

GIT Block

Revision Questions for the 2nd week



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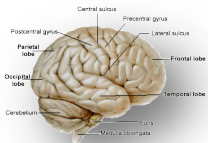
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Anatomy:

1-Peyer's patches we see it in which part of small intestine:

- A. -Duodenum
- B. -Jejunum
- C. -Ileum

Answer:C

2-posterior to the horizontal part of duodenum:

- A. -Abdominal aorta
- B. -Gastroduodenal artery
- C. -Right kidney

Answer:A

All of these parts of large intestine present in abdomen except ?

- A. appendix
- B. colon
- C. cecum
- D. sigmoid

Answer:D

Which one of these large intestine's parts are DEVOID OF PERITONEAL ?

- A. anal canal
- B. colon
- C. Sigmoid
- D. upper part of rectum

Answer:A

The Mc'Burney's point represented ?

- A. base of appendix
- B. anterior surface of appendix
- C. colon
- D. cecum

Answer:A

The blood supply of Lower part of anal canal is ?

- A. superior rectal
- B. inferior rectal
- C. superior mesentery
- D. inferior mesentery

Answer: B

The nerve supply of transverse colon is ?

- A. sympathetic
- B. vagus
- C. pelvic splanchnic nerve
- D. -all of these

Answer:D

All of these structure are posterior to Descending colon except ?

- A. -Left kidney
- B. -Quadratuslumborum
- C. -Iliacus
- D. right kidney

Answer:D

The posterior structures to transverse colon are ?

- A. pancreas
- B. -A&C
- C. second part of duodenum
- D. first part of duodenum

Answer:B

The Beginning of rectum at level ?

- A. S2
- B. -S4
- C. -S3
- D. -L3

Answer:C

In which one of the following regions lies McBurney's point?

- A. Right iliac fossa
- B. Hypogastrium
- C. Right lumbar region
- D. Umbilical region

Answer:A

Which one of the following parts of large intestine is found in the pelvis?

- A. Transverse colon
- B. Anal canal
- C. Rectum
- D. Cecum

Answer: C



Histology :

All of these are parts of large intestine except ?

- A. –Appendix,
- B. –Cecum,
- C. –Colon
- D. ileum

Answer: D

Which one of these are not present in mucosa of large intestine ?

- A. -villi
- B. paneth cell
- C. -lymphatic nodule
- D. a&b

Answer: D

Which one of these features are only present in muscularisexterna of large intestine ?

- A. tow layer of muscle
- B. circular muscle
- C. -longitudinal layer is not continuous
- D. longitudinal layer continuous

Answer: C

The appendices epiploicae is presenting in ?

- A. mucosa
- B. adventia
- C. serosa
- D. submucosa

Answer: C

the small intestine is sterile because it contain which type of cells:

- A. -Enteroendocrine cells
- B. -Paneth cells
- C. -Goblet cells

Answer: B

2- Brunner's glands is in the submucosa of:

- A. -Ileum
- B. -Jejunum
- C. –Duodenum

Answer: C



Biochemistry :

Digestion of protein and carbohydrate

Which ONE of the following pancreatic enzymes can activate itself:

- A. Trypsin
- B. Carboxypeptidase
- C. Chymotrypsin
- D. Elastase

Answer: A

Which one of the following hormones is secreted in the presence of partially digested protein & lipid in upper small intestine:

- A. Pepsin
- B. Rennin
- C. CCK
- D. Secretin

Answer: C

Which ONE of the following bonds in glycogen will be hydrolyzed by α -Amylase:

- A. α - (1,4) glycosidic bond
- B. β -(1,4) glycosidic bond
- C. β -(1,6) glycosidic bond
- D. α -(1,6) glycosidic bond

Answer: A

Absorption of monosaccharide occur in:

- A. Stomach
- B. Large intestine
- C. Pancrease
- D. Duodenum & upper jujenum

Answer: D

In case of pancreatic insufficiency the digestion & absorption of fat & protein is incomplete. Which one of the following is a manifestation related to this case:

