

Dysphagia is typically present in

- A. Achalasia
- B. Gastric ulcer
- C. Acute pancreatitis
- D. All of the above

“Alarm signs” necessitating endoscopy in all patients presenting with symptoms of GERD include

- A. Loss of weight
- B. Intensive salivation (water brash)
- C. Persistent cough
- D. Heartburn

Typical signs of gastroesophageal reflux disease (GERD) include

- A. Heartburn
- B. Regurgitation
- C. Erucation (belching)
- D. All of the above

“Alarm signs” necessitating endoscopy in all patients presenting with the symptoms of gastroesophageal reflux disease (GERD)

- A. Epigastric pain
- B. Erucation (belching)
- C. GI bleeding
- D. Heartburn

A 60-year-old man presenting with typical signs and symptoms of GERD requires

- A. Esophageal pH recording without endoscopy and treatment with proton pump inhibitors
- B. Endoscopic evaluation and treatment with proton pump inhibitors
- C. Empiric treatment with proton pump inhibitors, re-evaluation of symptoms after 4 weeks and endoscopy if symptoms persist
- D. Endoscopic evaluation, esophageal pH recording and treatment with proton pump inhibitors.

A 25-year-old man presenting with typical signs and symptoms of GERD requires

- A. Endoscopic evaluation and treatment with proton pump inhibitors
- B. Esophageal pH recording without endoscopy and treatment with proton pump inhibitors
- C. Empiric treatment with proton pump inhibitors, without endoscopy, and later re-evaluation of symptoms
- D. Endoscopic evaluation, esophageal pH recording and treatment with proton pump inhibitors.

Diagnosis of gastroesophageal reflux disease may include

- A. Endoscopy
- B. Esophageal pH recording
- C. Esophageal manometry
- D. All of the above

Extraesophageal symptoms of gastroesophageal reflux disease (GERD) include the following, EXCEPT

- A. Asthma bronchiale
- B. Dental caries
- C. Pernicious anemia
- D. Laryngitis

In a patient presenting with typical signs of gastroesophageal reflux disease (GERD) endoscopy reveals no signs of esophagitis. To confirm reflux disease, the next diagnostic step would be...

- A. Esophageal manometry
- B. Esophageal pH recording
- C. Contrast radiography
- D. Endoscopic ultrasound

To confirm reflux disease, the following diagnostic steps can be taken, except:

- A. Esophageal manometry
- B. Esophageal pH recording
- C. Endoscopic ultrasound
- D. Multichannel intraluminal impedance

Esophageal manometry allows...

- A. Visualization of the mucous membrane of the esophagus
- B. Recording pH of the esophagus
- C. Measurement of pressure in the esophagus and of the LES (lower esophageal sphincter)
- D. All of the above

Predisposing factors to gastroesophageal reflux disease (GERD) include the following, EXCEPT...

- A. Increased pressure of lower esophageal sphincter (LES)
- B. Impaired clearance of esophagus
- C. Hiatus hernia
- D. Decreased gastric motility

Treatment of gastroesophageal reflux disease (GERD) may include...

- A. Prokinetics
- B. Proton pump inhibitors
- C. Lifestyle changes, such as avoiding alcohol, mint and chocolate
- D. Any of the above

Barrett esophagus refers to ...

- A. typically intestinal metaplasia in the esophagus
- B. impaired relaxation of the lower esophageal sphincter
- C. diffuse spasm of the esophagus
- D. ulceration of the esophagus

Barrett esophagus can be diagnosed with...

- A. Esophageal pH monitoring
- B. Endoscopy and biopsy
- C. Esophageal manometry
- D. Any of the above

Barrett esophagus always requires...

- A. Immediate operation
- B. Regular endoscopic screening
- C. Regular contrast radiography
- D. All of the above

Barrett's metaplasia increases the risk of...

- A. Esophageal adenocarcinoma
- B. Peptic ulcer
- C. Pernicious anemia
- D. Achalasia

During the diagnostic evaluation of achalasia should be carried out.

- A. Endoscopic ultrasound
- B. Esophageal manometry
- C. pH monitoring of the esophagus
- D. All of the above

"Classic" achalasia refers to...

- A. Increased tone of the lower esophageal sphincter
- B. Increased peristalsis of the distal esophagus
- C. Increased tone of the upper esophageal sphincter
- D. All of the above

Typical signs and symptoms of achalasia, EXCEPT...

- A. Chest pain
- B. Weight loss
- C. Regurgitation
- D. GI bleeding

A 40-year-old man presents with the symptoms of burning epigastric pain that appears usually at night, aggravated by alcohol or coffee and relieved by eating. His appetite is maintained, belching and bloating are absent. This clinical presentation is highly suspicious to...

- A. Duodenal ulcer
- B. Gastric tumor
- C. Gastric ulcer
- D. Functional dyspepsia

Achalasia is typically caused by...

- A. the loss of neurons in the myenteric plexus
- B. intestinal metaplasia of the esophagus
- C. infectious esophagitis
- D. hiatus hernia

Barium X-ray showing dilated esophagus with a beak-like narrowing of the lower esophageal sphincter is typical in

- A. Barrett's metaplasia
- B. Achalasia
- C. Diffuse esophageal spasm

D. Uncomplicated gastroesophageal reflux disease

The diagnosis of diffuse esophageal spasm requires

- A. Manometry
- B. pH recording of the esophagus
- C. Endoscopy
- D. Any of the above

Signs of Candida esophagitis can include...

- A. Odynophagia
- B. Dysphagia
- C. Substernal pain
- D. Any of the above

Mallory-Weiss syndrome refers to

- A. Hemorrhages from lacerations of the cardiac orifice of the stomach due to vomiting
- B. Rupture of the esophagus due to excessive vomiting
- C. Bleeding due to corrosive injury of the esophagus
- D. Variceal bleeding of the esophagus

Typical symptoms of pill esophagitis include

- A. Waterbrash (excessive salivation)
- B. Odynophagia
- C. Vomiting
- D. GI bleeding

Boerhaave syndrome refers to

- A. Hemorrhages from lacerations of the cardiac orifice of the stomach due to vomiting
- B. Rupture of the esophagus due to excessive vomiting
- C. Intestinal metaplasia of the esophagus
- D. Variceal bleeding of the esophagus

Odynophagia refers to

- A. pain either caused by or exacerbated by swallowing
- B. the perception of a lump or fullness in the throat that is felt irrespective of swallowing
- C. a feeling of food "sticking" or even lodging in the chest
- D. a behavior in which recently swallowed food is regurgitated and then re-swallowed repetitively

Globus sensation refers to

- A. pain either caused by or exacerbated by swallowing
- B. the perception of a lump or fullness in the throat that is felt irrespective of swallowing
- C. a feeling of food "sticking" or even lodging in the chest
- D. a behavior in which recently swallowed food is regurgitated and then re-swallowed repetitively

Rumination refers to...

- A. pain either caused by or exacerbated by swallowing
- B. the perception of a lump or fullness in the throat that is felt irrespective of swallowing
- C. a feeling of food "sticking" or even lodging in the chest

D. a behavior in which recently swallowed food is regurgitated and then re-swallowed repetitively

Acute gastritis is often caused by...

