

YR 2 GASTROINTESTINAL UNIT EXAMINATION -- May 15, 1998.

CHOOSE THE SINGLE BEST ANSWER FOR QUESTIONS 1 - 100.

QUESTIONS 1 - 15 ARE RELATED TO THE PHOTOGRAPHS PROVIDED.

1. The most likely CORRECT statement about the liver biopsy shown (low magnification, trichrome stain):
 - A. The weight of the liver would be over 10 kg
 - B. It would have softened consistency (compared with normal)
 - C. It would have a uniform yellow color
 - D. Phlebotomy would reverse the pathologic alteration(s)
 - E. Clinically, the patient may have hepatic failure

2. The most likely etiology/cause for the pathologic changes shown in this liver biopsy:
 - A. Choledocholithiasis
 - B. Wilson's disease
 - C. Primary biliary cirrhosis
 - D. Hemochromatosis
 - E. Gilbert's syndrome

3. Most likely clinicopathologic syndrome corresponding to the changes shown in this liver biopsy:
 - A. Chronic hepatitis
 - B. Cholestasis
 - C. Acute hepatitis
 - D. Fulminant hepatitis
 - E. Chronic hepatic failure

4. The most likely INCORRECT statement about the liver biopsy shown, which was obtained from an alcohol abuser:
 - A. The histologic changes are reversible
 - B. The liver is enlarged
 - C. The patient has been consuming about 10-20 gm of alcohol per day for 2-3 weeks
 - D. The serum alkaline phosphatase may be elevated
 - E. The patient's (hepatic) illness is most likely clinically mild and self limited

5. The most like clinical scenario corresponding to this liver biopsy (arrow denotes a central vein):
 - A. Fever, malaise, tender hepatomegaly, vomiting
 - B. Ascites, gynecomastia, esophageal varices
 - C. Congestive heart failure
 - D. 2x-3x elevation of transaminases for 8 months in a patient with mild fatigue
 - E. Jaundice, cachexia, Courvoisier sign

DIRECTIONS: Match the histologies (A-E below) with the patients described 6-10.

- | | |
|--|---------------|
| | A. Picture 6 |
| | B. Picture 7 |
| | C. Picture 8 |
| | D. Picture 9 |
| | E. Picture 10 |
-
6. An 80 year old male with rectal mass
 7. A 35 year old male with duodenal ulcer
 8. A 60 year old male with gastroesophageal reflux for 10 years
 9. A 22 year old female with bloody diarrhea
 10. A 27 year old Asian female with diarrhea and cramps after eating dairy products

11. The patient with the pathology shown in Picture 11 most likely presented with:
 - A. Abdominal pain
 - B. Bloody diarrhea
 - C. Watery diarrhea
 - D. Dyspepsia
 - E. A family history of colon cancer

12. The patient whose resection specimen is shown in Picture 12 has a disease that is:
 - A. Cured by colectomy
 - B. Autosomal recessive
 - C. Associated with periampullary carcinoma
 - D. Present in approximately 15% of first degree relatives
 - E. Associated with increased intestinal permeability

13. If not removed, the lesion shown in Picture 13 has a good chance of:
 - A. Developing into a malignancy
 - B. Not harming the patient
 - C. Ulceration and bleeding
 - D. Requiring surgical resection
 - E. Causing intestinal obstruction

14. The disease shown in Picture 14 is most likely to:
 - A. Be limited to the mucosa and submucosa
 - B. Have a 5 year survival of approximately 50%
 - C. Present with bowel obstruction
 - D. Be limited to the colon
 - E. Be continuous from the rectum

