngeal constrictors
Palatoglossal arch
Genioglossus
Palatopharyngeal arch
Lingual tonsil
laryngeopharynx
Epiglottis
Mandible
Laryngeal inlet
Geniohyoid
Vocal fold
Hyoid bone
Transverse arytenoid
Hyo-epiglottic ligament
Vallecula
Cricoid cartilage
Thyroid cartilage
Esophagus
Trachea


Oropharynx
Laryngopharynx
Epiglottis
Aryepiglottic fold
PIRIFORM FOSSA
F. Netter M.D.

❑ Mandible:

1. Ramus, body, angle of mandible
2. 2 processes: chondylar & coronoid process
3. Mandibular foramen
4. Mandibular notch
5. Mylohyoid groove
6. Mental foramen
7. Digastric fossa





Digastric fossa

- Identify and determine the nerves and vessels that are related directly to the mandible

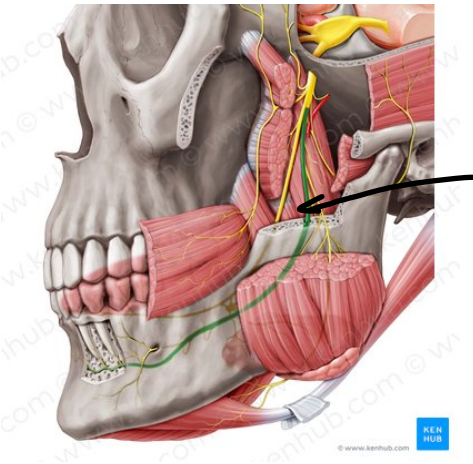
1. Inferior alveolar nerve: This is a branch of the mandibular division (V3) of the trigeminal nerve (cranial nerve V). It enters the mandibular foramen.

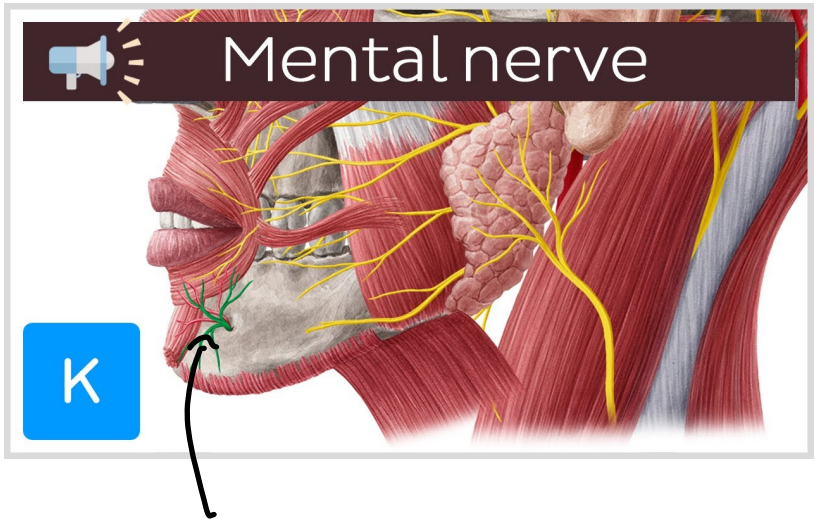
2. Mental nerve: This is a terminal branch of the inferior alveolar nerve. It exits the mandible through the mental foramen.

3. Buccal nerve: This is another branch of the mandibular division (V3) of the trigeminal nerve.

4. Inferior alveolar artery and vein: These blood vessels travel with the inferior alveolar nerve through the mandibular canal to supply blood to the lower teeth and surrounding tissues.

5. Mental artery and vein: These blood vessels accompany the mental nerve through the mental foramen to supply blood to the skin of the chin and lower lip.