- A. Excessive alcohol consumption
- B. NSAID abuse
- C. Infections
- D. Any of the above

Autoantibodies typically found in autoimmune gastritis

- A. ANCA
- B. Anti ds-DNA
- C. Autoantibodies against the intrinsic factor
- D. All of the above

Biopsy is always required in...

- A. Gastric ulcers
- B. Duodenal ulcers
- C. Both conditions
- D. Neither condition

Pain associated with gastric ulcer typically appears...

- A. At night
- B. Rapidly after eating
- C. After vomiting
- D. All of the above

Typical signs of gastric ulcer

- A. Epigastric pain
- B. Nausea
- C. Loss of weight
- D. All of the above

Pain associated with duodenal ulcer typically appears...

- A. rapidly after eating
- B. at night
- C. in a constant manner
- D. any of the above

Frequent finding during physical examination in patients with peptic ulcer...

- A. Epigastric tenderness
- B. Jaundice
- C. Muscular defense
- D. Absent liver dullness

Complications of peptic ulcers include...

- A. Acute pancreatitis
- B. Gastric outlet obstruction
- C. Pernicious anemia
- D. Any of the above

Absent liver dullness in a person with peptic ulcer indicates

- A. Gastric outlet obstruction
- B. Gastrointestinal bleeding
- C. Perforation
- D. Concomitant hepatitis

Transmission of *Helicobacter pylori* includes...

- A. Animal-to-human transmission (zoonosis)
- B. Human-to-human fecal-oral transmission
- C. Human-to-human airborne transmission
- D. Any of the above

Helicobacter pylori prevalence is...

- A. higher in the young than in older individuals
- B. higher in developing countries than in industrialized countries
- C. higher in men than in women
- D. all the above are true

Screening for *H. pylori* ...

- A. is suggested in the general population
- B. may be performed with urea breath test
- C. both statements are true
- D. neither statement is true

Urea breath test is used to screen for...

- A. *H. pylori* infection
- B. Lactose intolerance
- C. Pernicious anemia
- D. Celiac disease

Schilling's test is used to screen for...

- A. *H. pylori* infection
- B. Lactose intolerance
- C. Pernicious anemia
- D. Chronic pancreatitis

Non-invasive screening for *H. pylori* infection may be performed using...

- A. Rapid urease test
- B. Urea breath test
- C. Biopsy staining
- D. Any of the above

Potential treatment regimen of *H. pylori* infection

- A. Proton pump inhibitor + ranitidin bismuth citrate
- B. Amoxicillin + clarithromycin + metronidazole
- C. Proton pump inhibitor + clarithromycin + metronidazole
- D. Proton pump inhibitor + metronidazole

Treatment duration of the antibiotic treatment for H. pylori eradication

- A. 3-5 days
- B. 7-14 days
- C. 1-2 months
- D. lifelong

Potential treatment regimen of H. pylori eradication

- A. Proton pump inhibitor + amoxicillin + clarithromycin
- B. Ranitidin-bismuth citrate + metronidazole
- C. Proton pump inhibitor + bismuth subsalicylate + tetracycline
- D. Proton pump inhibitor + amoxicillin + clindamycin

Successful eradication of H. pylori can be proved using urea breath test...

- A. immediately after eradication treatment
- B. one month after eradication treatment and stopping PPI treatment
- C. one month after eradication treatment while the person is still on PPI treatment
- D. eradication can be proved only with repeated endoscopy and rapid urease test

Endoscopy reveals gastric ulcer in a person with potential H. pylori infection. The easiest and most rapid way to diagnose H. pylori infection in this case is...

- A. Biopsy rapid urease test
- B. Serology
- C. Culture
- D. Urea breath test

Treatment of peptic ulcer may include the following, EXCEPT...

- A. NSAIDs to relieve pain
- B. Sucralfat
- C. H₂ receptor antagonists
- D. Proton pump inhibitors

The gold standard method of diagnosing peptic ulcer

- A. Endoscopy
- B. Double-contrast barium study
- C. Abdominal CT
- D. Abdominal ultrasound

Select the FALSE statement about afferent loop syndrome

- A. It may develop in patients undergone partial gastric resection with Billroth II anastomosis
- B. It may be due to bacterial overgrowth in the afferent loop
- C. It may be due to incomplete drainage of bile and pancreatic secretions from the afferent loop that is partially obstructed
- D. It is explained by rapid emptying of hyperosmolar gastric contents into the small intestine.

Early dumping syndrome is due to...

- A. bacterial overgrowth in the afferent loop
- B. incomplete drainage of bile and pancreatic secretions from the afferent loop that is partially obstructed
- C. rapid emptying of hyperosmolar gastric contents into the small intestine

D. hypoglycemia from excessive insulin release

Late dumping syndrome is due to...

- A. bacterial overgrowth in the afferent loop
- B. incomplete drainage of bile and pancreatic secretions from the afferent loop that is partially obstructed
- C. rapid emptying of hyperosmolar gastric contents into the small intestine
- D. hypoglycemia from excessive insulin release

Zollinger-Ellison syndrome refers to severe peptic ulcer formation due to...

- A. H. pylori infection
- B. Autoimmune origin
- C. NSAID abuse
- D. gastrinoma

Diagnostic procedure of Zollinger-Ellison syndrome includes the following, EXCEPT...

- A. Measurement of fasting serum gastrin levels
- B. Urea breath test
- C. OctreoScan
- D. Assessment of acid secretion

The most common cause of chronic gastroparesis

- A. H. pylori infection
- B. Diabetes mellitus
- C. Hypothyroidism
- D. Scleroderma

Typical signs and symptoms of gastroparesis, EXCEPT

- A. GI bleeding
- B. Vomiting
- C. Early satiety
- D. Loss of weight

Treatment of gastroparesis includes the following

- A. Prokinetic agents
- B. Antiemetics
- C. Gastric pacemaker
- D. Any of the above

Pernicious anemia...

- A. necessitates endoscopic evaluation of the stomach
- B. is associated with increased risk of gastric cancer
- C. may be diagnosed using the Schilling's test
- D. All statements are true.

A 35-year-old female presents with the longstanding and unchanged symptoms of abdominal discomfort, early satiety, nausea, belching and bloating. Her weight is constant. This clinical presentation is highly suspicious to...

- A. Gastric ulcer
- B. Gastric tumor

- C. Crohn's disease
- D. Functional dyspepsia

Hypertensive gastropathy is a common consequence of...

- A. Cirrhosis
- B. Systemic hypertension
- C. H. pylori infection
- D. GERD

H₂ breath test is used to screen for...

- A. Lactose intolerance
- B. H. pylori infection
- C. Chronic pancreatitis
- D. Pernicious anemia

Lactose intolerance...

- A. Is often congenital
- B. Is equivalent to milk allergy
- C. Is typically associated with steatorrhea
- D. None of the above

Treatment of lactose intolerance includes the dietary elimination of...

- A. milk
- B. fructose
- C. gluten
- D. all the above

Signs and symptoms of lactose intolerance include the following, EXCEPT...

- A. Flatulence
- B. Abdominal distension and bloating
- C. Bloody diarrhea
- D. Cramping abdominal pain

Select the FALSE statement about celiac disease!