15. The lesion shown in Picture 15 is associated with an activating mutation of:
- A. p53
 - B. APC
 - C. DCC
 - D. K-ras
 - E. MSH2
16. Diverticulosis affects many patients, but only a subgroup develop diverticulitis. A proposed mechanism of diverticulitis includes:
- A. Vascular supply to the diverticulum
 - B. Decreased intraluminal pressure adjacent to the diverticulum
 - C. Obstruction of the neck of the diverticulum
 - D. Weakness of the muscularis mucosa adjacent to the diverticulum
 - E. Mesenteric ischemia
17. Which of the following is CORRECT concerning *Enterotoxigenic E. Coli*?
- A. Most common single cause of traveler's diarrhea
 - B. Toxin is similar to cholera toxin
 - C. Causes watery diarrhea
 - D. Heat stable toxin stimulates intracellular GTP
 - E. All of the above

18. Viral Diarrheal Agents:
- A. Cause diarrhea by destruction of intestinal mucosa
 - B. Are the most common etiology of diarrhea worldwide
 - C. Seldom result in the problem of dehydration in infancy or childhood
 - D. Rarely cause inapparent infection
 - E. Usually result in stools with fecal leukocytes
19. All of the statements are TRUE about protozoal parasites such as cryptosporidia or giardia lamblia EXCEPT:
- A. Usually result in a long clinical course
 - B. Often are transmitted person-to-person in nurseries and day care centers
 - C. Are a major problem with immunosuppression
 - D. Have cysts that resist chlorination; water filtration prevents disease
 - E. Have an 8-24 hour incubation period
20. A 37 year old man with a history of Crohn's ileitis is seen because of right upper quadrant abdominal pain. Ultrasound demonstrates gallstones. Four years ago the patient had a 28 cm. ileal resection. This patient's gallstones are probably due to:
- A. High serum oxalate levels
 - B. High serum cholesterol levels
 - C. Decreased circulating bile salts
 - D. Decreased RBC survival

21. The rate-limiting step in bilirubin metabolism is:
- A. Conjugation
 - B. Hepatic uptake
 - C. Intracellular binding
 - D. Canalicular excretion
22. A 52 year old man with chronic alcoholism is seen because of weight loss and bulky, greasy, loose stools. Abdominal flat film shows pancreatic calcification. Sudan staining of the stools shows steatorrhea. A d-Xylose and a Bentiromide test are performed simultaneously. The most likely results would be:
- A. Both tests normal
 - B. Both tests abnormal
 - C. d-Xylose abnormal, Bentiromide normal
 - D. Bentiromide abnormal, d-Xylose normal
23. A young man with cystic fibrosis is found to have a megaloblastic anemia. Parts I and II of the Schilling test are abnormal. This patient probably has vitamin B12 deficiency secondary to:
- A. Pancreatic exocrine enzyme insufficiency
 - B. Failure of gastric intrinsic factor secretion
 - C. Terminal ileum disease from surfactant insufficiency
 - D. Progressive failure of R factor synthesis

24. A 53 year old woman with alcoholic cirrhosis and a history of chronic hepatic encephalopathy was doing well off alcohol and on treatment. She has some ascites and edema. Now she presents with lethargy and confusion. Asterixis is present. Which of the following would be least likely to have precipitated her encephalopathy?
- A. Azotemia from recently begun diuretic
 - B. Loose bowel movements from lactulose
 - C. Spontaneous bacterial peritonitis
 - D. Benzodiazepine treatment for anxiety
 - E. Bleeding from gastric varices
25. You are evaluating a patient with hyperparathyroidism. In your GI review of systems, which of the following are you LEAST likely to elicit a history of?
- A. Peptic ulcer
 - B. Gallstones
 - C. Pancreatitis
 - D. Constipation
 - E. Diarrhea
26. Which of the following have NOT typically been associated with pregnancy?
- A. Hemorrhoids
 - B. Gallstones
 - C. Gastroesophageal reflux
 - D. Cholestasis
 - E. Diverticulosis

