

1. 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 intra esophageal 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

2. A 20-year-old woman presents with a 2-year history of difficulty swallowing and increasing fatigue. A CBC shows iron-deficiency anemia. Upper endoscopy reveals an annular narrowing in the upper third of the esophagus. A mucosal biopsy shows no evidence of inflammation or neoplasia. Which of the following is the most likely diagnosis?

- (A) Achalasia
- (B) Barrett esophagus
- (C) Diverticulum
- (D) **Esophageal web**
- (E) Schatzki ring

Answer D

EX. **Achalasia** occurs in the distal esophagus, upper endoscopy showed narrowing in the upper third of the esophagus, **Barrett esophagus** is a cause of chronic GERD, due to which the gastric juices enter the esophagus and cause inflammation but, in the biopsy, there was no evidence of inflammation, **Diverticulum** are bulging pouches or an abnormal growth or neoplasia which was also not detected in the biopsy, **Schatzki rings** are somewhat caused by hiatal hernia when the stomach pushes through the diaphragm into the thorax which can lead to the formation of rings or it can cause gastric reflux leading to inflammation in the esophagus, **Esophageal Web** are thin membranes that grow across the inside of the upper part of the esophagus which can cause difficulty in swallowing, since our patient has a history of dysphagia and also iron deficiency anemia was detected in CBC test, which is one of the causes of these webs. Part of Plummer Vinson syndrome

3. A 45-year-old woman presents with general discomfort and increasing tightness in the skin of her face. She reports intermittent pain in the tips of her fingers when exposed to the cold. Physical examination shows “stone facies” and edema of the fingers and hands. Serologic tests for antinuclear and anti-Scl-70 antibodies are both positive. Which of the following gastrointestinal manifestations is expected in this patient?

- (A) Adenocarcinoma of the esophagus
- (B) **Dysphagia**
- (C) Esophageal rupture
- (D) Esophageal varices
- (E) Squamous cell carcinoma of the esophagus

4. A 65-year-old woman complains of a 4-month history of bad breath, regurgitation of undigested food, occasional aspiration of food, and change in the sound of her voice. A barium swallow examination shows a posterior, midline pouch greater than 2 cm in diameter arising just above the cricopharyngeal muscle. Which of the following is the most likely diagnosis?

- (A) Epiphrenic diverticulum
- (B) Intramural pseudodiverticulum
- (C) Meckel diverticulum
- (D) Traction diverticulum
- (E) Zenker diverticulum

Epiphrenic is dysfunction of LES, above LES (nocturnal regurg), intramural are rare multiple tiny pouches. Meckel is in small intestine (terminal part of ileum), traction is near midpoint of EP, caused by mediastinal/pulmonary TB.

Zenker is above UES, above the muscle. Symptoms are dysphagia, halitosis, regurgitation of food in pouch, esophageal mass on palpation.

5. A 45-year-old man presents with long-standing heartburn and dyspepsia. An X-ray film of the chest shows a retrocardiac, gas-filled structure. This patient most likely has which of the following conditions?

- (A) Boerhaave syndrome
- (B) Esophageal varices
- (C) Esophageal webs
- (D) Hiatal hernia
- (E) Mallory-Weiss syndrome

Hiatal hernia. Hiatal hernia is a protrusion of the stomach through an enlarged esophageal hiatus in the diaphragm. Symptoms of hiatal hernia, particularly heartburn and regurgitation, are attributed to the reflux of gastric contents, which is primarily related to incompetence of the lower esophageal sphincter. Classically, the symptoms are exacerbated when the affected person is recumbent.

6. A 3-year-old boy is rushed to the emergency room in acute distress. The child has vague chest pain and difficulty swallowing. He refuses to drink water. Physical examination shows drooling and salivation. Vital signs are normal. The mother states that she saw the boy ingesting a liquid used to clear drains. If this chemical was a strong acid, which of the following histopathologic findings would be expected in the esophagus of this child?

- (A) Apoptosis
- (B) Coagulative necrosis
- (C) Fat necrosis
- (D) Hyaline sclerosis
- (E) Liquefactive necrosis

Coagulative necrosis is a type of accidental localized cell death typically caused by ischemia or infarction. Acid causes denaturation of proteins.

7. 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

Adenocarcinoma symp- dysphagia, progressive weight loss, chest pain, vomiting.

Mostly occurs in lower third of esophagus. Changes the cell lining which is originally stratified squamous epithelium. Leiomyosarcoma is a rare cancer in smooth muscles.

Scleroderma is hardening and tightening of skin. Squamous cell carcinoma occurs in middle third. High growth of squamous cells.

8. A 3-week-old boy is brought to the physician by his parents, who report that he vomits forcefully immediately after nursing. Physical examination reveals an “olive-like” palpable mass and visible peristaltic movements within the infant’s abdomen. What is the most likely cause of projectile vomiting in this infant?

- (A) Appendicitis
- (B) **Congenital pyloric stenosis**
- (C) Hirschsprung disease
- (D) Meconium ileus
- (E) Tracheoesophageal fistula

Congenital pyloric stenosis causes forceful vomiting that can lead to dehydration. Hirschsprung disease is a birth defect in which some nerve cells are missing in the large intestine, so a child’s intestine can’t move stool and becomes blocked. Meconium ileus is obstruction of the terminal ileum by abnormally tenacious meconium, it is an early manifestation of cystic fibrosis. D is abnormal connection between trachea and esophagus.