- A. Signs and symptoms include steatorrhea and weight loss
- B. Signs and symptoms always manifest in childhood
- C. Many patients are asymptomatic.
- D. It may cause iron or folate deficiency

Autoantibodies typically found in celiac disease

- A. ANCA
- B. Anti-tissue transglutaminase(tTG)
- C. Autoantibodies against intrinsic factor
- D. All of the above

Diet of a person diagnosed with celiac disease

- A. Wheat
- B. Barley
- C. Maize
- D. Rye

Celiac disease may be associated with

- A. alopecia areata
- B. Dermatitis herpetiformis
- C. type 1 diabetes mellitus
- D. any of the above

The gold standard diagnostic procedure in celiac disease

- A. Demonstration of ANCA
- B. Duodenal endoscopy and biopsy
- C. Schilling's test
- D. H₂ breath test

Typical histologic alteration(s) in celiac disease

- A. Lack or shortening of villi (villous atrophy)
- B. Crypt inflammation and abscesses
- C. Hyperplastic inflammatory mucosa(pseudopolyps)
- D. Any of the above

Long-term complication of untreated celiac disease includes...

- A. Diabetes mellitus
- B. T-cell lymphoma
- C. Duodenal fistules
- D. Duodenal stenosis

Treatment of celiac disease includes...

- A. Decreased intake of gluten-containing food
- B. Temporary gluten-free diet
- C. Permanent gluten-free diet
- D. Surgical removal of the duodenum

An abnormal D-xylose test in a person with steatorrhea suggests...

- A. Exocrine pancreatic insufficiency
- B. Small bowel mucosal disease
- C. Both conditions
- D. Neither condition

Savary-Miller and Los Angeles staging refers to stages of...

- A. Acute pancreatitis
- B. Gastroesophageal reflux disease (GERD)
- C. Peptic ulcer
- D. Colon cancer

Signs of small-bowel bacterial overgrowth include...

- A. Bloating
- B. Steatorrhea
- C. Flatulence
- D. Any of the above

Diagnosis of small bowel bacterial overgrowth may be based on...

- A. lactulose H₂ breath test
- B. ¹⁴C-xylose breath test
- C. Both methods
- D. Neither method

Risk factors for small bowel bacterial overgrowth include...

- A. anatomic alterations of the stomach / small intestine
- B. Intestinal motility disorders
- C. achlorhydria
- D. all of the above

The Rome criteria are used to diagnose...

- A. Inflammatory bowel disease
- B. Irritable bowel syndrome
- C. Gastroesophageal reflux disease (GERD)
- D. Malabsorption syndrome

Select the FALSE statement about short bowel syndrome!

- A. It results from an extensive resection of the large bowel
- B. Diarrhea and nutritional deficiencies are common
- C. Patients often require total parenteral nutrition
- D. Necessitates intensive monitoring of electrolytes

Select the true statement about Whipple disease!

- A. It is a common condition, affecting 2-5% of the population in developing countries.
- B. It is caused by parasitic infection of the GI tract.
- C. It usually presents with diarrhea, arthralgia and weight loss.
- D. Untreated cases have good prognosis.

Clinical manifestation of ulcerative colitis typically includes...

- A. Small bowel involvement
- B. Gross rectal bleeding
- C. Significant perianal lesions
- D. Epithelioid granulomas

In ulcerative colitis...

- A. Microscopic inflammation and fissuring extend transmurally
- B. Endoscopic appearance is patchy, with discrete ulcerations separated by segments of normal-appearing mucosa.
- C. Fistulas do not occur.
- D. Abdominal mass and abscess development is common.

Select the FALSE statement about ulcerative colitis!

- A. Colonic involvement is usually right-sided.
- B. Primary disease activity is confined to the colon .
- C. Initial disease invariably involves the rectum (n.b. patient is treated with suppositories).
- D. The colonic wall is affected uninterruptedly from rectum extending proximally.

In Crohn's disease...

- A. Gross rectal bleeding is rare, except in Crohn colitis.

- B. Small bowel is involved in at least 60% of cases.
- C. Fistula, mass, and abscess development is common.
- D. All statements are true.

In Crohn's disease...

- A. Endoscopic appearance is patchy, with discrete ulcerations separated by segments of normal-appearing mucosa.
- B. Inflammation is confined to mucosa except in severe cases.
- C. Significant perianal lesions never occur.
- D. All statements are true.

Select the FALSE statement about Crohn's disease

- A. Rectosigmoid is invariably involved
- B. Fistula, mass, and abscess development is common.
- C. Perianal lesions are significant in 25–35% of cases.
- D. Epithelioid (sarcoid-like) granulomas are detected in bowel wall or lymph nodes in 25–50% of cases.

Cigarette smoking decreases the risk of...

- A. Crohn's disease
- B. Ulcerative colitis
- C. Both disorders
- D. Neither disorder

Extraintestinal disorders that usually parallel (i.e., wax and wane) with IBD flare-ups, EXCEPT

- A. erythema nodosum
- B. peripheral arthropathy (type I)
- C. erythema multiforme
- D. aphthous stomatitis

Extraintestinal disorder that is clearly associated with IBD but appears independently of IBD activity

- A. primary biliary cirrhosis
- B. primary sclerosing cholangitis
- C. type 1 diabetes mellitus
- D. autoimmune pancreatitis

A 80-year-old man presenting with painless rectal bleeding (hematochezia) is highly suggestive to...

- A. diverticulosis
- B. acute appendicitis
- C. ulcerative colitis
- D. duodenal ulceration

Extraintestinal disorders that are clearly associated with IBD but appear independently of IBD activity include

- A. ankylosing spondylitis
- B. rheumatoid arthritis
- C. Reiter's syndrome

D. All of the above

In Crohn's disease...

- A. Colonic involvement is usually left-sided
- B. Gross rectal bleeding is always present
- C. Inflammation is uniform and diffuse
- D. Microscopic inflammation and fissuring extend transmurally.

Typical initial symptoms of Crohn's disease include the following...

- A. abdominal pain
- B. anorexia
- C. fever
- D. any of the above

The most common autoantibodies in Crohn's disease

- A. Anti-Saccharomyces cerevisiae antibodies
- B. ANCA
- C. Anti-tissue transglutaminase(anti-tTG)
- D. All of the above

First-line treatment in mild Crohn's disease localized to the ileum includes...

- A. azathioprine
- B. budesonide
- C. iv. corticosteroids
- D. anti-TNF alfa agents

First-line treatment in moderate-to-severe Crohn's disease includes...

- A. 5-ASA (mesalamin)
- B. anti-CD20 agents
- C. cyclophosphamide and iv. corticosteroids
- D. oral corticosteroids

Maintenance therapy in Crohn's disease typically includes the following agents, EXCEPT

- A. Systemic corticosteroids
- B. Azathioprine
- C. Infliximab
- D. Adalimumab

Signs of toxic or fulminant colitis typically include...

- A) Constipation
- B) High fever
- C) Jaundice
- D) All of the above

Signs of toxic or fulminant colitis typically include...

- A) Rebound tenderness
- B) Sudden violent diarrhea
- C) Abdominal pain
- D) All of the above

The most common autoantibodies in ulcerative colitis

- A. Anti-Saccharomyces cerevisiae (ASCA) antibodies
- B. ANCA
- C. Anti-tissue transglutaminase(anti-tTG)
- D. Antinuclear antibodies

In fulminant ulcerative colitis the following diagnostic approach is suggested

- A) Abdominal X-ray or abdominal CT
- B) Colonoscopy
- C) Barium enema
- D) All of the above

Treatment of patients with mild, left-sided ulcerative colitis typically includes...