- A. Faltulace
- B. Cramps
- C. Steatorrhea

Answer: C

Dietary cellulose can't be digested due to absence of:

- A. Enzyme cleave β -(1,4) bonds
- B. Enzyme condense β -(1,4) bonds
- C. Pancreatic α -Amylase
- D. GLUT 5

Answer: A

Which one of the following enzymes is an exopeptidase:

- A. Trypsin
- B. Elastase
- C. Carboxypeptidase
- D. Chymotrypsin

Answer: C

Which on of gastric juice components important for protein digestion?

- A. -Hydrochloric acid
- B. -Pepsin
- C. -gastrin

Answer: A & B

Which one of these enzymes is responsible for activates pancreatic zymogen (proteases)?

- A. -Trypsin
- B. -Enteropeptidase
- C. -Carboxypeptidases
- D. -Elastase (endopeptidase)

Answer: A

All of these enzymes are endopeptidase except ?

- A. Trypsin
- B. Chymotrypsin
- C. Elastase
- D. Carboxypeptidases

Answer: D

Oligopeptides are cleaved into free amino acids and smaller peptides by ?

- A. -intestinal aminopeptidase
- B. -Enteropeptidase
- C. -Trypsin
- D. -Chymotrypsin

Answer: A

The Sites for digestion of dietary carbohydrates is?

- A. mouth
- B. intestine lumen
- C. stomach

Answer: A & C

The lactose is converted to Galactose& Glucose by ?

- A. -Lactase
- B. -galactosidase
- C. sucrase

Answer: A & B

Which one of these substrate can not digest ?

- A. -cellulose
- B. sucrose
- C. oligodisaccharides
- D. starch

Answer: A

The transport of fructose from intestinal lumen to enterocyte occur by ?

- A. GLUT 5
- B. GLUT 2
- C. active transport
- D. non of them

Answer: A

- Pancreatic proteases , like pepsin, are synthesized and secreted as inactive zymogens
- In pancreatic insufficiency, the digestion and absorption of fat & steatorrhea protein is incomplete & appearance of undigested proteins in the feces

- amylase acts on dietary glycogen & starch in the mouth
- amylase continues the process of polysaccharide digestion in small intestine

- Lactose intolerance is due to deficiency of lactase enzyme and causes abdominal cramps, diarrhea & flatulence also Abnormal digestion of Lactose

Biochemical Aspects of Digestion of Lipids

1-Which one of the following enzymes help in digestion of lipid in the stomach:

- A. Cholesterol esterase
- B. Lingual lipase
- C. Pancreatic lipase
- D. Lysophospholipase

Answer: B

2-Emulsification of lipid in small intestine is caused by:

- A. Peristalsis
- B. Bile salts
- C. A and B

Answer: C

3-Which of the following hormones activate the secretion of pancreatic enzymes:

- A. Gastrin
- B. cholecystokinin (CCK)
- C. secretin
- D. GIP

Answer: B

4-Which of the following hormones will help in neutralize the pH in the Small Intestine by Pancreas:

- A. Gastrin
- B. cholecystokinin (CCK)
- C. secretin
- D. GIP

Answer: C

5-Mixed Micelles has the end products of which of the following:

- A. Lipid
- B. Bile salts
- C. Fat-soluble Vitamins
- D. All

Answer: D

6-Milky-appearance of serum caused by:

- A. Chylomicrons
- B. Proteins
- C. Iron
- D. Carbohydrates

Answer: A

7-Characteristic abnormality in Cystic Fibrosis , defect in transport of :

- A. Na and K
- B. Na and Cl
- C. Cl and K
- D. Cl and Ca

Answer: B

Which on of these sites are responsible for Lipid Digestion ?

- A. stomach
- B. large intestine
- C. small intestine
- D. -a&c

Answer: D

The digestion in small intestine is hormonally controlled by ?

