

- 1) A 45-year-old man complains of “heart burn” and burning epigastric pain, relieved by antacids and triggered by eating spicy or acidic foods or by assuming a recumbent position. The patient smokes two packs of cigarettes a day and consumes several alcoholic drinks each evening. Which of the following is the usual cause of this patient’s condition?
- (A) Columnar intestinal metaplasia of esophageal squamous epithelium
(B) Excessive acid production in the stomach
(C) Excessive NSAID use
(D) *H. pylori* infection
(E) Hiatal hernia and incompetent lower esophageal sphincter
- 2) A 60-year-old man presents with hematemesis, melena, guaiac-positive stools, and signs of circulatory collapse. He has a 20-year history of burning midepigastic pain and tenderness relieved by food, milk, or antacids. Also, he has been taking high doses of NSAIDs to relieve the pain of long-standing arthritis. Esophagogastroduodenoscopy reveals a peptic ulcer in the upper duodenum. Which of the following is an important association of duodenal peptic ulcer disease?
- (A) Barrett esophagus and columnar intestinal metaplasia of esophageal squamous epithelium
(B) Evolution into carcinoma as a likely sequela
(C) *H. pylori* infection
(D) Hiatal hernia and incompetent lower esophageal sphincter
(E) Pernicious anemia and achlorhydria
- 3) A 60-year-old Caucasian man with a 5-year history of gastroesophageal reflux disease (GERD) presents with persistent pyrosis (heartburn) and acid regurgitation. He has had similar symptoms for the past 5 years. Because this patient has a long history of GERD, an esophagogastroduodenoscopy is performed to screen for Barrett esophagus, a well-known complication of long-standing GERD. Results reveal that Barrett esophagus is indeed present. Which of the following is true of Barrett esophagus?
- (A) A biopsy will show a histologic finding of columnar-to-squamous metaplasia.
(B) It is a known precursor of adenocarcinoma of the esophagus.
(C) It is a known precursor of carcinoma of the stomach.
(D) It is a known precursor of squamous cell carcinoma of the esophagus.
(E) The most common location is the proximal (upper) third of the esophagus

4) A 65-year-old man presents with dysphagia, weight loss, and anorexia. Physical examination is normal. Esophagogastroduodenoscopy with biopsy of an esophageal lesion is performed, revealing squamous cell carcinoma. Which of the following is true regarding this cancer?

- (A) Cigarette smoking and chronic alcohol use are associated risk factors.
- (B) Gastroesophageal reflux disease and Barrett esophagus are associated risk factors.
- (C) Histologic findings include disordered, back-to-back submucosal glands.
- (D) It most frequently arises in the lower third of the esophagus.
- (E) This cancer is characterized by an indolent course, and long survival is common.

5) A 69-year-old man was seen for vague abdominal distress. The gastric lesion shown in the figure was resected following initial endoscopic discovery. Which of the following statements about this condition is correct?



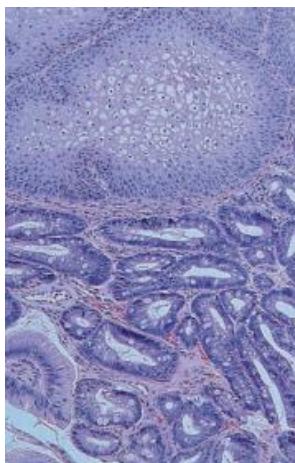
6)

- (A) It has been decreasing in frequency over the past several decades.
- (B) It is more frequent in Japan than in the United States.
- (C) It is related to the use of nitrites as food preservatives.
- (D) It may result in Krukenberg tumors.
- (E) It will most likely heal with conservative management

6) A 35-year-old man complains of difficulty swallowing and a tendency to regurgitate his food. Endoscopy does not reveal any esophageal or gastric abnormalities. Manometric studies of the esophagus show a complete absence of peristalsis, failure of the lower esophageal sphincter to relax upon swallowing, and increased intraesophageal pressure. Which of the following is the most likely diagnosis?

- (A) Achalasia
- (B) Barrett esophagus
- (C) Esophageal stricture
- (D) Mallory-Weiss syndrome
- (E) Schatzki ring

7) A 54-year-old man with a long history of indigestion after meals and “heartburn” presents with upper abdominal pain. He was treated with proton-pump inhibitors for gastroesophageal reflux 3 years previously. An endoscopic biopsy of the lower esophagus is shown in the image. Which of the following best describes these pathologic findings?