27. Which of the following statements is TRUE concerning acetaminophen hepatic toxicity?
- A. Toxicity is primarily manifested as cholestasis
 - B. Toxicity is an idiosyncratic, unpredictable phenomenon
 - C. Toxicity is worsened by an overproduction of glutathione
 - D. Toxicity is caused by the unmetabolized acetaminophen
 - E. Toxicity occurs at lower doses in heavy alcohol users
28. The most frequent site of oral cancer is:
- A. Tongue
 - B. Lip
 - C. Floor of mouth
 - D. Gingiva
 - E. hard palate
29. Which of the following is a pre-malignant lesion?
- A. Geographic tongue
 - B. Fordyce spots
 - C. Herpes labialis
 - D. Erythroleukoplakia
 - E. Lichen planus
30. Major salivary gland tumors are:
- A. Usually malignant
 - B. Most often found in the parotids
 - C. Rarely pleomorphic adenomas
 - D. Likely to be benign if arising from a sublingual gland
 - E. Rarely, if ever, involve submandibular glands

31. A patient with longstanding chronic hepatitis C is being seen in consultation for enlarging abdominal girth. On exam there is shifting dullness, and splenomegaly. The ascites had been sampled by paracentesis. You suspect portal hypertension as the cause of his ascites. Labs: Serum: ALT 111, AST 98, Total bilirubin 1.2. Albumin 2.6, Protine 12.3, Platelets 120,000, Amylase 99; Ascites: WBC 84, 84% mononuclear, protein 2.2, Albumin 1.3. The lab finding most suggestive of a portal hypertensive etiology of the ascites is:
- A. WBC in the ascites
 - B. Ascitic amylase
 - C. ALT and AST
 - D. Serum-ascites albumin gradient
 - E. Platelet count
32. Which of the following patients would be most likely to have a transfer dysphagia?
- A. A 65 year old man with polymyositis
 - B. A 31 year old may with achalasia
 - C. A 41 year old woman with scleroderma
 - D. A 59 year old man with Schatzki ring
 - E. A 53 year old man with Barrett's esophagus
33. You are reading an esophageal manometry (motility) study on one of your patients. The study shows minimal or no progressive peristalsis in the distal one-half of the esophagus. The LES pressure is very low, but there seems to be relaxation with a swallow. The manometric diagnosis is:
- A. Achalasia
 - B. Diffuse esophageal spasm
 - C. Scleroderma
 - D. Nutcracker esophagus
 - E. Non-specific esophageal motility disorder

34. Which of the following findings in a patient with acute pancreatitis would be most likely to be associated with infection and a possibly fatal outcome?
- A. ALT 113, AST 125, ALK PHOS 266 (all about twice normal)
 - B. Amylase 1256, Lipase 2371 (both about 10 times normal)
 - C. Ultrasound showing moderate fluid collection around the pancreas
 - D. Calcium 11.1 (normal to 10.5)
 - E. CT scan with contrast showing necrosis of about 35% of the pancreas
35. Helicobacter pylori infection is implicated as a significant risk factor for each of the following EXCEPT:
- A. Gastric cancer of the body and antrum (distal stomach)
 - B. Gastric cancer of the cardia (proximal stomach)
 - C. Gastric ulcer
 - D. Duodenal ulcer
 - E. Gastric lymphoma
36. Which of the following diarrhea patients would not have much improvement with fasting (nothing by mouth)?
- A. A 22 year old woman with lactase deficiency
 - B. A 64 year old man with chronic pancreatitis
 - C. A 48 year old woman with a VIPoma
 - D. A 37 year old woman with laxative abuse
37. Botulinum toxin injection endoscopically into the LES would be most beneficial for which of the following conditions?
- A. Gastroesophageal reflux disease
 - B. Scleroderma
 - C. Plummer-Vinson syndrome
 - D. Achalasia