- A) Mesalamin (5-ASA) enemas
- B) Systemic corticosteroids
- C) Azathioprine
- D) Anti-TNF drugs

Biologic therapy in inflammatory bowel diseases includes...

- A) Anti-CD20 monoclonal antibodies
- B) mTOR-inhibitors
- C) anti-TNF alfa drugs
- D) IL-1-receptor antagonists

Treatment of patients with extensive ulcerative colitis typically includes...

- A) oral 5-ASA formulations
- B) oral corticosteroids
- C) azathioprine
- D) any of the above

Patients with fulminant ulcerative colitis should receive...

- A) Antibiotics
- B) Antidiarrheal drugs
- C) Azathioprine
- D) All of the above

A 40-year-old man returning from a half-year- long Southeast Asian trip develops megaloblastic anemia and symptoms of malabsorption. This condition is highly suggestive of...

- A. Chronic pancreatitis
- B. Tropical sprue
- C. Atrophic gastritis
- D. Celiac disease

Surgical intervention in ulcerative colitis...

- A) most commonly includes restorative proctocolectomy with ileal pouch-anal anastomosis (IPAA)
- B) Is indicated in case of massive hemorrhage or toxic megacolon.
- C) Both statements are true.
- D) Neither statement is true.

Surgical intervention in Crohn's disease...

- A. may be curative in case of total colectomy
- B. is best reserved for intestinal obstruction due to long segment fibrotic stenosis or fistulas or abscesses
- C. is necessary only in < 1% of all patients
- D. all statements are true

Colonic diverticula

- A. are true diverticula
- B. are more common in people on high-fiber diet
- C. most of them are symptomatic
- D. become more common with aging

Management of diverticulosis typically includes...

- A. high-fiber diet
- B. antidiarrheal drugs
- C. antibiotics
- D. all of the above

Diagnosis of diverticulosis requires...

- A. Abdominal X-ray
- B. Angiography
- C. Colonoscopy
- D. None of the above

Common findings in diverticulitis include...

- A. rebound tenderness
- B. nausea
- C. fever
- D. all of the above

Common findings in diverticulitis include...

- A. abdominal pain / tenderness
- B. melena
- C. jaundice
- D. all of the above

The preferred method of diagnosing diverticulitis

- A. abdominal CT
- B. colonoscopy
- C. barium enema
- D. angiography

In the majority of cases, serious diverticulitis affects the...

- A. ascending colon
- B. transverse colon
- C. rectum
- D. sigmoid colon

Complications of diverticulitis include...

- A. abscess formation
- B. fistulas
- C. free intraperitoneal perforation
- D. all of the above

A patient with diverticulitis develops pneumaturia. This symptom indicates...

- A. bowel obstruction
- B. perirectal abscess
- C. fistula development involving the bladder
- D. septicemia

In most cases, treatment of diverticulitis includes...

- A. antibiotics
- B. steroids
- C. surgical intervention
- D. all of the above

Etiology of irritable bowel syndrome may include the following factors, EXCEPT...

- A. psychologic distress
- B. visceral hyperalgesia
- C. inflammatory bowel disease
- D. exaggerated gastro-colonic reflex

Typical findings in irritable bowel syndrome, EXCEPT...

- A. Signs and symptoms usually begin in teens and 20s.
- B. Symptoms often rouse the sleeping patients.
- C. Symptoms are often triggered by food.
- D. Symptoms may recur at irregular periods.

Signs and symptoms of irritable bowel syndrome may include...

- A. Alternation of diarrhea and constipation
- B. Cramping abdominal discomfort
- C. Abdominal pain relieved by defecation
- D. Any of the above

Signs and symptoms of irritable bowel syndrome often include...

- A. steatorrhea
- B. fever
- C. extraintestinal symptoms (fatigue, fibromyalgia, chronic headache)
- D. weight loss

Alarm signs indicating organic disease rather than irritable bowel syndrome include...

- A. loss of weight
- B. vomiting
- C. rectal bleeding
- D. all of the above

Irritable bowel syndrome...

- A. is often caused by lactose intolerance

- B. may result in malabsorption
- C. both statements are true
- D. neither statement is true

Treatment of diarrhea-predominant irritable bowel syndrome may include...

- A. Tricyclic antidepressants
- B. Serotonin receptor modulation by 5HT₄-agonists
- C. Metoclopramide
- D. Domperidone

In irritable bowel syndrome...

- A. drug therapy is directed toward the dominant symptoms
- B. cognitive-behavioral therapy may help some patients
- C. both statements are true
- D. neither statement is true

Common nonspecific symptoms of liver disease include the following, EXCEPT

- A. fatigue
- B. anorexia
- C. nausea
- D. fever

Risk factor(s) of liver disorders include

- A. Alcohol
- B. Transfusion
- C. Drugs
- D. Any of the above

Fever associated with liver disease is a typical feature in

- A. hemochromatosis
- B. acute alcoholic hepatitis
- C. hepatic vein obstruction
- D. none of the above

In a person with liver disease, the term *asterixis* refers to

- A. Bilateral, asynchronous flapping of dorsiflexed hands with the arms outstretched
- B. Sweet, pungent smell associated with end-stage liver disease
- C. Muddy skin pigmentation and excoriations caused by constant pruritus
- D. Visibly dilated abdominal veins

Acute liver failure may be the consequence of

- A. *Amanita phalloides* mushroom poisoning
- B. Hepatitis B infection
- C. Wilson's disease
- D. Any of the above

Acute liver failure often develops due to

- A. Gilbert's disease
- B. Acetaminophen overdose
- C. Acute pancreatitis

D. Any of the above

Acute liver failure is characterized by

- A. Jaundice
- B. Coagulopathy
- C. Encephalopathy
- D. All of the above

Budd-Chiari syndrome is the consequence of

- A. hepatic vein thrombosis
- B. portal vein thrombosis
- C. hepatic artery thrombosis
- D. any of the above

Hepatic encephalopathy is typically associated with elevated level of

- A. ammonia
- B. urea
- C. both of them
- D. neither of them

Treatment of acute liver failure may include the following modalities, EXCEPT

- A. Fresh frozen plasma
- B. Hemodialysis
- C. Infusion of arginine hydrochloride and glutamic acid (Glutarsin)
- D. Liver transplantation

Treatment of severe coagulopathy in acute liver failure

- A. Fresh frozen plasma
- B. N-acetylcystein
- C. Infusion of arginine hydrochloride and glutamic acid (Glutarsin)
- D. All of the above

The most common cause of ascites

- A. Budd-Chiari syndrome
- B. Portal hypertension due to cirrhosis
- C. Severe alcoholic hepatitis without cirrhosis
- D. Portal vein thrombosis

Pathomechanism of ascites formation includes

- A. Higher plasma oncotic pressure
- B. decreased hepatic lymph formation
- C. increased renal Na retention
- D. all of the above

Pathomechanism of ascites formation includes

- A. Increased portal venous hydrostatic pressure
- B. Decreased renal Na retention
- C. Increased plasma oncotic pressure
- D. All of the above

A clear, straw-colored ascites with low protein concentration, low WBC count and high serum-to ascites albumin concentration gradient is a typical finding in

- A. Spontaneous bacterial peritonitis
- B. Portal hypertension
- C. Lymphatic duct occlusion
- D. Peritoneal carcinosis

If the following disorder is suspected, diagnostic paracentesis should always be performed ...

