

1. What is the anatomical structure of the esophagus?

Answer: The esophagus is a muscular tube that extends from the epiglottis to the gastroesophageal junction (GEJ) and is lined by stratified squamous epithelium.

2. What are the different types of diseases that can affect the esophagus?

Answer:

- Obstruction: Mechanical or functional.
- Vascular diseases: Varices.
- Inflammation: Esophagitis.
- Tumors.

3. What are some examples of mechanical obstruction in the esophagus?

Answer:

- Atresia: Thin, non-canalized cord replaces a segment of the esophagus.
- Fistulas: Abnormal connections between the esophagus and other structures.
- Duplications: Abnormal outpouchings of the esophageal wall.
- Agenesis (very rare): Complete absence of the esophagus.
- Stenosis: Narrowing of the esophageal lumen.

4. What are the clinical presentations of atresia in the esophagus?

Answer:

- Shortly after birth: Regurgitation during feeding.
- Prompt surgical correction (rejoin) is needed.
- Complications if present with fistula: Aspiration, suffocation, pneumonia, severe fluid and electrolyte imbalances.

5. What causes acquired esophageal stenosis?

Answer:

- Chronic gastroesophageal reflux disease (GERD).
- Systemic sclerosis.
- Irradiation.
- Ingestion of caustic agents.

6. What is achalasia and what are its primary and secondary causes?

Answer:

- Achalasia is a condition characterized by incomplete relaxation of the lower esophageal sphincter (LES), increased LES tone, and esophageal aperistalsis.
- Primary achalasia: Degeneration of distal esophageal inhibitory neurons (idiopathic).
- Secondary achalasia: Loss of neural innervation due to damage in the esophagus, vagus nerve, or dorsal motor nucleus of vagus. Examples include Chagas disease (Trypanosoma cruzi infection) leading to myenteric plexus destruction.

7. What are esophageal varices and what causes them?

Answer:

- Esophageal varices are tortuous dilated veins within the submucosa of the distal esophagus and proximal stomach.
- They are caused by portal hypertension, which is a result of diseases that impede portal blood flow, such as cirrhosis and hepatic schistosomiasis.

8. What are the clinical features of esophageal varices?

Answer:

- Often asymptomatic.
- Rupture leads to massive hematemesis and can be life-threatening.
- 20% of patients die from the first bleed despite interventions.
- Other complications include hepatic coma, hypovolemic shock, and rebleeding in 60% of cases.

9. What are the different types of esophagitis?

Answer:

- Esophageal Lacerations (Mallory Weiss tears).
- Mucosal Injury.
- Infections (viral, fungal, bacterial).
- Reflux Esophagitis.
- Eosinophilic Esophagitis.

10. What can cause chemical esophagitis?

Answer:

- Damage to the esophageal mucosa by irritants such as alcohol, corrosive acids or alkalis, excessively hot fluids, heavy smoking, medicinal pills (e.g., doxycycline and bisphosphonates), or iatrogenic causes (chemotherapy, radiation therapy, graft-versus-host disease).

11. Which microorganisms can cause infectious esophagitis?

Answer:

- Viral infections: Herpes simplex virus (HSV), cytomegalovirus (CMV).
- Fungal infections: Candida (including mucormycosis and aspergillosis).
- Bacterial infections: Less common, accounting for approximately 10% of cases.

12. What are the characteristic features of candidiasis in the esophagus?

Answer:

- Adherent gray-white pseudo membranes composed of matted fungal hyphae and inflammatory cells.

13. What are the characteristic features of herpes esophagitis?

Answer:

- Punched-out ulcers with nuclear viral inclusions, degenerating epithelial cells at the ulcer edge, and multinucleated epithelial cells.

14. What are the characteristic features of CMV esophagitis?

Answer:

- Shallower ulcerations with nuclear and cytoplasmic inclusions (mega cells) seen in capillary endothelium and stromal cells.

Please note that this information is based on the provided document and my knowledge cutoff in September 2021. It's always recommended to consult a healthcare professional for accurate diagnosis and information.

