

Unit V – Problem 3 – Histology: Esophagus



- Esophagus is a soft tube which extends from pharynx to stomach, posterior to the trachea.
- It penetrates the diaphragm, and a short portion is in abdominal cavity before entering the stomach.
- **The gastric tube is composed of the following four layers (below are characteristics of each layer concerned with the esophagus):**
 - ✓ Mucosa:
 - ❖ **Stratified squamous non-keratinized epithelium** (it will change to non-ciliated columnar epithelium with goblet cells in Barret esophagus).
 - ❖ Lamina propria contains blood vessels and lymphatic nodules (+ esophageal cardiac glands in the gastroesophageal junction).
 - ❖ Muscularis mucosae is composed of longitudinal smooth muscle fibers.
 - ✓ Submucosa:
 - ❖ Contains esophageal glands proper, adipose tissue and blood vessels.
 - ✓ Muscularis externa:
 - ❖ Consisting of inner circular & outer longitudinal muscle fibers. These muscle fibers are skeletal in the upper third of the esophagus, mixed in the middle third & smooth in the lower third.
 - ✓ Adventitia (this term is applied for the upper part of esophagus) and serosa (this term is applied in the lower part of esophagus):
 - ❖ Containing blood vessels, nerves & adipose tissue.



FIGURE 12.2 ■ Upper esophagus (transverse section). Stain: hematoxylin and eosin. Low magnification.

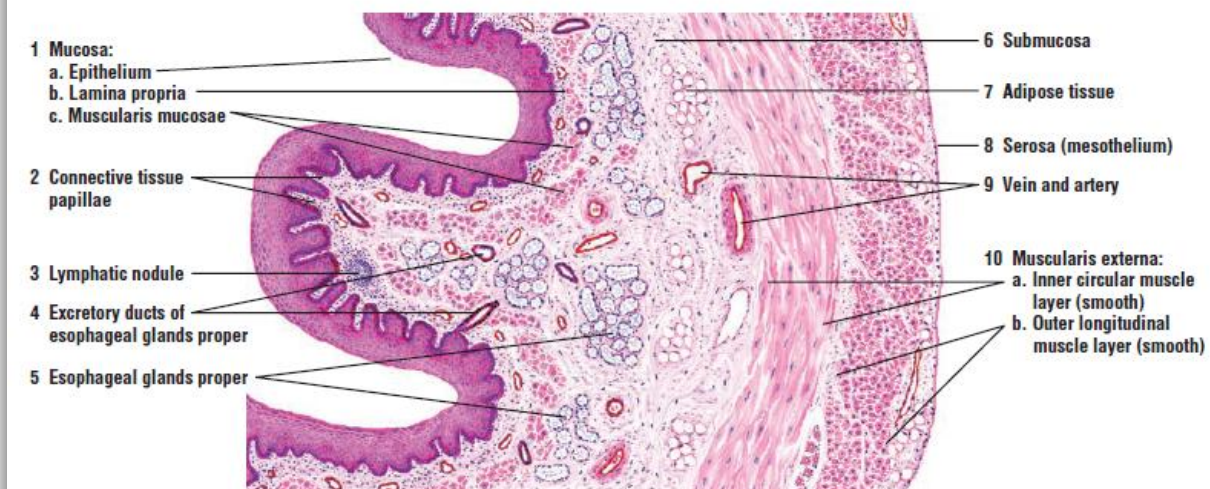


FIGURE 12.3 ■ Lower esophagus (transverse section). Stain: hematoxylin and eosin. Low magnification.