- A. Acute alcoholic hepatitis
- B. Spontaneous bacterial peritonitis
- C. Alcoholic cirrhosis
- D. Paracentesis should always be done if ascites is present

The sound during percussion in case of ascites is ...

- A. tympanic
- B. resonant
- C. dull
- D. none of the above

Treatment of ascites includes...

- A. Dietary Na restriction
- B. Diuretics (furosemide, spironolactone)
- C. Both interventions
- D. Neither intervention

Transjugular intrahepatic portosystemic shunt (TIPS) creates a connection between...

- A. Hepatic artery and jugular vein
- B. Portal vein and hepatic vein
- C. Hepatic artery and portal vein
- D. Peritoneal cavity and superior vena cava

Treatment of refractory ascites may include...

- A. autologous infusion of ascitic fluid (peritoneovenous shunt)
- B. transjugular intrahepatic portosystemic shunting (TIPS)
- C. regular therapeutic paracentesis
- D. any of the above

Spontaneous bacterial peritonitis is a common consequence of...

- A. alcoholic cirrhosis
- B. acute appendicitis
- C. diverticulitis
- D. all of the above

Spontaneous bacterial peritonitis is often caused by...

- A. E.coli
- B. S. aureus
- C. C. difficile
- D. Any of the above

Signs of spontaneous bacterial peritonitis include...

- A. absent liver dullness
- B. diffuse abdominal discomfort
- C. diarrhea
- D. all of the above

Diagnosis of spontaneous bacterial peritonitis is based on...

- A. abdominal ultrasound
- B. diagnostic paracentesis
- C. abdominal X-ray
- D. all of the above

Polymorphonuclear leukocyte (PMN) count in ascites indicating spontaneous bacterial peritonitis is...

- A. $>250/\mu\text{L}$
- B. $> 1000/\mu\text{L}$
- C. $> 3000/\mu\text{L}$
- D. $> 10\,000/\mu\text{L}$

Select the true statement(s) about spontaneous bacterial peritonitis

- A. Spontaneous bacterial peritonitis develops if abdominal wall becomes discontinuous.
- B. Signs of spontaneous bacterial peritonitis include worsening of hepatic failure and unexplained clinical deterioration.
- C. All cirrhotic patients require antibiotic prophylaxis to prevent spontaneous bacterial peritonitis.
- D. All statements are true.

Treatment of spontaneous bacterial peritonitis includes...

- A. explorative laparotomy
- B. antibiotics
- C. regular therapeutic paracentesis
- D. all of the above

Non-alcoholic steatohepatitis (NASH) typically includes...

- A. fat accumulation
- B. inflammation
- C. fibrosis
- D. all of the above

Non-alcoholic steatohepatitis is often associated with

- A. acetaminophen overdose
- B. metabolic syndrome
- C. hemochromatosis
- D. hepatitis A infection

Complications of non-alcoholic steatohepatitis include

- A. Cirrhosis
- B. Wilson's disease
- C. Budd-Chiari syndrome
- D. Chronic viral hepatitis

The most common laboratory abnormalities in non-alcoholic steatohepatitis

- A. Elevated transaminase levels
- B. Hypalbuminemia
- C. Elevated AFP level
- D. Decreased cholinesterase level

AST/ALT (GOT/GPT) ratio in non-alcoholic steatohepatitis is typically

- A. < 1
- B. 1
- C. > 1
- D. cannot be predicted

To establish the diagnosis of non-alcoholic steatohepatitis, the following conditions should be ruled out

- A. Alcoholism
- B. Chronic hepatitis B infection
- C. Chronic hepatitis C infection
- D. All of the above

Select the true statement(s) about non-alcoholic steatohepatitis

- A. Liver biopsy clearly distinguishes alcoholic and non-alcoholic steatohepatitis.
- B. Management includes discontinuation of drugs or toxins, weight loss, and treatment for dyslipidemia or hyperglycemia.
- C. Prognosis is poor: most patients develop cirrhosis or liver tumor.
- D. All statements are true.

Common cause of unconjugated hyperbilirubinemia

- A. Hemolysis
- B. Viral hepatitis
- C. Extrahepatic cholestasis
- D. All of the above

Common cause of conjugated hyperbilirubinemia

- A. Ineffective erythropoiesis
- B. Gilbert syndrome
- C. Alcoholic liver disease
- D. All of the above

Jaundice due to hemolysis is often associated with...

- A. Acholic (clay-colored) stool
- B. Conjugated hyperbilirubinemia
- C. Bilirubinuria
- D. None of the above

Jaundice due to Gilbert disease is often associated with...

- A. Bilirubinuria
- B. Acholic (clay-colored) stool

- C. Unconjugated hyperbilirubinemia
- D. All of the above

Jaundice due to viral hepatitis is often associated with...

- A. Bilirubinuria
- B. Unconjugated hyperbilirubinemia
- C. Acholic (clay-colored) stool
- D. All of the above

Jaundice associated with the absence of urobilinogen from urine suggests...

- A. Hemolysis
- B. Hepatocellular dysfunction
- C. Biliary obstruction
- D. None of the above

Jaundice associated with the absence of bilirubin from urine suggests...

- A. Hemolysis
- B. Hepatocellular dysfunction
- C. Biliary obstruction
- D. None of the above

Jaundice associated with acholic (clay-colored) stool suggests...

- A. Hemolysis
- B. Hepatocellular dysfunction
- C. Biliary obstruction
- D. Any of the above

Jaundice associated with highly elevated aminotransferase levels suggests...

- A. Hemolysis
- B. Hepatocellular dysfunction
- C. Extrahepatic cholestasis
- D. All of the above

Jaundice associated with highly elevated alkaline phosphatase and GGT and moderately elevated aminotransferases suggests...

- A. Hemolysis
- B. Hepatocellular dysfunction
- C. Cholestasis
- D. All of the above

Gilbert syndrome is typically associated with elevated level of...

- A. Bilirubin
- B. Aminotransferases (AST, ALT)
- C. Alkaline phosphatase and GGT
- D. All of the above

Gilbert syndrome...

- A. is a common condition that may affect as many as 5% of people
- B. is most often detected in young adults by finding an elevated bilirubin level that tends to increase with fasting and other stresses

- C. requires no treatment
- D. all statements are true

Portal hypertension may be caused by...

- A. cirrhosis
- B. schistosomiasis
- C. hepatic vein thrombosis
- D. any of the above

Consequences of portal hypertension include...

- A. hypertensive gastropathy
- B. visible abdominal wall collaterals
- C. rectal varices
- D. all of the above

The level of portal venous pressure gradient at which the risk of variceal bleeding increases... significantly

- A. 4 mmHg
- B. 12 mmHg
- C. 20 mmHg
- D. 30 mmHg

Complications of portal hypertension include...

- A. Sudden painless upper GI bleeding
- B. Portosystemic encephalopathy
- C. Hypersplenism
- D. All of the above

Portal hypertensive gastropathy is best diagnosed by ...

- A. Upper endoscopy
- B. Abdominal ultrasound
- C. Double-contrast barium study
- D. ERCP

Long-term drug therapy for varices that have bled involves...