1. Which of the following is NOT a disease that affects the esophagus?
 - a) Obstruction
 - b) Vascular diseases
 - c) Inflammation
 - d) Gastric ulcersAnswer: d) Gastric ulcers
2. Reflux Esophagitis is commonly caused by:
 - a) Increased lower esophageal sphincter tone
 - b) Decreased abdominal pressure
 - c) Reflux of gastric contents into the lower esophagus
 - d) Eosinophilic infiltration in the esophageal epitheliumAnswer: c) Reflux of gastric contents into the lower esophagus
3. Which of the following is a protective force against reflux esophagitis?
 - a) Alcohol consumption
 - b) Tobacco use
 - c) Mucin and bicarbonate from submucosal glands
 - d) Hiatal herniaAnswer: c) Mucin and bicarbonate from submucosal glands
4. Eosinophilic Esophagitis is characterized by:
 - a) Food impaction and dysphagia in adults
 - b) Feeding intolerance or GERD-like symptoms in children
 - c) Presence of rings in the upper and mid esophagus
 - d) All of the aboveAnswer: d) All of the above
5. Barrett Esophagus is a complication of:
 - a) Eosinophilic Esophagitis
 - b) Chronic GERD
 - c) Vascular diseases
 - d) Esophageal tumorsAnswer: b) Chronic GERD
6. The most common type of esophageal tumor worldwide is:
 - a) Squamous cell carcinoma
 - b) Adenocarcinoma
 - c) Eosinophilic esophageal tumor
 - d) Vascular tumorAnswer: a) Squamous cell carcinoma
7. Risk factors for adenocarcinoma of the esophagus include:
 - a) Barrett esophagus
 - b) Smoking
 - c) Obesity
 - d) All of the aboveAnswer: d) All of the above
8. Which of the following is a clinical feature of esophageal tumors?
 - a) Heartburn
 - b) Regurgitation of gastric contents
 - c) Difficulty swallowing
 - d) HematemesisAnswer: c) Difficulty swallowing
9. Squamous cell carcinoma of the esophagus is associated with which of the following risk factors?
 - a) Alcohol and tobacco use
 - b) Nutritional deficiencies
 - c) Caustic injury
 - d) All of the aboveAnswer: d) All of the above
10. What is the prognosis for advanced-stage esophageal tumors?
 - a) 5-year survival rate of over 80%
 - b) 5-year survival rate of approximately 50%
 - c) 5-year survival rate of less than 25%
 - d) 5-year survival rate of 100%Answer: c) 5-year survival rate of less than 25%

1. What is the most frequent cause of esophagitis?
 - a) Obstruction
 - b) Vascular diseases
 - c) Reflux of gastric contents
 - d) TumorsAnswer: c) Reflux of gastric contents

2. Which protective forces help prevent reflux esophagitis?
 - a) Alcohol and tobacco
 - b) Mucin and bicarbonate from submucosal glands
 - c) Hiatal hernia
 - d) Increased lower esophageal sphincter toneAnswer: b) Mucin and bicarbonate from submucosal glands

3. Which cell type is typically infiltrated in cases of reflux esophagitis?
 - a) Eosinophils
 - b) Neutrophils
 - c) Macrophages
 - d) LymphocytesAnswer: b) Neutrophils

4. Eosinophilic esophagitis is characterized by the presence of:
 - a) Rings in the upper and mid esophagus
 - b) Barrett esophagus
 - c) Goblet cells in the esophageal epithelium
 - d) Intramucosal carcinomaAnswer: a) Rings in the upper and mid esophagus

5. What is the main risk factor for Barrett esophagus?
 - a) Chronic GERD
 - b) Eosinophilic esophagitis
 - c) Vascular diseases
 - d) Esophageal tumorsAnswer: a) Chronic GERD

6. Adenocarcinoma of the esophagus is more common in which population?
 - a) Young adults
 - b) Females
 - c) Rural areas
 - d) Developed countriesAnswer: d) Developed countries

7. Which genetic mutation is commonly associated with adenocarcinoma of the esophagus?
 - a) TP53 mutation
 - b) BRCA1 mutation
 - c) EGFR mutation
 - d) HER2 mutationAnswer: a) TP53 mutation

8. What is a common clinical feature of esophageal tumors?
 - a) Heartburn
 - b) Hematemesis
 - c) Dysphagia
 - d) Regurgitation of sour-tasting gastric contentsAnswer: c) Dysphagia

9. The main risk factors for squamous cell carcinoma of the esophagus include:
 - a) Alcohol and tobacco use
 - b) Barrett esophagus
 - c) Obesity
 - d) Chronic GERDAnswer: a) Alcohol and tobacco use