- (A) Candida esophagitis
- (B) Esophageal diverticulum
- (C) Esophageal varices
- (D) Glandular metaplasia
- (E) Schatzki ring

8) The patient described in Question 7 is at increased risk of developing which of the following diseases of the esophagus?

- (A) Achalasia
- (B) Adenocarcinoma
- (C) Candidiasis
- (D) Plummer-Vinson syndrome
- (E) Varices

9) A 70-year-old woman presents with difficulty swallowing and a 9-kg (20-lb) weight loss over the past several months. Endoscopy reveals irregular narrowing of the lower third of the esophagus. A biopsy shows markedly atypical cuboidal cells lining irregular gland-like structures. Which of the following is the most likely diagnosis?

- (A) Adenocarcinoma
- (B) Esophageal stricture
- (C) Leiomyosarcoma
- (D) Scleroderma
- (E) Squamous cell carcinoma

10) A 60-year-old man presents with a 5-week history of difficulty swallowing. Physical examination is unremarkable. Upper endoscopy shows a large mass in the upper third of the esophagus. A biopsy is shown in the image. What is the appropriate histologic diagnosis for this esophageal mass?

- (A) Adenocarcinoma
- (B) Glandular metaplasia
- (C) Malignant melanoma
- (D) Squamous cell carcinoma

11) Which of the following is the most important risk factor for development of the esophageal mass identified in the patient described in Question 10?

- (A) Cigarette smoking
- (B) Exposure to aflatoxin
- (C) Herpetic esophagitis
- (D) Hot and spicy food
- (E) Reflux esophagitis

12) A 50-year-old obese man (BMI = 32 kg/m²) comes to the physician complaining of indigestion after meals, bloating, and heartburn. Vital signs are normal. A CT scan of the abdomen reveals a hiatal hernia of the esophagus. Endoscopic biopsy shows thickening of the basal layer of the squamous epithelium, upward extension of the papillae of the lamina propria, and an increased number of neutrophils and lymphocytes. Which of the following is the most likely diagnosis?

- (A) Esophageal varices
- (B) Mallory-Weiss syndrome
- (C) Reflux esophagitis
- (D) Schatzki mucosal ring
- (E) Squamous cell carcinoma

13) A 30-year-old man with AIDS complains of severe pain on swallowing. Upper GI endoscopy shows elevated, white plaques on a hyperemic and edematous esophageal mucosa. Which of the following is the most likely diagnosis?

- (A) Barrett esophagus
- (B) Candida esophagitis
- (C) Herpetic esophagitis
- (D) Reflux esophagitis
- (E) Squamous cell carcinoma in situ

14) A 58-year-old woman is brought to the emergency department 4 hours after vomiting blood and experiencing bloody stools. The patient was diagnosed with alcoholic cirrhosis 2 years ago. The patient subsequently goes into shock and expires. The histologic appearance of the esophagus at autopsy is shown in the image. Which of the following is the most likely underlying cause of hematemesis and hematochezia in this patient?

- (A) Alcoholic hepatitis
- (B) Ischemia of the gastric mucosa
- (C) Mallory-Weiss syndrome
- (D) Peptic ulcer disease
- (E) Portal hypertension

15) A 34-year-old man presents with a 5-month history of weakness and fatigue. There is no history of drug or alcohol abuse. A CBC shows megaloblastic anemia and a normal reticulocyte count. Further laboratory studies reveal vitamin B12 deficiency. Anemia in this patient is most likely caused by which of the following?

- (A) Acute erosive gastritis
- (B) Autoimmune gastritis
- (C) Helicobacter pylori gastritis
- (D) Ménétrier disease
- (E) Peptic ulcer disease

16) A 40-year-old woman presents with a 2-month history of burning epigastric pain that usually occurs between meals. The pain can be relieved with antacids or food. The patient also reports a recent history of tarry stools. She denies taking aspirin or NSAIDs. Laboratory studies show a microcytic, hypochromic anemia (serum hemoglobin = 8.5 g/dL). Gastroscopy reveals a bleeding mucosal defect in the antrum measuring 1.5 cm in diameter. An endoscopic biopsy shows that the lesion lacks mucosal lining cells and is composed of amorphous, cellular debris and numerous neutrophils. Which of the following is the most important factor in the pathogenesis of this patient's disease?

- (A) Achlorhydria
- (B) Acute ischemia
- (C) Autoimmunity
- (D) Gastrinoma
- (E) Helicobacter pylori infection

1	2	3	4	5	6	7	8
E	C	B	A	E	A	D	B
9	10	11	12	13	14	15	16
A	D	A	C	B	E	B	E