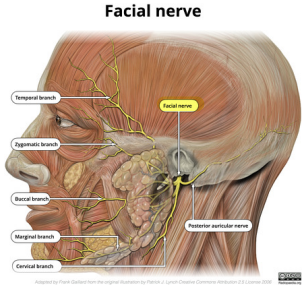




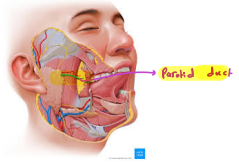
❑ Salivary glands:

A. Parotid gland:

Position: lies in a deep hollow below the external auditory meatus, behind the ramus of the mandible and in front of the sternocleidomastoid muscle.



1. fascial nerve branches

2. Parotid duct 

3. Contents of gland:from doctor explanation

Upper border : superficial temporal artery, temporal nerve and auriculotemporal nerve.

Middle border: parotid duct , transverse facial artery and buccal nerve.

Lower border: external carotid artery and retromandibular vein.

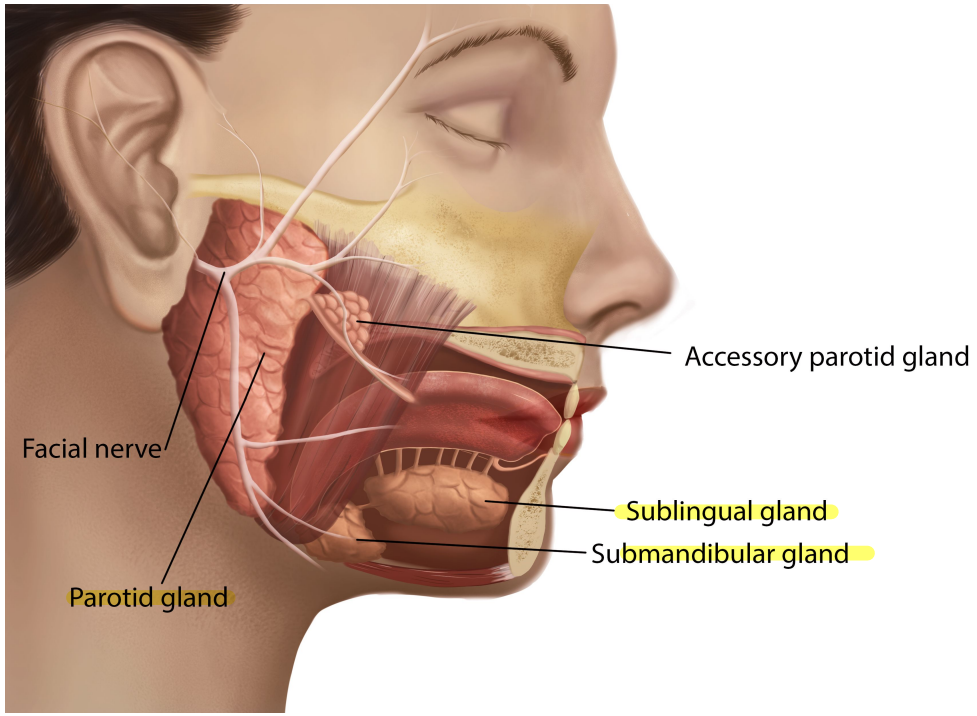
4. Relations (otic ganglion and lesser petrosal nerve which gives preganglionic parasympathetic fibers) and innervation (sensory and postganglionic parasympathetic fibers from auriculotemporal nerve AND sympathetic from external carotid artery and superior cervical ganglia).

B. Submandibular gland(Divided into superficial & deep lobe by the mylohyoid muscle) and C. Sublingual gland(Located under the tongue)

☺ Relations and innervation:

- Parasympathetic secretomotor supply is from the facial nerve via the chorda tympani, and the submandibular ganglion.

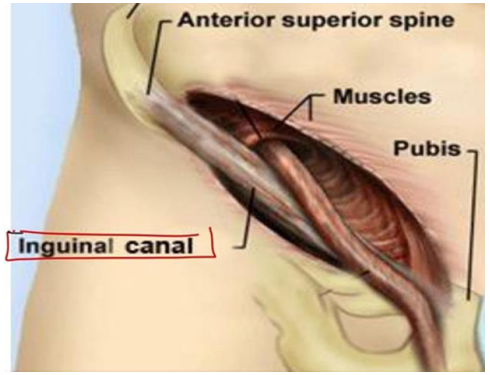
- Postganglionic fibers pass directly to the gland.