- A. diuretics
- B. nonselective beta blockers
- C. ACE inhibitors
- D. all of the above

Signs of portosystemic encephalopathy include...

- A. Impaired concentration
- B. Poor handwriting
- C. Somnolence
- D. Any of the above

Routine diagnosis of portosystemic encephalopathy includes...

- A. serum ammonia levels
- B. cerebrospinal fluid examination
- C. diagnostic paracentesis

D. all of the above

Treatment of portosystemic encephalopathy includes...

- A. Diuretics
- B. Oral nonabsorbable antibiotics
- C. Non-selective beta blockers
- D. Anti-diarrheal drugs

Hepatorenal syndrome...

- A. refers to the structural damage of the kidneys in advanced liver disease
- B. usually necessitates hemodialysis
- C. often has rapid progression and fatal outcome
- D. all statements are true

In males, alcoholic cirrhosis is often associated with...

- A. gynecomastia
- B. erectile dysfunction
- C. decreases spermatogenesis
- D. all of the above

A young woman taking ciprofloxacin to cure her pyelonephritis develops malaise and right upper quadrant abdominal pain, associated with marked elevation in aminotransferase levels.

This is a typical presentation of...

- A. hepatorenal syndrome
- B. drug-induced liver injury (DILI)
- C. non-alcoholic steatohepatitis
- D. any of the above

Treatment of acetaminophen-related liver injury should include...

- A. Nonselective beta blockers
- B. Diuretics
- C. N-acetylcystein
- D. Deferoxamin

Disproportionally elevated aminotransferase levels with an AST to ALT (GOT to GPT) ratio being > 2 is characteristic of...

- A. alcoholic liver injury
- B. non-alcoholic steatohepatitis
- C. viral hepatitis
- D. all forms of hepatitis

The main risk factors in alcoholic liver disease involve...

- A. Quantity and duration of alcohol use
- B. Gender
- C. Nutritional status
- D. All of the above

Symptoms of alcoholic fatty liver typically include...

- A. enlarged and smooth nontender liver
- B. fatigue, fever, jaundice, right upper quadrant pain and tender hepatomegaly

- C. small liver with signs of portal hypertension
- D. any of the above

Symptoms of acute alcoholic hepatitis typically include...

- A. enlarged and smooth nontender liver
- B. fatigue, fever, jaundice, right upper quadrant pain and tender hepatomegaly
- C. small liver with signs of portal hypertension
- D. any of the above

Symptoms of alcoholic cirrhosis typically include...

- A. enlarged and smooth nontender liver
- B. fatigue, fever, jaundice, right upper quadrant pain and tender hepatomegaly
- C. small liver with signs of portal hypertension
- D. any of the above

Pathophysiology of alcoholic liver disease includes...

- A. hepatic fat accumulation
- B. increased absorption of endotoxins from the gut
- C. oxidative damage
- D. all of the above

Laboratory alterations in alcoholic cirrhosis often include...

- A. microcytic anemia
- B. elevated GGT
- C. decreased aminotransferases
- D. all of the above

Child-Pugh scoring system is used to assess the severity of...

- A. cirrhosis
- B. GERD
- C. colon cancer
- D. acute pancreatitis

Transmission is primarily fecal-oral for...

- A. hepatitis A virus
- B. hepatitis B virus
- C. hepatitis C virus
- D. hepatitis D virus

Hepatitis C virus is most commonly transmitted through...

- A. sexual intercourse
- B. blood
- C. insect bite
- D. fecal-oral route

Chronic infection typically occurs in case of...

- A. hepatitis A infection
- B. hepatitis B infection
- C. hepatitis E infection
- D. all of the above

Hepatitis D can replicate...

- A. alone
- B. only in the presence of hepatitis B
- C. only in the presence of hepatitis C
- D. in the presence of either hepatitis B or C

Hepatitis E infection often causes fulminant hepatitis in...

- A. pregnant women
- B. young children
- C. the elderly
- D. the general population

Prodromal symptoms of viral hepatitis infection include...

- A. profound anorexia
- B. right upper quadrant abdominal pain
- C. nausea and vomiting
- D. all of the above

Jaundice in viral hepatitis...

- A. is usually the first sign of the disease
- B. is often associated with the regression of prodromal symptoms
- C. typically lasts 1-2 days
- D. all statements are true

The highest rate of chronicity is associated with...

- A. hepatitis A infection
- B. hepatitis B infection
- C. hepatitis C infection
- D. hepatitis E infection

Diagnosis of acute hepatitis A infection involves the detection of...

- A. Hepatitis A virus surface antigen (HAsAg)
- B. anti-HAV IgM
- C. anti-HAV IgG
- D. any of the above

IgG anti-HAV suggests...

- A. acute hepatitis A infection
- B. previous exposure to hepatitis A
- C. chronic hepatitis A infection
- D. none of the above

Routine diagnosis of acute hepatitis B infection involves the detection of...

- A. Hepatitis B surface antigen (HBsAg)
- B. anti-HBs
- C. HBcAg
- D. any of the above

The presence of HBsAg and the absence of anti-HBs...

- A. always suggests acute infection
- B. always suggests chronic infection
- C. may be associated with either acute or chronic infection
- D. indicates proper immunization

Routine diagnosis of hepatitis C infection involves...

- A. Hepatitis C surface antigen (HCSAg)
- B. Anti-HCV
- C. HCV DNA
- D. Any of the above

The presence of anti-HCV suggests...

- A. always acute, never chronic hepatitis C infection
- B. always chronic, never acute hepatitis C infection
- C. proper immunization and protection against HCV infection
- D. acute or chronic hepatitis C infection

Preexposure prophylaxis is NOT available for...

- A. hepatitis A infection
- B. hepatitis B infection
- C. hepatitis C infection
- D. hepatitis E infection

Infants born to HBsAg-positive mothers should receive...

- A. only hepatitis B immune globulin (HBIG)
- B. only hepatitis B vaccination
- C. both of the above
- D. neither of the above, since these infants have no risk of infection

Treatment of chronic hepatitis B virus infection involves...

- A. corticosteroids
- B. pegylated interferon alpha
- C. ribavirin
- D. hepatitis B immune globulin (HBIG)

Treatment of chronic hepatitis C virus infection may involve...

- A. corticosteroids
- B. anti-TNF alpha drugs
- C. ribavirin
- D. all of the above

Autoimmune hepatitis is usually associated with elevated levels of...

- A. anti-mitochondrial antibody
- B. anti smooth muscle antibody
- C. ANCA
- D. tissue transglutaminase antibody

Treatment of autoimmune hepatitis involves...

- A. corticosteroids
- B. pegylated interferon alpha

- C. ribavirin
- D. anti TNF alpha drugs

Signs of acute hepatic venous outflow obstruction typically include...

- A. tender hepatomegaly
- B. ascites
- C. nausea and vomiting
- D. all of the above

Diagnosis of hepatic venous outflow obstruction is based on...

- A. Abdominal Doppler ultrasonography
- B. ERCP
- C. Upper endoscopy
- D. Liver biopsy

Treatment of hepatic venous outflow obstruction includes...