- A. Cholecystokinin
- B. -Secretin
- C. -Motilin
- D. a&b

Answer: D

Pancreatic Enzymes for Digestion of Lipids is ?

- A. -Pancreatic Lipase and co-lipase
- B. -Cholesterol esterase
- C. -Phospholipase A2
- D. -Lysophospholipase
- E. all

Answer: E Pancreatic lipase inhibited by Orlistat, an antiobesity drug

Mixed micelle includes all of these of the following except?

- A. -bile salts
- B. -fat-soluble vitamins
- C. long chain fatty acids
- D. short medium fatty acids

Answer: C

- Emulsification of lipids occurs in duodenum, helped by peristalsis and bile salts
- Intestinal digestion of lipids by pancreatic enzymes
- Lipid absorption by formation of mixed micelles

incomplete digestion and absorption of fat => Liver diseases, pancreatic insufficiency, or intestinal diseases
&steatorrhea (protein & appearance of undigested proteins in the feces (Malabsorption syndrome)



Embryology :

1-The ventral pancreatic bud forms:

- A. -Inferior part of head of pancreas.
- B. -Body of pancreas.
- C. -Tail of pancreas.

Answer: A

2-which one of these anomalies mimics the appendicitis:

- A. -Umbilical Hernia
- B. Ileal Diverticulum
- C. -Anular pancreas

Answer: B

3- The superior mesenteric artery supply:

- A. midgut
- B. -foregut
- C. -hindgut

Answer: A



Physiology :

Physiology of pancreas

Which of the following is secreted by endocrine islets of Langerhans of the pancreas:

- A. somatostatin.
- B. CCK
- C. Glucagone
- D. Proteolytic enzymes

Answer: A & C

The greater bulk of electrolytes in the pancreatic juice is in the form of:

- A. Na^+
- B. K^+
- C. Ca^+
- D. NaHCO_3
- E. HCO_3^-

Answer: D

The concentration of Na^+ and HCO_3^- in pancreatic secretion compared to plasma is:

- A. Both are equal because pancreatic fluid is isotonic.
- B. HCO_3^- in pancreatic juice is higher than that in plasma while Na^+ is equal.
- C. Both are higher in pancreatic juice.
- D. Na^+ in pancreatic juice is higher than that in plasma while HCO_3^- is equal.

Answer: B

Which of the following is needed for Pancreatic lipase to break TG into MG & FA:

- A. colipase
- B. enteropeptidase (enterokinase)
- C. activated trypsin
- D. bile salts

Answer: A & D Pancreatic lipase is the most important fat splitting enzyme.

The action of secretin hormone on pepsin is:

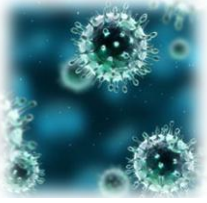
- A. stimulates pepsin secretion.
- B. Inhibits pepsin secretion
- C. Has no effect on pepsin

Answer: A secretin inhibits gastric acid secretion and gastrin release, but it stimulates pepsin secretion.

Which of the following is right concerning Cholecystokinin (CCK):

- A. Its Main stimulus is the presence of AA and FA& It acts on pancreatic acinar cells.
- B. Its Main stimulus is the presence of AA and FA& It acts on pancreatic duct cells
- C. Its Main stimulus is high acidity & It acts on pancreatic duct cells
- D. Its Main stimulus is high acidity & It acts on pancreatic acinar cells

Answer: A



Microbiolog

H.Pylori

Q 1. Which of the following is the most accurate statement regarding H pylori infection?

- A. It is more common in developed than underdeveloped countries.
- B. It is associated with the development of colon cancer.
- C. It is believed to be the cause of nonulcer dyspepsia.
- D. The route of transmission is believed to be sexually transmitted.
- E. It is believed to be a common cause of both duodenal and gastric ulcers.