❑ Inguinal canal:(4 cm long)

Extend from deep inguinal ring, downward and medially to superficial inguinal ring.

Lies above inguinal ligament.



- Aponeurosis from the external oblique muscle form:

1- Inguinal ligament (between ASIS and the pubic tubercle)
2-superficial inguinal ring (above and medial to pubic tubercle)
3-lacunar ligament (pass backward and upward to pectineal line)
4- pectineal ligament (continuation of lacunar ligament at pectineal line

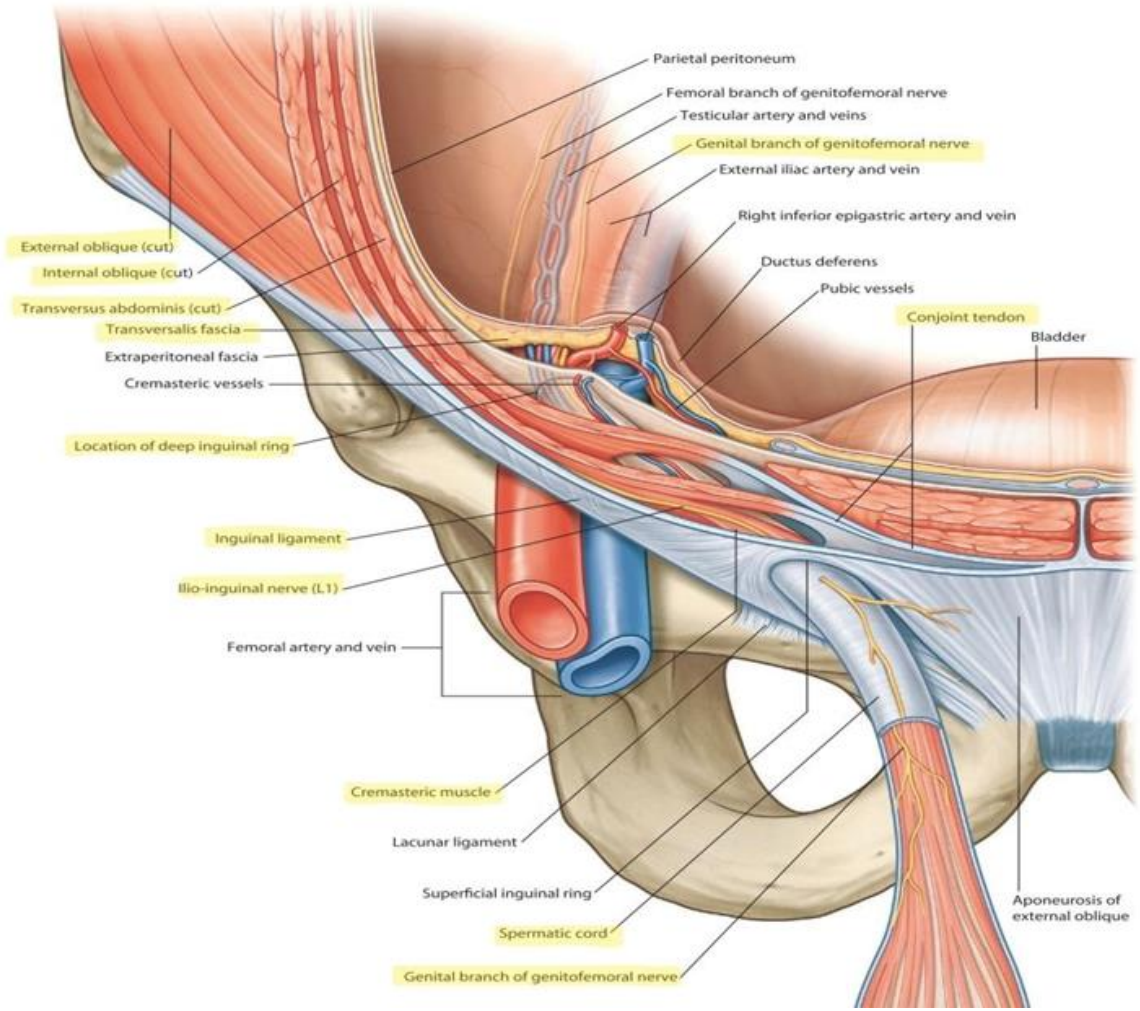
- Aponeurosis of internal oblique muscle