- A. anticoagulation
- B. inhibition of thrombocyte aggregation
- C. corticosteroids
- D. all of the above

The “5F rule – female, fair, fat, forty, fecund” summarizes risk factors of

- A. acute pancreatitis
- B. peptic ulcer
- C. cholelithiasis
- D. diverticulosis

The most common form of gallstones in the Western world is

- A. cholesterol stones
- B. black pigment stones
- C. brown pigment stones
- D. all stones are equally common

In the biliary tract, infection, inflammation or parasitic infestation favor the formation of

- A. cholesterol stones
- B. black pigment stones
- C. brown pigment stones
- D. none of the stones

True statements about symptoms and signs of gallstones

- A. Most individuals (~80%) are asymptomatic
- B. The most common symptom is biliary colic
- C. Complications include cholecystitis
- D. All of the above are true

Pain associated with biliary colic

- A. characteristically begins in the right upper quadrant
- B. typically remains at steady intensity for >24 h
- C. is always associated with fever and chills
- D. all of the above

Signs and symptoms of biliary colic typically include

- A. enlarged, palpable, painless gallbladder
- B. signs of peritoneal irritation
- C. nausea and vomiting
- D. absent liver dullness

Gas, bloating and nausea...

- A. occur only in cholecystitis, not in cholelithiasis.
- B. are specific signs of gallbladder disease
- C. are common nonspecific signs, having about equal prevalence in cholelithiasis, peptic ulcer disease, and functional GI disorders
- D. only rarely occur in gallbladder disease

Diagnosis of gallstones is based on

- A. ERCP
- B. ultrasonography
- C. elevated alkaline phosphatase levels
- D. cholescintigraphy

Complications of gallstones include

- A. cholangitis
- B. pancreatitis
- C. choledocholithiasis
- D. all of the above

Substance used for gallstone dissolution

- A. ursodeoxycholic acid
- B. 5-aminosalicylate
- C. azathioprine
- D. cholestyramine

Cholecystectomy...

- A. effectively prevents future biliary colic
- B. is warranted in all patients with gallstones, regardless of symptoms
- C. requires strict dietary limitations
- D. all statements are true

Acute cholecystitis develops...

- A. in ~95% in the presence of gallstones, and in ~5% without stones
- B. in ~50% in the presence of gallstones, and in ~50% without stones
- C. in ~5% in the presence of gallstones, and in ~95% without stones
- D. only in the presence of gallstones

Typical signs and symptoms of cholecystitis include

- A. severe and steady pain lasting > 6h
- B. vomiting
- C. low-grade fever
- D. all of the above

Murphy's sign refers to...

- A. palpable, painless, distended gallbladder
- B. deep inspiration exacerbates the pain during palpation of the right upper quadrant and halts inspiration
- C. livid discoloration of skin around the umbilicus
- D. the combination of jaundice, fever and right upper quadrant pain

Gallstone ileus develops if...

- A. gallstones pass from the gallbladder into the biliary tract and block the pancreatic duct
- B. gallstone becomes impacted in the cystic duct and compresses and obstructs the common bile duct
- C. a large stone erodes the gallbladder wall, creating a fistula into the small bowel and results in small bowel obstruction
- D. free perforation and peritonitis occurs

Acute acalculous cholecystitis...

- A. is typically associated with critical illness (e.g., major surgery, burns, sepsis, or trauma)
- B. has high mortality
- C. both statements are true
- D. neither statement is true

The term *cholecystectomy à froid* refers to...

- A. early cholecystectomy done during the first 24 to 48 h of acute cholecystitis
- B. deferred cholecystectomy done after the resolution of cholecystitis (≥ 6 wk later)
- C. cholecystectomy performed after the dissolution of gallstones
- D. laparoscopic cholecystectomy

In case of acute cholecystitis, cholecystectomy...

- A. is best done between 3 to 7 days after the onset of the disease
- B. should always be done during the first 24 to 48 hrs
- C. should always be deferred until cholecystitis resolves (≥ 6 wk later)
- D. none of the statements is true

Ultrasonographic finding of gallstones in slightly thick-walled, shrunken gallbladder suggests

- A. acute cholecystitis
- B. chronic cholecystitis
- C. cholangitis
- D. cholangiocarcinoma

Choledocholithiasis may be the consequence of

- A. Stone formation in the bile duct
- B. Migration of stones formed in the gallbladder into the bile duct
- C. Residual stones, which are missed at the time of cholecystectomy
- D. All of the mechanisms above

Charcot's triad includes...

- A. abdominal pain, jaundice, and fever
- B. jaundice, melena and loss of weight
- C. abdominal pain, bloating and nausea
- D. diarrhea, fever and anorexia

Charcot's triad is characteristic of...

- A. acute pancreatitis
- B. cholangitis
- C. diverticulitis
- D. all of the above

Laboratory findings in acute cholangitis typically include elevated levels of

- A. WBC
- B. conjugated bilirubin
- C. alkaline phosphatase
- D. all of the above

Retained stones in the common bile duct can be effectively visualized by

- A. abdominal ultrasound
- B. magnetic resonance cholangiopancreatography (MRCP) or ERCP
- C. all of the methods
- D. none of the methods

Ultrasonography in acute cholangitis typically and accurately displays

- A. dilated extrahepatic bile ducts
- B. gallstones in the extrahepatic bile ducts
- C. shrunken, fibrotic gallbladder
- D. all of the above

Treatment of acute cholangitis includes

- A. ERCP and sphincterotomy
- B. broad-spectrum antibiotics
- C. both interventions
- D. neither intervention

Primary sclerosing cholangitis is often associated with

- A. ulcerative colitis
- B. primary biliary cirrhosis
- C. diverticulosis
- D. chronic pancreatitis

Signs and symptoms of primary sclerosing cholangitis typically include

- A. progressive fatigue
- B. jaundice
- C. pruritus
- D. all of the above

Primary sclerosing cholangitis....

- A. is a benign disease without progression
- B. is best treated with corticosteroids
- C. can be cured by total colectomy, if associated with ulcerative colitis
- D. increases the risk of cholangiocarcinoma

Laboratory findings in primary sclerosing cholangitis typically include elevated levels of the following substances, EXCEPT

- A. alkaline phosphatase
- B. pANCA
- C. antimitochondrial antibodies
- D. IgM

ERCP displaying multiple strictures and dilations in the intrahepatic and extrahepatic bile ducts is characteristic of...

- A. primary sclerosing cholangitis
- B. autoimmune pancreatitis
- C. liver cirrhosis
- D. acute cholecystitis

Treatment modalities applied in primary sclerosing cholangitis include

- A. liver transplantation
- B. ursodeoxycholic acid
- C. ERCP dilation and stenting of a dominant stricture
- D. all of the above

Acute pancreatitis may be triggered by...

- A. heavy alcohol intake
- B. hypertriglyceridemia
- C. certain viral infections
- D. any of the above

Pathophysiology of acute pancreatitis may include

- A. Pancreatic ductal obstruction by protein plugs
- B. Activation of pancreatic enzymes within the gland itself
- C. Activation of the complement system and the inflammatory cascade, producing cytokines
- D. All of the above

Acute pancreatitis is always associated with...

- A. Necrosis and hemorrhage of the gland
- B. Inflammation and edema formation
- C. Infection of necrotic pancreatic tissue by enteric bacteria
- D. All of the above

Select the FALSE statement about pain in acute pancreatitis

- A. It is typically a steady, boring upper abdominal pain
- B. It is often severe enough to require large doses of parenteral opioids
- C. It usually persists for less than 24 hrs
- D. Sitting up and leaning forward may reduce pain

Common finding in acute pancreatitis, EXCEPT

- A. Muscular defense
- B. Nausea and vomiting
- C. Hypoactive bowel sounds
- D. Upper abdominal distension

Cullen sign refers to...