38. A 35 year old business executive has had recurrent documented duodenal ulcers. He is currently symptom free for three years taking ranitidine(Zantac) every night. Which next test would you think would be most helpful in your further management of this patient?
- A. Esophagogastroduodenoscopy
 - B. Upper GI series (barium meal examination)
 - C. Gastric acid secretion test
 - D. Serum gastrin level
 - E. Helicobacter pylori serology
39. In a patient with cirrhosis and portal hypertension, which variety of portal-systemic anastomosis is most likely to hemorrhage?
- A. Esophageal varices
 - B. Gastric varices
 - C. Caput medusae
 - D. Duodenal varices
 - E. Rectal varices
40. In which of the following patients would colon cancer screening/surveillance NOT require colonoscopy?
- A. A 45 year old man with a family history of Hereditary Non-Polyposis Colon Cancer
 - B. A 54 year old woman with fecal occult blood test positivity, and no family history of colon cancer
 - C. A 64 year old man with a history of previous colon cancer and a negative fecal occult blood test
 - D. A 51 year old woman with no family history of colon cancer and a negative fecal occult blood test
 - E. A 45 year old physician with 15 years of fairly quiescent pan-ulcerative (universal) colitis and negative fecal occult blood test

41. A patient with crampy abdominal pain, constipation, and some streaks of blood mixed in with his stools is most likely to have which type of colon cancer as the cause?
- A. Cecum
 - B. Ascending colon
 - C. Transverse colon
 - D. Descending colon
 - E. Sigmoid colon
42. Which of the following statements is FALSE concerning pancreatic enzymes?
- A. Decrease duodenal cholecystokinin secretion
 - B. Inactivated by gastric acid
 - C. Some required to activate others
 - D. Important pathogenic role in acute pancreatitis
 - E. Large amounts lost as result of long ileal resections
43. Which of the following would likely worsen reflux esophagitis?
- A. Nifedipine (calcium channel blocker)
 - B. Omeprazole (proton-pump inhibitor)
 - C. Cisapride (pro-kinetic agent)
 - D. Bethanechol (cholinergic agonist)
 - E. Famotidine (histamine-2 receptor antagonist)
44. Which does NOT contribute to excess oxalate absorption?
- A. Steatorrhea
 - B. Colon
 - C. Bile salt malabsorption
 - D. Fatty acid malabsorption
 - E. Excess dietary calcium

DIRECTIONS: Match the abnormal antibodies (A-E below) most closely associated with the conditions numbered 45-47.

- A. Anti-endomysial antibodies
- B. Anti-smooth muscle antibodies
- C. Anti-mitochondrial antibodies
- D. Anti-parietal cell antibodies
- E. Anti-nuclear cytoplasmic antibodies

- 45. Autoimmune chronic hepatitis
- 46. Celiac disease
- 47. Primary biliary cirrhosis

DIRECTIONS: Match the disease or condition (A-E below) most closely associated with the clinical situations numbered 48-50.

- A. Crohn's disease
- B. Ulcerative colitis
- C. Celiac disease
- D. Whipple's disease
- E. Carcinoid syndrome

- 48. Known bacterial etiology
- 49. Colo-vaginal fistula
- 50. Diarrhea and flushing

DIRECTIONS: Match the most specific enzyme and bilirubin pattern (A-E below) most likely to be seen with the conditions numbered 51-52.

- A. ALT 117, AST 131, ALK PHOS 548, T. BILI 2.1
- B. ALT 35, AST 113, ALK PHOS 162, T. BILI 3.7
- C. ALT 684, AST 598, ALK PHOS 225, T. BILI 7.9
- D. ALT 41, AST 57, ALK PHOS 108, T. BILI 4.1
- E. ALT 45, AST 38, ALK PHOS 462, T. BILI 0.9

51. Alcoholic liver disease

52. Cholestasis

53. A patient who presents with the carcinoid syndrome is UNLIKELY to have:

- A. An appendiceal carcinoid tumor
- B. Increased serum serotonin
- C. Metastatic disease
- D. <90% 5 year survival
- E. Diarrhea

54. A pan-ulcerative (universal) colitis patient's risk of colorectal dysplasia and/or carcinoma is most closely related to:

- A. Colitis severity
- B. The presence of HLA B27
- C. Disease duration
- D. Ileal involvement
- E. Primary sclerosing cholangitis