Answer: E

Q2.Helicobacter pylori:

- A. is a Gram positive bacterium
- B. is associated with over-crowding and lower socio-economic class
- C. is rarely eradicated by a combination of proton pump inhibitor and antibiotics
- D. is a common cause of food poisoning

Answer: B

q3)All drugs can be used in the treatment of H. Pylori infection except

- A. Omeprazole
- B. b) Metronidazole
- C. Amoxicillin
- D. Mosapride

Answer: D

q4) Where is the best place to biopsy H. pylori?

- A. Gastric body
- B. Antrum
- C. Lesser curvature
- D. Greater curvature
- E. Lower esophageal sphincter

Answer: B

The best place is "body of stomach" but in lecture was reported antrum. So, the answer will be "b" regarding to lecture.

5) A patient H.PYLORI infection, he received drug after that, H.pylori detected by :

- A. a)rapid urease test
- B. b)urea breath test
- C. c) Polymerase chain reaction (PCR)

Answer: B

6)What enzyme possessed by Helicobacter pylori helps to neutralize stomach acid and whose presence is tested for in biopsy specimens?

- A) Coagulase
- B) Urease
- C) Hyaluronidase
- D) DNase
- E) Catalase

Answer: B

Normal flora & introduction to infectious diarrhea

1) Which of the following statement regarding Campylobacter jejuni is not correct?

- A. It is commonly cultured in antibiotic containing media
- B. Incubation temperature is 42°C
- C. It is cultured in an atmosphere containing 5% O₂ and 10% CO₂. It is a normal flora of intestine.

Answer: C

2) which type of organism can cause Guillain–Barré syndrome and Reactive arthritis?

- A. Clostridium difficile
- B. Clostridium perfringens
- C. Campylobacter jejuni
- D. Yersinia enterocolitica

Answer: C

3: patient presented with Mimic appendicitis symptoms which is the most likely Organism ?

- A. Yersinia enterocolitica
- B. Campylobacter jejuni
- C. Listeria monocytogenes
- D. Endamebahistolytica

Answer: A

4)A 30 year old woman has non bloody diarrhea for the past 14 hours. Which one of the to following organisms is least likely to cause this illness?

- A. Streptococcus pyogens
- B. Clostridium difficile
- C. Shigelladysenteriae
- D. Salmonella enteritidis

Answer: A

Cholera

1)Cholera toxin increases the activity of what enzyme in human intestinal cells?

- A) Adenylcyclase
- B) DNase
- C) Coagulase
- D) cAMP
- E) cGMP

Answer: A

2)Vibrio Cholera usually is transported using

- A. a.VR Medium
- B. b.BSA Medium
- C. c.GTTA Medium
- D. d.None of the above

Answer: A

3)in the small intestine, cholera toxin acts by:

- A. A. ADP-ribosylation of the G regulatory protein
- B. Inhibition of adenylcyclase
- C. C. Activation of GTPase
- D. D. Active absorption of NaCl

Answer: A

Cholera toxin increases **adenylcyclase** activity by irreversible ADP ribosylation of GTP binding domain of adenylcyclase.

1)Which type of bacteria enters our bodies through the ingestion of food contaminated with fecal matter?

- A. *Escherichia coli* O157:H7
- B. *Campylobacter jejuni*
- C. *Salmonella*
- D. Caliciviruses

2) patient presented with bacillary dysentery, tenesmus, WBC what is the Gram stain of the pathogenic organism ?

- A. a) Gram negative bacilli lactose fermenter
- B. b) Gram negative bacilli non lactose fermenter
- C. c) Gram negative facultative anaerobic bacilli

Answer: B pathogenic organism is *Shigella* , 'c' for salmonella

3) Which of the following bacteria has the lowest 50% infective dose (ID50)?

- A. *Campylobacter jejuni*
- B. *Salmonella typhi*
- C. *Vibrio cholera*
- D. *Shigella sonnei*

Answer: D

1) patient present with painless haematuria , burning micturition and inflammation of bladder what is the pathogenic organism ?

