

ANATOMY

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المحاضرة الاولى:

Surfaces of the parotid Gland

1. Lateral (superficial) surface

Is covered by skin and fascia, which contains superficial parotid lymph nodes.

2. Anteromedial surface

- Is grooved by the posterior border of the ramus of the mandible and extends anteriorly over the masseter and medially to the T.M (temporomandibular) joint.
- The branches of the facial nerve emerge from the anterior border of this surface.

3. Posteromedial surface

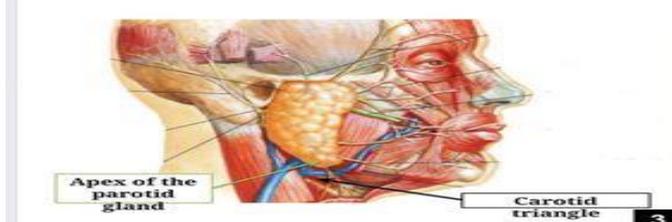
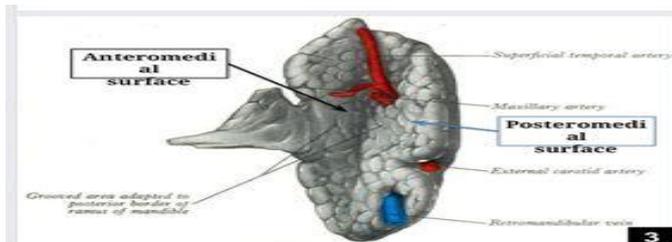
- Is moulded to the mastoid process, sternocleidomastoid, posterior belly of digastrics, and styloid process and styloid apparatus.

4. Superior surface

Is in contact with the cartilaginous part of external acoustic meatus.

5-Apex of the gland

Overlaps the carotid triangle.



-parotid duct opens into the vestibule of the mouth on a small papilla **opposite the 2nd upper molar tooth**

Structure within Parotid Gland:

a. The external carotid artery:

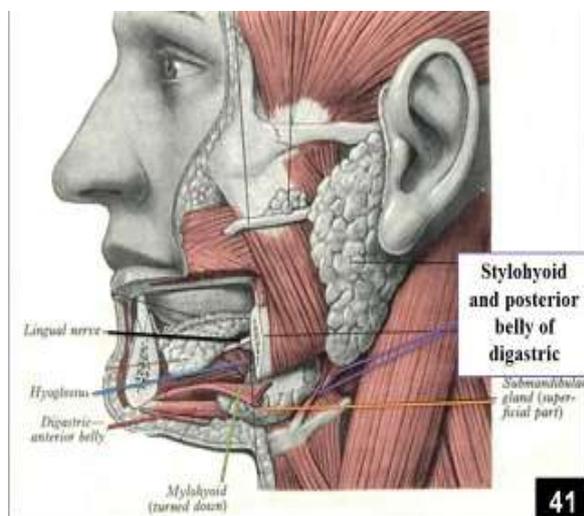
- Lies deeper than other.
- It divides within the substance of the gland into superficial temporal and maxillary arteries.

b. The retromandibular vein:

- Lies superficial to external carotid artery.
- Formed by the union of maxillary and superficial temporal veins.

c. The facial nerve:

- On a still more superficial plane the facial nerve traversed the gland.
- Within the glands, the nerve divides into its five terminal branches, which leave the gland at its anterior border.



المحاضرة الثانية:

Sensory Supply of Tongue

A.

- The mucous membrane covering anterior two-thirds of tongue is supplied by lingual branch of the mandibular nerve.
- The trigeminal component of this nerve mediates common sensibility.
- The chorda tympani component mediates taste.

B. The posterior third of tongue is supplied by glossopharyngeal nerve.

Motor Supply of Tongue

- The palatoglossal muscle is supplied by pharyngeal plexus of nerves.
- The remaining muscles (intrinsic and extrinsic) are innervated by hypoglossal nerve.