55. Primary sclerosing cholangitis is NOT associated with:
- A. Crohn's disease
 - B. Ulcerative colitis
 - C. Peutz-Jeghers disease
 - D. Cholangiocarcinoma
 - E. Hypercholesterolemia
56. In a patient with inflammatory bowel disease, which of the following disease characteristics is most likely to be helpful in discriminating between ulcerative colitis and Crohn's disease?
- A. Mucosal ulceration
 - B. Rectal involvement
 - C. Crypt abscesses
 - D. Fissuring ulcers
 - E. Bloody diarrhea
57. Which is the LEAST likely feature of acute pancreatitis?
- A. Hypocalcemia
 - B. Hemorrhage
 - C. Abdominal pain
 - D. Fat accumulation in acinar cells
 - E. Respiratory distress
58. Which of the following does NOT predispose to gallstones?
- A. Chronic hemolysis
 - B. Increased chenodeoxycholic acid secretion
 - C. Exogenous estrogens
 - D. Diabetes mellitus
 - E. Decreased bile salt enterohepatic circulation

59. Which is the CORRECT statement about pyloric stenosis in a 4 week old baby?
- A. It is usually asymptomatic
 - B. It is caused by scarring due to prior ulceration
 - C. It is caused by gastric atresia
 - D. It is associated with hypochloremic alkalosis
 - E. It is associated with increased risk for gastric adenocarcinoma
60. Which is the INCORRECT statement about congenital tracheo-esophageal fistula?
- A. It is associated with cardiac malformations
 - B. It results from persistent inflammation
 - C. It is usually associated with esophageal atresia
 - D. In most cases the upper esophagus ends in a blind pouch
 - E. It is associated with aspiration
61. Which statement is CORRECT concerning gallstones?
- A. Most are asymptomatic
 - B. Most consist of calcium bilirubinate
 - C. Most are visible on abdominal x-ray
 - D. Most occur in men
 - E. Most are brown-black in color
62. A patient of yours is diagnosed as having cholangiocarcinoma. Which of the following is LEAST likely?
- A. Jaundice
 - B. A history of hemochromatosis
 - C. An abnormal ERCP
 - D. A history of gallstone disease
 - E. Neoplastic cells having mesenchymal differentiation

63. Which is the CORRECT statement about pancreatic pseudocyst?
- A. The lumen is filled with mucus
 - B. They may become malignant
 - C. The inner surface is lined by acinar-type epithelium
 - D. They contain caseous necrosis
 - E. They are surrounded by granulation tissue and fibrosis
64. Patients with which of the following are MOST likely to develop colon cancer?
- A. Peutz-Jegher syndrome
 - B. Hereditary nonpolyposis colon cancer
 - C. Ulcerative colitis
 - D. Familial adenomatous polyposis
 - E. Adenomatous polyps
65. Which of the following is an inherited syndrome?
- A. Barrett's metaplasia
 - B. Hirshsprung's disease
 - C. Juvenile polyposis
 - D. Meckel's diverticulosis
 - E. Carcinoid syndrome
66. Which of the following viruses is NOT associated with a chronic carrier condition?
- A. HBV
 - B. HCV
 - C. HDV
 - D. HEV
 - E. HGV

67. Interferon (IFN) in combination with ribavirin can be/has been used to treat the following form of chronic hepatitis?
- A. HBV
 - B. HCV
 - C. HAV
 - D. HGV
 - E. HDV
68. Which form of acute viral hepatitis presents a significantly greater danger for pregnant women?
- A. HAV
 - B. HBV
 - C. HCV
 - D. HDV
 - E. HEV

QUESTIONS 69 - 71 ARE RELATED TO THE FOLLOWING PATIENT.

A previously healthy patient of yours presents with severe malaise, jaundice, and an enlarged tender liver. Aminotransferases are elevated fifteen fold. PT is normal and he is alert and oriented.