- A. *S. haematobium*
- B. *S. mansoni*
- C. c) *Fasciola hepatica*

Answer: A

2) Dysentery is not caused by:

- A. a) Amebiasis
- B. b) *Shigella*
- C. c) Schistosomiasis
- D. d) Giardiasis

Answer: D Chemotherapy of schistosoma:
Mebendazole Bithional Praziquantel Triclabendazole

3) Which is effective in preventing schistosomamansoni:

- A. Metronidazole
- B. Albendazole
- C. c) Cloroquine
- D. Praziquantel

Answer: D

4) Fasciola hepatica treat by ?

- A. Metronidazole
- B. Albendazole
- C. c) Triclabendazole
- D. Praziquantel

Answer: C

[Thanks for Noor Alzahrani for sharing us some questions](#)

(1)Schistosomamansoni is transmitted mainly by..... And infective stage is:

- A- fecal oral rout , sporocyst
- B- penetration of skin , cercasie

"B"

2(clinical feature of Schistosomahaematobium is^s.....

- A- hepatosplenomegaly
- B- painless heamaturia
- C- dysentry

"B"

3 (False infection could happen after ingestion of which one^s:

- A- Schistosomamansoni
- B- Schistosomahaematobium
- C- Faschiola hepatica

"C"



Pathology :

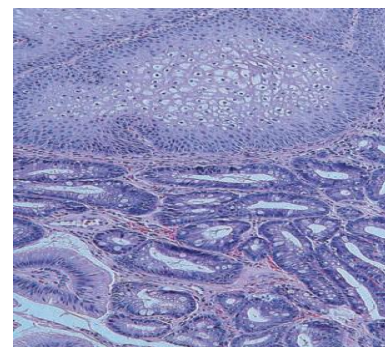
Gastroesophageal reflux disease

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) Intestinal metaplasia
- (E) Schatzki ring

The answer is D: Intestinal metaplasia The biopsy shows **Barrett esophagus**, which is defined as a replacement of the esophageal squamous epithelium by columnar epithelium as a result of chronic gastroesophageal reflux. This disorder occurs typically in the lower third of the esophagus. The lesion is characterized histologically by distinctive intestine-like epithelium composed of goblet cells and surface cells similar to those of incompletely intestinalized gastric mucosa. None of the other choices lead to metaplastic changes.

Diagnosis: Barrett esophagus, reflux esophagitis



The patient described in Question 4 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

The Answer B: Adenocarcinoma. Barrett esophagus carries a serious risk of malignant transformation to adenocarcinoma, and the risk correlates with the length of the involved esophagus and the degree of dysplasia. Virtually all esophageal adenocarcinomas arise in the background of the metaplastic epithelium of Barrett esophagus. The symptoms and clinical course of adenocarcinoma of the esophagus are similar to those of squamous cell carcinoma and include dysphagia, pain, and, occasionally, bleeding. None of the other choices reflect a complication of Barrett esophagus.

Diagnosis: Barrett esophagus

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

The answer is D: 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 (مضطجع).

Diagnosis: Paraesophageic hiatal hernia

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?

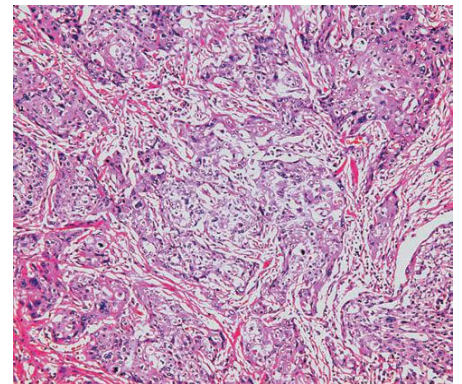
- (A) Adenocarcinoma
- (B) Esophageal stricture
- (C) Leiomyosarcoma
- (D) Scleroderma
- (E) Squamous cell carcinoma

The answer is A: Adenocarcinoma. Adenocarcinoma originates in the glandular metaplasia (intestinal metaplasia) of Barrett esophagus. The affected region of the esophagus is typically indurated (متورمة) and ulcerated, causing pain and bleeding. The other choices do not exhibit the histologic features described.