-The mucous membrane of the mouth proper is composed of stratified squamous epithelium keratinized or nonkeratinized and lamina propria.

-Keratinized squamous epithelium covers the hard palate and dorsal surface of anterior two-thirds of tongue.

-The remaining part of the epithelial lining (soft palate, floor of the mouth, and the dorsal surface of the posterior third and the inferior surface of the tongue) is of the nonkeratinized type.

The Soft Palate

-Forms the posterior part of roof of mouth.

-Projects backwards and downwards from the posterior part of hard palate.

-It consists of an aponeurosis, the palatine aponeurosis, to which four paired muscles are attached

-However, much of the mass of soft palate is formed by mucous and serous glands.

-The upper and lower surface of the mass of soft palate is covered by mucous

-The palatine aponeurosis is formed by the tensor veli palatini.

-The muscles attached to the aponeurosis include the 3 extrinsic muscles (levator veli palatine, palatoglossus, and palatopharyngeus).

Nerve Supply:

-The tensor veli palatini muscle is supplied by mandibular nerve. The remaining four muscles of soft palate are innervated by pharyngeal plexus of nerves.

المحاضرة الثالثة:

-**Nasopharynx:** Lies behind the nasal cavity, and extends from base of skull to upper surface of soft palate, at the level of C1 vertebra

-**Oropharynx:** The posterior wall is on a level with body of C2 vertebra and upper half of body of C3

The palatine tonsil is a large collection of lymphoid tissue which projects into oropharynx from tonsillar fossa.

- The lateral surface is covered by fibrous tissue which forms the tonsillar hemicapsule.

-A peritonsillar abscess occurs outside the capsule .

-The superior constrictor muscle separates this surface from the facial artery.

-**Laryngopharynx:** Lies behind larynx, and extends from upper border of epiglottis to level of cricoid cartilage (C6 vertebra).

The Wall of the Pharynx is formed from without inward by:

1. **Buccopharyngeal Fascia:** This layer contains a plexus of nerves (pharyngeal plexus) that supplies the pharyngeal muscles and extensive pharyngeal venous plexus.

2. **Muscular Coat:** Consists of three circular muscles, the constrictor muscles: superior middle and inferior constrictors, and three longitudinal muscles: stylopharyngeus, palatopharyngeus, and salpingopharyngeus muscles.

3. **Pharyngobasilar Fascia:**

-Superiorly, attached to the base of skull.

-It holds the nasopharynx permanently open for breathing

4. Mucous Coat:

-Consists of a dense connective tissue containing a network of elastic fibers, which is covered with an epithelium.

-In the nasopharynx, the epithelium is pseudostratified columnar and ciliated.

-In the oropharynx and laryngopharynx it is of the stratified squamous type

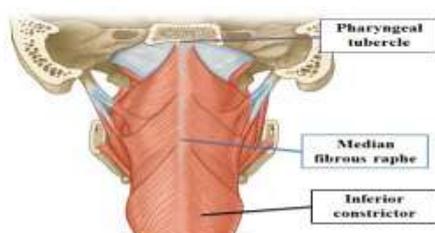
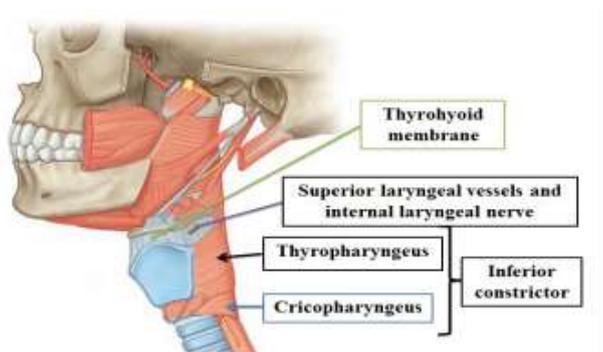
Inferior Constrictor muscle:

- It is divided into two parts.
- Thyopharyngeus part: arises from oblique line of thyroid cartilage.
- Cricopharyngeus part: is rounded, and extends around the pharynx from one side of the cricoids arch to the other.