69. Which of the following pathological changes is MOST likely?
- A. Periportal fibrosis
 - B. Mononuclear infiltrates limited to portal triads
 - C. 4+ Prussian blue staining of hepatocytes
 - D. Apoptotic hepatocytes
 - E. Fatty change

70. Which of the following tests would be most likely to yield a definitive etiologic diagnosis (i.e. in the above patient)?
- A. ERCP
 - B. Hepatic quantitative iron determination
 - C. Serology for hepatotropic viruses
 - D. Liver biopsy
 - E. Determination of total bilirubin with fractionation into unconjugated and conjugated fractions.
71. Following hospitalization, the above patient becomes progressively obtunded with elevation of the PT. The liver decreases in size. What complication would be your greatest immediate concern?
- A. Bacterial peritonitis
 - B. Bleeding from esophageal varices
 - C. Cerebral edema
 - D. Hepatic fibrosis
 - E. Hyperglycemia
72. NOT an effect of alcohol on hepatocytes:
- A. Collagen synthesis
 - B. Macrovesicular steatosis
 - C. Cytoplasmic condensation of intermediate filaments
 - D. Hypertrophy of SER
 - E. Cell swelling

73. MOST characteristic manifestation of hepatocellular injury in cholestasis:
- A. massive necrosis
 - B. Hypertrophy of endoplasm reticulum
 - C. Foamy degeneration
 - D. Piecemeal necrosis
 - E. Fat accumulation
74. MOST characteristic of an acute infection of the liver with HAV:
- A. Fatty change
 - B. Periportal infiltrates of neutrophils
 - C. Nuclear viral inclusions
 - D. Lobular mononuclear infiltrates
 - E. Centrilobular fibrosis
75. CORRECT statement about bile secretion/biliary function:
- A. Copper is secreted in bile
 - B. Bilirubin is produced (from heme) in the hepatocyte cytoplasm
 - C. Unconjugated bilirubin is excreted into the urine
 - D. Conjugated bilirubin is normally secreted into the space of Disse
 - E. Unconjugated bilirubin is secreted in bile

DIRECTIONS: Match the mechanism/pathogenesis (A-E below) with the most appropriate disease numbered 76-77.

- A. Impaired excretion into bile and blood
- B. Impaired secretion into blood
- C. Increased dietary absorption
- D. Increased generation of free radicals from hypertrophic SER
- E. Increased secretion into bile

76. Wilson's disease

77. Hemochromatosis

DIRECTIONS: Match the appropriate item (A-E below) with the corresponding description numbered 78-82.

- A. Periportal fibrosis with piecemeal necrosis of limiting plate hepatocytes
- B. Fibrosis in sinusoids close to central veins
- C. Thrombosis of central veins
- D. Portal granulomas
- E. Portal triad edema

78. Budd - Chiari

79. Extrahepatic bile duct obstruction

80. Chronic hepatitis B

81. Primary biliary cirrhosis

82. Alcoholic liver disease

83. Which of the following pathologic features is MOST SPECIFIC for cirrhosis?
- A. Hepatocellular necrosis
 - B. Cholestasis in portal areas
 - C. Central vein fibrosis
 - D. hepatocellular carcinoma
 - E. regenerative nodules throughout the liver
84. Which of the following is the MOST likely feature/consequence of pancreatic carcinoma:
- A. Cystic gross appearance
 - B. Duct obstruction
 - C. Acinar cell differentiation
 - D. Squamous differentiation on histologic examination
 - E. Elevation of serum alpha-feto protein
85. A male patient presents with pruritus and elevated alkaline phosphatase. ERCP is negative and a liver biopsy reveals centrilobular bile canalicular plugging with normal portal triads. What is the MOST likely?
- A. Primary sclerosing cholangitis
 - B. Drug effect
 - C. Chronic hepatitis
 - D. Pancreatic carcinoma
 - E. Hemochromatosis
86. MOST likely feature of chronic pancreatitis:
- A. Acinar cell hyperplasia
 - B. Hemorrhage
 - C. Distortion of pancreatic duct
 - D. Phlegmon
 - E. Softening of pancreatic parenchyma