Diagnosis: Adenocarcinoma of the esophagus

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
- (E) Transitional cell carcinoma



The answer is D: Squamous cell carcinoma.

The most common presenting complaint of patients with esophageal cancer is **dysphagia**, but by this time,

most tumors are unresectable. Adenocarcinoma (choice A) and Barrett esophagus (choice B) are incorrect because the biopsy does not show

glandular features. Primary malignant melanoma (choice C) of the esophagus is extremely rare, although melanoma metastases to the esophagus may occur.

Diagnosis: Squamous cell carcinoma of the esophagus

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

The answer is A: Cigarette smoking. Risk factors for squamous cell carcinoma of the esophagus include chronic alcoholism, tobacco use, diets lacking in fresh fruits, exposure to aniline dyes, chronic esophagitis, and congenital disorders of the esophagus (e.g., Plummer-Vinson syndrome. Reflux esophagitis (choice E) leads to Barrett esophagus and adenocarcinoma. Aflatoxin (choice B) is a well-known hepatotoxin linked to the development of hepatocellular carcinoma. Herpetic esophagitis (choice C) frequently occurs in immunocompromised persons but is not associated with the development of carcinoma.
Diagnosis:Esophageal cancer

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

The answer is C: Reflux esophagitis. Chronic exposure to stomach juice causes reactive thickening of the squamous epithelium (leukoplakia) and the underlying stroma. Areas affected by gastric reflux are susceptible to mucosal erosions and ulcers which appear as linear vertical streaks. Neutrophils and lymphocytes accumulate in the mucosa. The other choices are not typical complications of hiatal hernia.
Diagnosis:Reflux esophagitis, hiatal hernia

Malabsorption

A child is brought by his mother to a physician complaining of diarrhea and inadequate rate of weight gain. There was a fat in his stool(teatorrhea) and after the doctor did a serology test he found it positive for IgA to tissue transglutaminase, IgG to deamidatedgliadin& anti-endomysial antibodies. Which of the following has association with increasing the risk of developing such a disease:

- A. class II HLA DQ2
- B. APC
- C. P53

Answer: A
celiac disease.

In previous case the child has a high risk to develop which type of cancers:

- A. Adenocarcinoma
- B. Intestinal T-cell lymphoma
- C. Juvenile Polyps
- D. Peutz-Jehgers

Answer: B

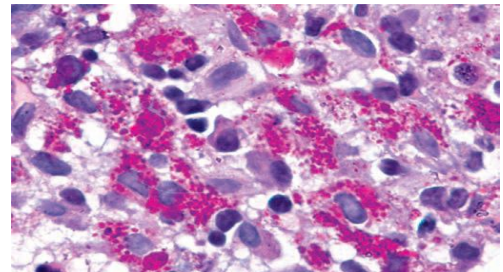
Which one of the following help in diagnosis of lactose intolerance:

- A. Serology
- B. Hydrogen breath test
- C. CT scan
- D. Barium enema

Answer: B

A 36-year-old man presents with fever and painful joints for 2 weeks. Physical examination shows skin pigmentation, glossitis, angular cheilitis, and generalized lymphadenopathy. The patient has lost 9 kg (20 lb) over the past 6 months. He reports that his stools are pale and foul smelling. Blood cultures are negative. The patient is started on antibiotic therapy and exhibits remarkable clinical improvement. Biopsy of the small intestine shows marked distortion of the intestinal villi, and a periodic acid-Schiff stain reveals large, foamy macrophages filled with glycoprotein-rich granules (shown in the image). Which of the following is the most likely diagnosis?

- (A) Angiodysplasia of ileum
- (B) Crohn disease
- (C) Ménétrier disease
- (D) Peutz-Jeghers syndrome
- (E) Whipple disease



The answer is E: Whipple disease. Whipple disease is a rare infectious disorder of the small intestine in which malabsorption is the most prominent feature. The disorder typically features infiltration of the small bowel mucosa by macrophages that are packed with small, rod-shaped bacilli (*Tropheryma whippelii*). Infiltrates of macrophages containing bacilli may be found in other organs. The other choices do not feature these distinctive aggregates of foamy macrophages.