- A. a palpable, painless, distended gallbladder
- B. deep inspiration exacerbates the pain during palpation of the right upper quadrant and halts inspiration
- C. a livid discoloration of skin around the umbilicus
- D. the combination of jaundice, fever and right upper quadrant pain

A positive Cullen sign is characteristic of...

- A. hemorrhagic pancreatitis
- B. acute cholangitis
- C. acute cholecystitis
- D. pancreatic cancer

Laboratory findings in acute pancreatitis may include elevated levels of

- A. lipase
- B. WBC
- C. triglycerides
- D. any of the above

The most sensitive imaging technique for the visualization of necrosis, fluid collections and pseudocysts associated with acute pancreatitis are...

- A. abdominal ultrasound
- B. abdominal X-ray
- C. abdominal CT scan
- D. ERCP

In acute pancreatitis imaging may reveal...

- A. localized ileus in the left upper quadrant on abdominal X-ray
- B. left-sided atelectasis or a pleural effusion on chest X-ray
- C. overlying gas obscuring the pancreas on abdominal ultrasound
- D. any of the above

Treatment of acute pancreatitis always includes the following, EXCEPT

- A. iv. fluid resuscitation
- B. parenteral analgesics
- C. antibiotics
- D. fasting

Fluid resuscitation in acute pancreatitis...

- A. is not necessary
- B. should not exceed 1 to 2 L/day
- C. is essential, up to 6 to 8 L/day of fluid may be required
- D. is preferably done orally

ERCP in acute pancreatitis...

- A. is always contraindicated
- B. should be performed in patients with gallstone pancreatitis, who do not improve after 24h of treatment
- C. should be performed in patients with alcoholic pancreatitis, who do not improve after 24h of treatment

D. should be performed in all cases

The most common cause of chronic pancreatitis in the Western world is...

- A. primary sclerosing cholangitis
- B. alcoholism
- C. autoimmune pancreatitis
- D. cholelithiasis

Signs and symptoms of chronic pancreatitis include

- A. decreased glucose tolerance
- B. steatorrhea
- C. episodic abdominal pain
- D. all of the above

The term *steatorrhea* refers to ...

- A. passing undigested muscle fibers in the feces
- B. passing large-volume, greasy, foul-smelling stool
- C. passing digested blood in the stool
- D. passing undigested blood in the stool

In everyday clinical practice, the diagnosis of chronic pancreatitis is typically based on...

- A. various exocrine tests (Lundh tests, pancreolauryl test etc...)
- B. elevated levels of amylase and lipase
- C. detection of pancreatic calcification or ductal dilations and strictures
- D. quantification of lipids in the stool

Treatment of chronic pancreatitis may include

- A. pancreatic enzyme supplementation
- B. alcohol abstinence
- C. pancreas resection
- D. all of the above

Select the FALSE statement about pain relief in chronic pancreatitis

- A. It may be best achieved by NSAIDs
- B. It may require increased amounts of opioids, with the threat of addiction
- C. It may include denervation of the celiac plexus
- D. It may be achieved by pseudocyst decompression surgery

The term *melena* refers to...

- A. passing undigested muscle fibers in the feces
- B. passing large-volume, greasy, foul-smelling stool
- C. passing digested blood in the stool
- D. passing undigested blood in the stool

The term *hematochezia* refers to...

- A. passing undigested muscle fibers in the feces
- B. passing large-volume, greasy, foul-smelling stool
- C. passing digested blood in the stool
- D. passing undigested blood in the stool

The site of upper gastrointestinal bleeding is located above the...

- A. pyloric ring
- B. ligament of Treitz
- C. ileocecal valve
- D. hepatic flexure

Upper GI bleeding > 200 ml always results in

- A. hematemesis
- B. melena
- C. both hematemesis and melena
- D. hematochezia

Treatment of variceal bleeding may include

- A. Iv. octreotid injection
- B. Endoscopic banding of varices
- C. Mechanical compression of bleeding varices with a Sengstaken-Blakemore tube
- D. Any of the above

Common cause of lower GI bleeding in the elderly patient

- A. angiodysplasia
- B. inflammatory bowel disease
- C. irritable bowel syndrome
- D. any of the above

The risk of variceal rupture is increased if ...

- A. portal/systemic pressure gradient is >12 mm Hg
- B. varices exhibit red color sign ("cherry red spots")
- C. in both conditions
- D. in neither condition

Small bowel GI bleeding distal to the proximal jejunum may be visualized by

- A. Upper endoscopy
- B. Colonoscopy
- C. Enteroscopy/Capsule endoscopy
- D. Any of the above

If colonoscopy cannot visualize the source and ongoing lower GI bleeding is sufficiently rapid (> 0.5 to 1 mL/min), the optimal next diagnostic step is...

- A. angiography
- B. enteroscopy
- C. capsule endoscopy
- D. explorative laparotomy

Classic symptoms of acute appendicitis include

- A. periumbilical pain that shifts to the right lower quadrant
- B. nausea
- C. anorexia
- D. all of the above

Pain felt in the right lower quadrant with palpation of the left lower quadrant (Rovsing sign) suggests...

- A. acute appendicitis
- B. acute pancreatitis
- C. cholelithiasis
- D. irritable bowel syndrome

Select the true statement about acute appendicitis

- A. Abdominal ultrasound never visualizes the inflamed appendix.
- B. Appendicitis remains primarily a clinical diagnosis.
- C. The suspicion of acute appendicitis always necessitates abdominal CT scan.
- D. Clinical diagnosis must be confirmed with colonoscopy.

Acute appendicitis...

- A. does not necessitate the administration of antibiotics
- B. requires surgical intervention only in case of perforation
- C. both statements are true
- D. neither statement is true

Hyperactive, high-pitched bowel sounds are characteristic of ...

- A. intestinal obstruction
- B. acute appendicitis
- C. acute intestinal perforation
- D. all of the above

On plain X-ray, ladderlike series of distended small-bowel loops and fluid levels in the bowel suggest...

- A. intestinal obstruction
- B. intestinal bleeding
- C. intestinal perforation
- D. none of the above

The term *miserere* refers to...

- A. coffee-ground vomiting due to exposure of blood to gastric juice
- B. vomiting of small bowel content due to intestinal obstruction
- C. absent bowel sounds due to paralytic ileus
- D. abdominal muscle guarding due to peritonitis

The diagnostic procedure of choice in acute mesenteric ischemia is...

- A. CT angiography
- B. abdominal ultrasound
- C. colonoscopy
- D. double-contrast barium enema

The first sign of acute mesenteric ischemia is...

- A. severe abdominal pain
- B. abdominal muscle guarding
- C. absent bowel sounds
- D. fever

Treatment of acute abdominal perforation

- A. Necessitates immediate surgical intervention
- B. antibiotics and deferred surgical intervention performed after the resolution of peritonitis (> 6 wks)
- C. both options are feasible
- D. neither option is suggested

Non-surgical causes of acute abdomen include

- A. lead poisoning
- B. acute porphyria
- C. sickle cell crisis
- D. all of the above