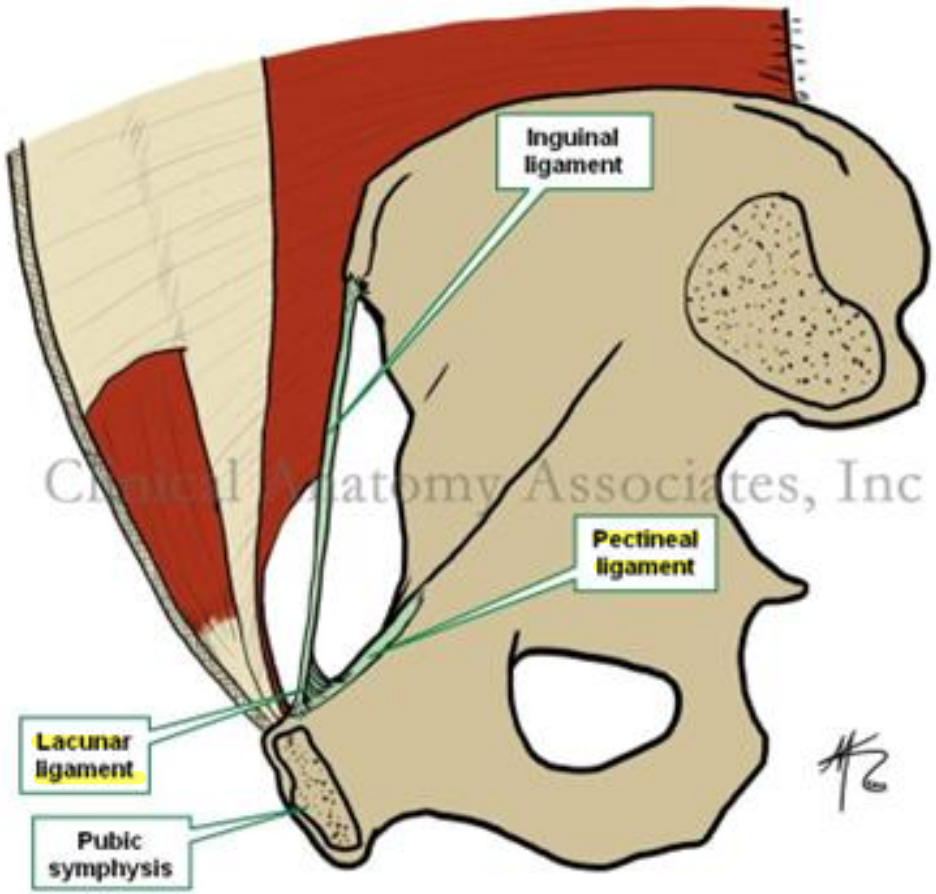
1- Conjoint tendon (aponeurosis of internal oblique + transversus abdominis)
2- Cremasteric fascia

➢ **Deep inguinal ring**: oval opening in fascia transversalis (½ inch above inguinal ligament (between ASIS and pubic symphysis)).

On its edge it gives attachment to internal spermatic fascia.

➢ **Superficial inguinal ring** : Triangular defect in external muscle aponeurosis. On its edge, it gives attachment for external spermatic fascia.