87. Lesions that are MOST likely to present as submucosal polyps include:
- A. Hyperplastic polyps
 - B. Carcinoids
 - C. Adenomas
 - D. Hamartomatous polyps
 - E. Juvenile polyps
88. Celiac disease is NOT associated with:
- A. Sensitivity to wheat
 - B. Anti-neutrophil cytoplasmic antibodies
 - C. Anti-gliadin antibodies
 - D. Anti-adenovirus Elb antibodies
 - E. Anti-endomysial antibodies
89. Luminal phase absorptive function is altered in:
- A. Abetalipoproteinemia
 - B. Whipple's disease
 - C. Cystic fibrosis
 - D. Lactase deficiency
 - E. Celiac disease
90. A patient with adenocarcinoma of the colon that has invaded into, but not through, the muscularis mucosa has a chance of 5 year survival closest to:
- A. 95%
 - B. 75%
 - C. 55%
 - D. 35%
 - E. 15%

91. Small intestinal microvilli are:
- A. Made up of villi
 - B. Atrophic in celiac disease
 - C. Approximately 1mm in size
 - D. Present at the villus tip
 - E. Lined by foveolar epithelium
92. Na^+ is NOT involved in transport of:
- A. Water
 - B. Glucose
 - C. Cholesterol
 - D. Amino acids
93. Evaluation of which of the following would be most likely to help to determine if a section of bowel was from small intestine or colon:
- A. Paneth cells
 - B. Muscularis propria
 - C. Submucosa
 - D. Muscularis mucosa
 - E. Serosa

QUESTIONS 94 AND 95 ARE RELATED TO THE FOLLOWING CASE HISTORY.

A 23 year old woman goes to see her gynecologist because she has had crampy abdominal pain for several months. She notes a 10 lb weight loss, although she has not been dieting. She has also had several episodes of bloody diarrhea. The gynecologist paid attention during the gastrointestinal unit, and thinks that her disease may be intestinal.

94. From the following list, the best diagnosis is:
- A. Giardiasis
 - B. Ulcerative colitis
 - C. Intussusception
 - D. Whipple's disease
 - E. Enteropathogenic *E. coli* infection
95. The patient suddenly develops severe abdominal pain. A plain film of the abdomen shows dilated loops of small bowel with air-fluid levels and wall thickening of the entire ileum. Despite nasogastric suction her condition does not improve. She is taken to laparotomy where an ileocelectomy is performed. Which of the following is the best diagnosis:
- A. Mycobacterial infection
 - B. Ulcerative colitis
 - C. Carcinoid tumor
 - D. Crohn's disease
 - E. Malignant lymphoma
96. A frequent site of obstruction secondary to intra-abdominal adhesions or hernia:
- A. Stomach
 - B. Duodenum
 - C. Esophagus
 - D. Jejunum/ileum
 - E. Colon

97. The jejunum is NEVER involved by:
- A. Crohn's disease
 - B. Carcinoid tumors
 - C. Celiac sprue
 - D. Ulcerative colitis
 - E. Familial adenomatous polyposis

DIRECTIONS: Match the option (A-E below) which best fits the descriptions numbered 98-100.

- A. Mesenteric venous thrombosis
 - B. Mesenteric arterial thrombosis
 - C. Ischemia following aortic surgery
 - D. Nonocclusive mesenteric ischemia
 - E. Chronic intestinal ischemia
98. The syndrome associated with weight loss, abdominal pain, and diarrhea.
99. Sudden onset of abdominal pain. Surgical findings include necrosis of small bowel and right and transverse colon.
100. Seen in association with low cardiac output states, heart failure, dialysis.

SOME WORTHWHILE NORMAL LABORATORY VALUES :

Serum:

AST 0-60
ALT 0-60
ALK PHOS 0-125
BILI 0.5-1.1
ALBUMIN 3.5-5.0
AMYLASE 25-115
LIPASE 114-286
PROTIME 10-12
PLATELETS 150K-350K
PROTEIN variable

Ascites:

WBC <250, mostly mononuclear
ALBUMIN variable
AMYLASE less than serum
PROTEIN variable