Diagnosis: Whipple disease

Diarrhea

A patient came to the hospital complaining of diarrhea. When the doctor asked the patient to fast the diarrhea improved. Which type of diarrhea the patient has?

- A. Secretory
- B. Osmotic
- C. Exudative
- D. Motility-related

Answer: B

A 1-year-old girl is brought to the emergency room by her parents who report that she had a fever and diarrhea for 3 days. The child's temperature is 38°C (101°F). The CBC shows a normal WBC count and increased hematocrit. Which of the following microorganisms is the most likely cause of diarrhea in this young child?

- (A) Cytomegalovirus
- (B) Rotavirus
- (C) *Salmonella typhi*
- (D) *Shigelladysenteriae*
- (E) *Yersinia jejuni*

The answer is B: Rotavirus. Rotavirus is the most common cause of infantile diarrhea and can be demonstrated in duodenal biopsy specimens in half the cases of acute diarrhea in hospitalized children under the age of 2 years. Choices C, D, and E can cause diarrhea, but are uncommon in developed countries.

Diagnosis: Viral diarrhea

A 53-year-old woman complains of acute diarrhea and severe abdominal pain. She was recently treated with broad-spectrum antibiotics for community-acquired pneumonia. A CBC shows a WBC count of 24,000/µL. The patient subsequently develops septic shock and dies. A portion of her colon is shown at autopsy. These findings are typical of which of the following gastrointestinal diseases?

- (A) Crohn disease
- (B) Diverticulitis
- (C) Ischemic colitis
- (D) Pseudomembranous colitis
- (E) Ulcerative colitis



The answer is D: Pseudomembranous colitis.

Antibiotic therapy eliminates the normal mixed flora of the colon and facilitates the overgrowth of *Clostridium difficile*, leading to an acute infection of the colon. The exotoxins produced by *C. difficile* cause intestinal necrosis, with superficial ulcers covered by a thick fibrinopurulent exudate. The other choices are not related to antibiotic therapy and are not associated with the development of these exudative plaques.

Diagnosis: Pseudomembranous colitis

Pancreatitis

A 42-year-old obese woman (BMI = 32 kg/m²) presents with severe abdominal pain that radiates to the back. There is no history of alcohol or drug abuse. The blood pressure is 90/45 mm Hg, respirations are 32 per minute, and pulse is 100 per minute. Physical examination shows abdominal tenderness, guarding, and rigidity. An X-ray film of the chest shows a left pleural effusion. Laboratory studies reveal elevated serum amylase (850 U/L) and lipase (675 U/L), and hypocalcemia (7.8 mg/dL). Which of the following is the most likely diagnosis?

- (A) Acute cholecystitis
- (B) Acute pancreatitis
- (C) Alcoholic hepatitis
- (D) Chronic calcifying pancreatitis
- (E) Dissecting aortic aneurysm

The answer is B: Acute pancreatitis.

Severe forms are characterized by the sudden onset of abdominal pain, often accompanied by signs of shock (hypotension, tachypnea, and tachycardia). The release of amylase and lipase from the injured pancreas into the serum provides a sensitive marker for monitoring injury to acinar cells. Left pleural effusion is a common finding in patients with acute pancreatitis due to local irritation below the diaphragm. The other choices do not feature increases in serum amylase and lipase.

Diagnosis: Pancreatitis, acute

A 60-year-old alcoholic man presents with a 6-month history of recurrent epigastric pain,

progressive weight loss, and foulsmelling diarrhea. The abdominal pain is now almost constant and intractable. An X-ray film of the abdomen reveals multiple areas of calcification in the mid-abdomen. Which of the following is the most likely diagnosis?