Parietal peritoneum
Femoral branch of genitofemoral nerve
Testicular artery and veins
Genital branch of genitofemoral nerve
External iliac artery and vein
Right inferior epigastric artery and vein
External oblique (cut)
Internal oblique (cut)
Transversus abdominis (cut)
Transversalis fascia
Extraperitoneal fascia
Cremasteric vessels
Location of deep inguinal ring
Ductus deferens
Pubic vessels
Conjoint tendon
Bladder
Inguinal ligament
Ilio-inguinal nerve (L1)
Femoral artery and vein
Cremasteric muscle
Lacunar ligament
Superficial inguinal ring
Spermatic cord
Genital branch of genitofemoral nerve
Aponeurosis of external oblique

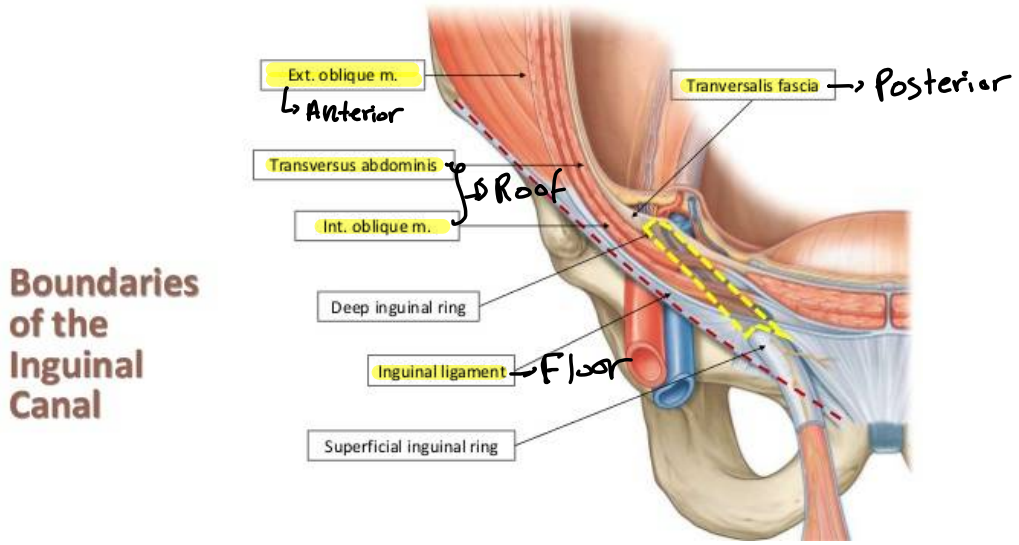

Inguinal ligament
Pectineal ligament
Lacunar ligament
Pubic symphysis

➢ Boundaries:

Anterior wall: external oblique aponeurosis.
Posterior wall: fascia transversalis.
Floor: inguinal ligament and on its medial side the lacunar ligament.
Roof: arching lower fibers from internal oblique and transversus abdominis muscles.

➢ Contents:

1- Spermatic cord and its content in males
2- Round ligament in females
3- Genital branch of genitofemoral nerve
4- Ilioinguinal nerve (enter the canal through posterior wall)



Inguinal Hernia

	Direct	Indirect
Age	Common on old	young
Bilaterally	Usually bilateral	unilateral
Shape	Hemispherical	Oval
Reaches scrotum	never	Can reach the scrotum
Direction of descent	Forwards	Downwards , forwards medially
Reduction	backward	Upward, backward laterally
Relation to inf. epigastric art.	Medially	Laterally
Superficial inguinal ring test	Feel impulse on the side finger	Feel an impulse on the tip of the finger
Deep ring test Reduction of hernia, put thumb over deep ring, ask patient to cough	Hernia appears	Hernia does not appear
Coverings	1- Lat. To lat. Umbilical lig Same as indirection 2- Med. To lat	Skin, superfacial fascia, Ex.sp.fascia, cremastric muscle & fascia, Int spermatic fascia

كل البدايات جميلة
إلا البداية اللي فيها anterior و posterior

لا تنسوا أهلنا في غزة من الدعاء