

Course Title: Regional and Radiological Anatomy II (RAD 4 ${ }^{\text {th }}$ ) ASSIGNMENT

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## Esophagus:

- It is a narrow muscular tube.
- Esophagus extending from Pharynx to the Stomach.
- Descends in front of vertebral column goes to superior and posterior mediastinum.
- Esophagus begins with lower part of the neck at the inferior border of the Cricoid Cartilage (C6), extending to the cardiac orifice of the stomach (T11).
- It gives passage for chewed food (bolus) and liquids during the third stage and deglutition.


## Dimensions \& Lumen:

- Length: 25 cm (10 inches)
- Width: 2cm
- Lumen: Its flattened anteroposteriorly.

Normally it's kept closed and opens only during the passage of food.

## Parts of Esophagus:

- The Esophagus divided into three parts.

1. Cervical Part (4cm in length): Extend from the lower border of cricoid cartilage to the superior border of manubrium sterni.
2. Thoracic Part ( 20 cm in length): Extend from superior border of manubrium sterni to the esophageal opening in the diaphragm.
3. Abdominal Part ( $1-2 \mathrm{~cm}$ in length): Extends create esophageal opening in the diaphragm to the cardiac end of the stomach.

## Anatomical Position of the Esophagus:

- The esophagus begins in the midline at the level of the lower cricoid border (C6).
- It then deviates to the left at the root of the neck and returns to the midline at T5.
- When it reaches T7, it once again deviates to the left to reach the gastric cardia.
- It passes through the esophageal hiatus of the diaphragm at T10.
- The abdominal part of the esophagus (about 1 cm ) forms a groove in the left lobe in the liver.
- It ends at the level of T11 in the gastric cardiac orifice.


## Arterial Supply of the Esophagus:

- Cervical Part is by Inferior thyroid arteries.
- The Thoracic part is by esophageal branch of Descending thoracic aorta and Bronchial arteries.
- The Abdominal part is by esophageal branch of Left gastric artery, and Left inferior phrenic arteries.


## Venous Drainage:

- Cervical part is drained by inferior thyroid veins.
- Thoracic part is drained by Azygos and hemiazyguos veins.
- Abdominal part is drained by two venous channels,
i. Hemiazygos vein, a tributary of inferior vena cava, and
ii. Left gastric vein, a tributary of portal vein.


## Nerve Supply of the Esophagus:

- The esophagus is supplied by both parasympathetic (laryngeal Nerve) and Sympathetic (Vagus Nerve).


## Esophagoscopy:

- It performed to visualize the interior of the esophagus.


## Pharynx:

- Its fibromuscular tube lined with mucous membrane.
- It extends from base of the skull to lower border of cricoid cartilage (C6).
- It is $12-14 \mathrm{~cm}$ long
- At lower border of cricoid, continues with esophagus.
- Passage for respiration and digestive tracts.


## Pharynx present opening of

- Auditory tubes.
- Two posterior nares.
- Larynx.
- Esophagus.
> Contains:
- Pharyngeal tonsils.
- Palatine tonsils.
- Lingual tonsils.
- Tubal tonsils.


## Layers in Pharyngeal wall:

- Mucosa and submucosa.
- Longitudinal muscles.
- Circular muscles, constrictors.
- Pharyngeal plexus of veins and nerves.
- Buccopharygeal fascia.

Muscles of Pharynx:

- Differ from rest GIT.
- Skeletal muscles.
- Longitudinal muscles.
- Circular muscles.

| Muscles | Origin |
| :--- | :--- |
| Stylopharyngeus | Medial side of base of styloid <br> process |
| Salpingopharyngeus | Inferior aspect of pharyngeal <br> end of pharyngotympanic tube |
| Palatopharyngeus | Upper surface of palatine <br> aponeurosis |

## Blood Supply-ECA of Pharynx:

- Ascending pharyngeal A.
- Ascending palatine and tonsillar braches of facial A.
- Maxillary and lingual A.


## Veins:

- Superiorly: Pterygoid plexus an infratemporal fossa.
- Inferiorly: Facial and IJV.