The lowest fibers pass transversely backwards, whereas the upper fibers ascend obliquely to be inserted into median pharyngeal raphe

Anteriorly, the triangular gap between origins of middle and inferior constrictors is closed by thyrohyoid membrane .

The membrane is pierced in this area by internal laryngeal nerve and superior laryngeal vessels.



Nerve supply:

With the exception of stylopharyngeus and cricopharyngeus which are supplied by glossopharyngeal nerve and external laryngeal nerves, respectively, all other muscles of pharynx (superior constrictor, middle constrictor, inferior constrictor, palatopharyngeus) are supplied by pharyngeal plexus of nerves

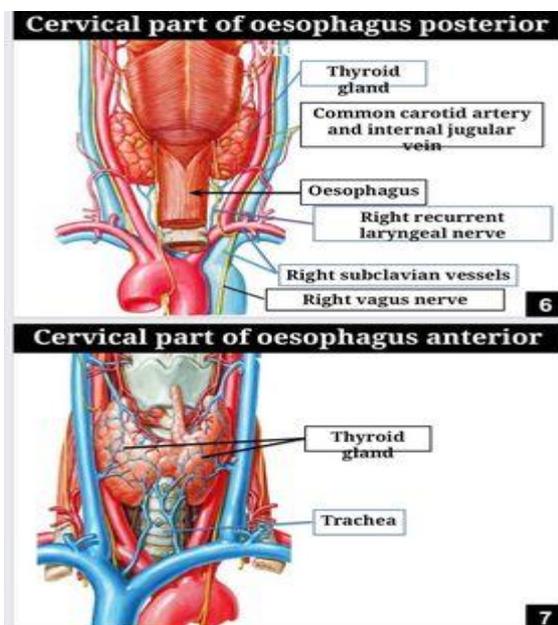
Esophagus:

-Ends in abdomen at level of body of T11 vertebra, where it joins the cardiac orifice of stomach

The course of the esophagus can be divided into three parts:

1-Cervical Part

- Lies between trachea and prevertebral fascia overlying the anterior longitudinal ligament and longus coli muscles.
- The recurrent laryngeal nerves ascend, one on each side, in the groove between trachea and esophagus.
- On right, it is in contact with thyroid gland and, at the root of neck, with cervical pleura
- On left, with thyroid gland, but the subclavian artery and thoracic duct separate it from the pleura.
- In addition, the esophagus is related on each side to carotid sheath.

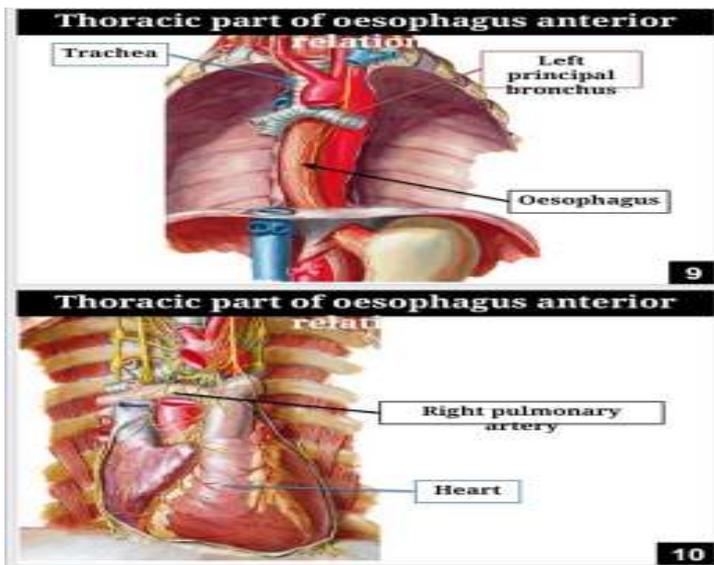


2-Thoracic Part

At first passes through superior mediastinum and then through posterior .mediastinum