9. A 50-year-old woman with long-standing rheumatoid arthritis complains of weakness and fatigue. She states that her stools have recently become black after taking a new nonsteroidal anti-inflammatory drug (NSAID). Gastroscopy shows numerous superficial, bleeding mucosal defects. Which of the following is the most likely diagnosis?

- (A) **Acute erosive gastritis**
- (B) Early gastric cancer
- (C) Helicobacter pylori gastritis
- (D) Ménétrier disease
- (E) Peptic ulcer disease

10. A 58-year-old woman presents with a 2-month history of abdominal discomfort and dark stools. Physical examination shows pallor but no evidence of jaundice. Laboratory studies disclose a microcytic, hypochromic anemia, with a hemoglobin level of 6.7 g/dL. A barium swallow radiograph reveals a “leather bottle” appearance of the stomach. Microscopic examination shows diffusely infiltrating malignant cells, many of which are “signet ring” cells, in the stomach wall. Which of the following is the most likely diagnosis?

- (A) **Fungating adenocarcinoma**
- (B) Gastric leiomyosarcoma

- (C) Gastric lymphoma
- (D) **Linitis plastica**
- (E) Ménétrier disease

11. A 60-year-old woman complains of increasing abdominal girth of 4 weeks in duration. Physical examination discloses ascites, and cytologic examination of the fluid reveals malignant cells. Exploratory laparotomy shows multiple tumor nodules on the serosal surface of the intestines. Which of the following is the most likely diagnosis?

- (A) Carcinoid tumor
- (B) Gastrointestinal stromal tumor
- (C) Liposarcoma
- (D) MALToma
- (E) **Metastatic carcinoma**

Metastatic carcinoma is by far the most common malignant disorder affecting the peritoneum. Ovarian, gastric, and pancreatic carcinomas are particularly likely to seed the peritoneum, but any intra-abdominal carcinoma can spread to the peritoneum. Metastatic carcinoma to the abdomen presents in the form of multiple serosal nodules and ascites fluid that contains malignant cells.

12. A 34-year-old man with AIDS presents with a 3-month history of constipation and lower abdominal pain. The patient has a history of chronic diarrhea and persistent cough. Recently, he noticed blood in his stool. Laboratory studies reveal mild iron deficiency anemia. Stool specimens are positive for occult blood. A CBC shows a CD4 count of less than 50/ μ L. Sigmoidoscopy discloses a mass in the rectosigmoid region. In addition to B-cell lymphoma, this patient is at increased risk of developing which of the following tumors of the gastrointestinal (GI) tract?

- (A) Carcinoid tumor
- (B) Colonic adenocarcinoma

(C) Kaposi sarcoma

- (D) Leiomyosarcoma

Kaposi sarcoma develops from cells that line lymph or blood vessels. Tiny blood vessels will grow in mouth, nose, eyes and anus. They look like a bruise, purple patches. At risk of developing bcz its most common cancer related to HIV infection. Carcinoid tumor grows from neuroendocrine cells. Leiomyosarcoma cancer is in smooth muscles.

13. A 24-year-old man is brought to the emergency room with symptoms of acute intestinal obstruction. His temperature is 38°C (101°F), respirations are 25 per minute, and blood pressure is 120/80 mm Hg. Physical examination reveals a mass in the right lower abdominal quadrant. At laparoscopy, there are numerous small bowel strictures and a fi stula extending into a loop of small bowel. Which of the following is the most likely diagnosis?

- (A) Adenocarcinoma
- (B) Carcinoid tumor
- (C) **Crohn disease**
- (D) Pseudomembranous colitis

(E) Ulcerative colitis

The answer is C: Crohn disease. Intestinal obstruction and fistulas are the most common intestinal complications of Crohn disease. Occasionally, free perforation of the bowel occurs.

Pseudomembranous colitis (choice D) and ulcerative colitis (choice E) are not associated with fistula formation. Adenocarcinoma (choice A) rarely, if ever, arises in the terminal ileum. Diagnosis: Crohn disease

14. A 70-year-old woman with a history of ovarian cancer presents with diarrhea. She completed radiation therapy for her cancer 3 months ago. Physical examination shows cachexia, hyperactive bowel sounds, and generalized pallor. The stools are found to contain blood. A CBC shows decreased hemoglobin (7.8 g/dL) and decreased mean corpuscular volume (70 μm^3). Which of the following is the most likely cause of GI bleeding in this patient?

(A) Angiodysplasia

(B) Hemorrhoids

(C) Ischemic colitis

(D) Radiation enterocolitis

(E) Solitary rectal ulcer

Angiodysplasia is an abnormal, tortuous, dilated small blood vessel in the mucosal and submucosal layers of the GI tract. Hemorrhoids are swollen veins in lower rectum. Ischemic colitis is inflammation of large intestine or colon due to reduced blood flow. **Radiation enteritis** is damage to the small and/or large intestines secondary to radiation. Symp- diarrhoea, vomiting, nausea, malabsorption, anemia. Bowel obstruction. Solitary rectal ulcer due to chronic constipation.