- (A) Carcinoid syndrome
- (B) Chronic pancreatitis
- (C) Crohn disease
- (D) Insulinoma
- (E) Miliary tuberculosis

The answer is B: Chronic pancreatitis. Chronic pancreatitis is characterized by the progressive destruction of the pancreas, with accompanying irregular fibrosis and chronic inflammation. Calcification and intraductal calculi often develop. Pancreatic insufficiency results in malabsorption syndrome. Chronic pancreatitis is most commonly seen in patients with a history of alcohol abuse (70% of cases). The other choices are not associated with pancreatic calcifications.

Diagnosis: Pancreatitis, chronic

Which of the following findings is most likely to be encountered in the patient described in previous question?

- (A) Achlorhydria
- (B) Hypoglycemia
- (C) Melena
- (D) Pernicious anemia
- (E) Steatorrhea

The answer is E: Steatorrhea. Fat malabsorption in the setting of chronic pancreatitis is most often associated with steatorrhea. In patients with steatorrhea, the fecal matter is foul smelling and floats because of a high fat content. Hypoglycemia (choice B) is incorrect because loss of pancreatic islet cells would be associated with hyperglycemia.

Diagnosis: Pancreatitis, chronic; steatorrhea

A 50-year-old woman complains of persistent abdominal pain, anorexia, and abdominal distention. Her past medical history is significant for a previous hospitalization for acute pancreatitis. Physical examination shows jaundice and a nonpulsatile abdominal mass. Laboratory studies reveal normal serum levels of bilirubin. CT scan of the abdomen shows a fluid-filled cavity in the head of the pancreas. What is the most likely diagnosis?

- (A) Acute hemorrhagic pancreatitis
- (B) Insulinoma
- (C) Pancreatic cystadenoma
- (D) Pancreatic islet cell tumor
- (E) Pancreatic pseudocyst

The answer is E: Pancreatic pseudocyst. Pancreatic pseudocyst is a late complication of acute pancreatitis, in which necrotic pancreatic tissue is liquefied through the action of pancreatic enzymes (e.g., peptidases, lipases, and amylase). The necrotic tissue becomes encapsulated by granulation tissue, which then develops into a fibrous capsule. Choices B, C, and D are not consequences of acute pancreatitis.

Diagnosis: Pancreatic pseudocyst

The surgical specimen is shown in the image for the patient

described in Question 6. In addition to blood and necrotic debris, which of the following best describes the contents of this cystic lesion?

- (A) Bile
- (B) Chylous fluid
- (C) Lymph
- (D) Mucopolysaccharides
- (E) Pancreatic enzymes



The answer is E: Pancreatic enzymes.

Pancreatic pseudocysts are lined by connective tissue and contain blood, necrotic debris, and secreted pancreatic enzymes. Reflux of bile (choice A) is not characteristic of a pancreatic pseudocyst. The other choices (B, C, and D) may be present in small quantities.

Diagnosis: Pancreatic pseudocyst

Peptic ulcer

The most common site for chronic peptic ulcer is:

- A. First portion of duodenum
- B. Antrum of the stomach
- C. Jejunum
- D. Lower part of esophagus

Answer: A

Patient came with Epigastric Pain which is relieved by food and the patient mentioned that the pain awakes him at night. With investigation there was multiple peptic ulcerations in the stomach with involvement of jejunum. What is the most probably cause of his ulcer:

- A. GERD
- B. stress
- C. Zollinger-Ellison syndrome
- D. Meckel diverticulum

Answer: C Ulcers characteristics in Zollinger-Ellison syndrome=>they are multiple + occur in areas that are not usual for ulcers such as jejunum

Patient who is known to have ulcer present to the hospital with black feces, Coffee-ground vomitus which are suggestive to which of the following complications of chronic ulcer:

- A. Perforation.
- B. Fibrous stricture.
- C. Hemorrhage
- D. Malignant changes

Answer: C

If you have any questions you want to add, please send it to : Revisiontest432@Gmail.com

Good luck

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