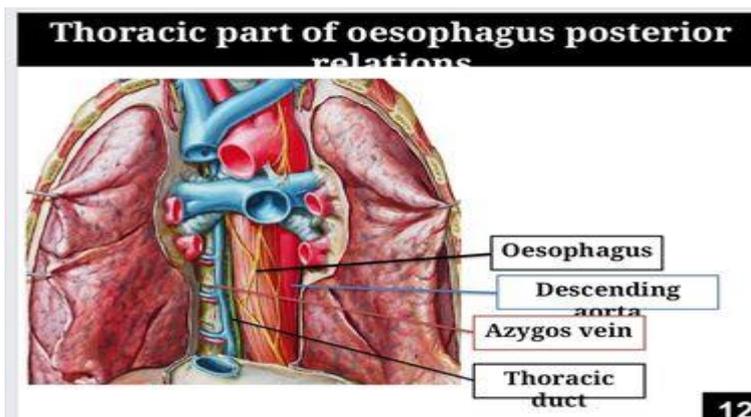
Anterior relations

From above downwards: Trachea, right pulmonary artery, left principal bronchus, pericardium (separates esophagus from left atrium), and diaphragm



Posterior relations

longus coli, thoracic vertebra, thoracic duct, azygos vein, terminal parts of hemiazygos and accessory hemiazygos veins, right posterior intercostals arteries, and inferiorly, close to diaphragm, the descending thoracic aorta.



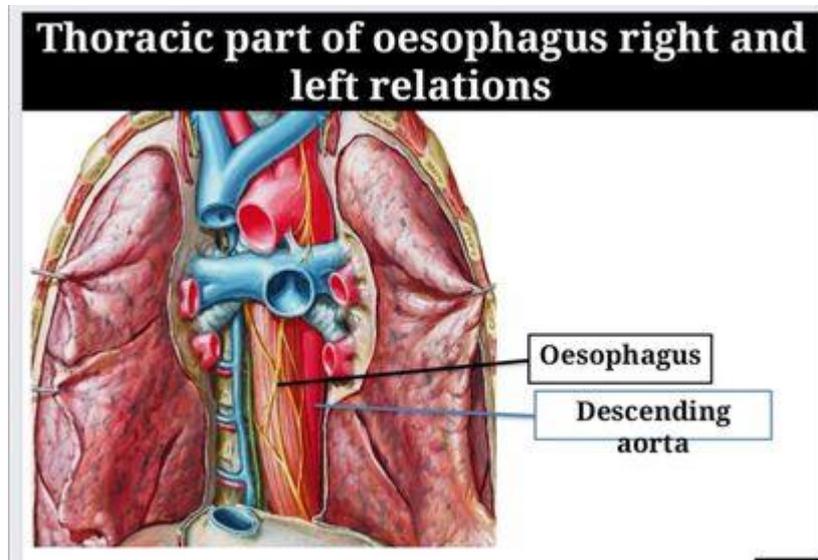
Right relations: Mediastinal pleura and the arch of the azygos vein.

Left relations:

- In the superior mediastinum, it is related to the aortic arch, the left subclavian artery, the thoracic duct, and mediastinal pleura. The left

recurrent laryngeal nerve ascends in the groove between esophagus and trachea.

- In the posterior mediastinum, it is related to descending thoracic aorta and mediastinal pleura.



3-Abdominal Part

Lies in the esophageal groove on the posterior surface of the left lobe of liver.

Arterial supply of esophagus

- Upper third by inferior thyroid artery.
- Middle third by esophageal branches of descending thoracic aorta.
- Lower third by esophageal branches of left gastric artery.

Venous drainage

- From upper third into inferior thyroid veins.
- From middle third into azygos veins.
- From lower third into left gastric vein, a tributary of portal vein.