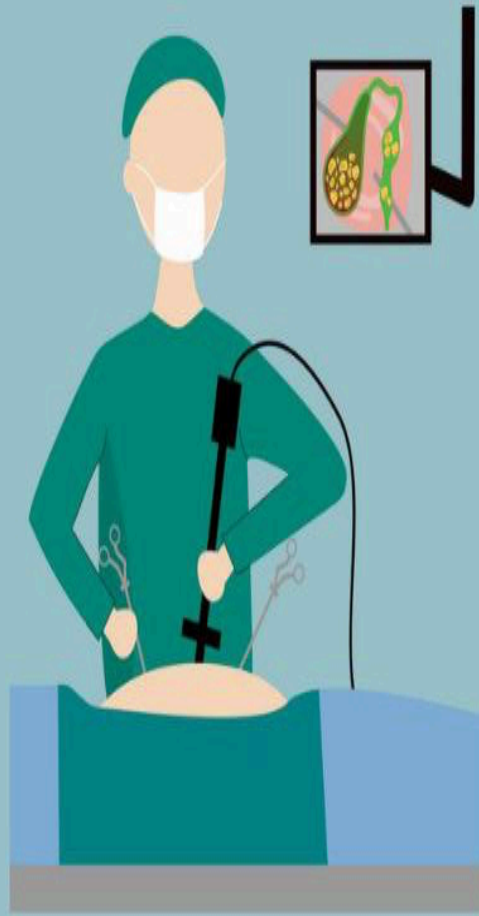


# Edited past paper 'Part 1'



By Malak khaled  
Hala Qulajo

# **Final Doctor 020**

- 1- A 35-year-old male patient, admitted with abdominal pain, distension and excessive vomiting. He had previous history of appendectomy at the age of 18. The most likely cause for this illness is:
- A. Internal hernia
  - B. Right colon cancer
  - C. Volvulus
  - D. Adhesions
  - E. Acute mesenteric ischemia

Ans: D

### Small bowel obstruction

*Abbreviation: SBO*



An interruption in the normal passage of contents of the small bowel due to a structural barrier. Most commonly caused by adhesions (e.g., from prior abdominal surgery) and incarcerated hernias. Manifestations include colicky abdominal pain, constipation, abdominal distention, and early-onset vomiting.

- 2- Which of the following is true about adhesive mechanical small bowel obstruction:
- A. associated with colicky upper abdominal pain
  - B. sepsis can occur without frank ischemia
  - C. diffuse abdominal tenderness is a common finding

Ans: B/C

Clinical features associated with the site of bowel obstruction <sup>[1][3]</sup>		
Clinical feature	SBO	LBO
Abdominal pain	<ul style="list-style-type: none"> <li>Colicky, periumbilical</li> </ul>	<ul style="list-style-type: none"> <li>Colicky or constant</li> </ul>
Vomiting and/or nausea	<ul style="list-style-type: none"> <li>Early onset</li> <li>Larger volume of vomitus than in LBO</li> <li>Bilious</li> </ul>	<ul style="list-style-type: none"> <li>Late onset</li> <li>Initially bilious</li> <li>Progresses to fecal vomiting (presence of feces in vomitus)</li> </ul>
Constipation or obstipation	<ul style="list-style-type: none"> <li>Late onset in proximal SBO</li> </ul>	<ul style="list-style-type: none"> <li>Early onset in distal LBO</li> </ul>
Abdominal distention	<ul style="list-style-type: none"> <li>Typically less severe than in LBO</li> </ul>	<ul style="list-style-type: none"> <li>Early and significant abdominal distention</li> </ul>
Examination findings	<ul style="list-style-type: none"> <li>Dehydration and possible hypovolemia (hypotension, dry mucous membranes)</li> <li>Diffuse abdominal tenderness</li> <li>Tympanic percussion</li> <li>Increased <b>high-pitched</b> bowel sounds (early) or the absence of any bowel sounds (late)</li> <li>Collapsed, empty rectum on digital rectal examination (complete bowel obstruction); or impacted feces</li> </ul>	

Note in small bowel obstruction the pain is not upper

3- 60-years old Patient presented with dyspepsia and weight loss, the best initial test to diagnose is?

- CT scan
- Upper endoscopy
- Barium swallow
- Ultrasound

Ans: B

4- Which of the following locations is the most common to have acute diverticulitis in adults?

- Sigmoid
- Left splenic flexure
- Cecum
- hepatic flexure
- Rectum

Ans: A

### Clinical features

- Low-grade fever
- Sigmoid colon most commonly affected → **left lower quadrant pain**
- Possibly tender, **palpable mass** (pericolonic inflammation)
- Change in bowel habits (constipation in ~ 50% of cases and diarrhea in 25–35% of cases)
- ↑ Urinary urgency and frequency (in ~ 15% of cases), sterile pyuria
- Acute abdomen: indicates possible perforation and peritonitis
- Rarely: hematochezia

### Summary

Diverticulitis is a **diverticular disease** caused by inflammation of **colonic diverticula** and occurs as a complication of **diverticulosis**, more commonly in older adults. It may remain localized (mild **uncomplicated diverticulitis**) or progress, resulting in complications such as **abscess** or **perforation** (**complicated diverticulitis**). Diverticulitis typically manifests with fever and **left lower quadrant abdominal pain** as the **sigmoid colon** is most commonly involved. CT



- 5- which of the following doesn't cause HCC?
- A. HAV
  - B. HBV
  - C. HCV
  - D. Liver cirrhosis
  - E. Hemochromatosis

Ans: A

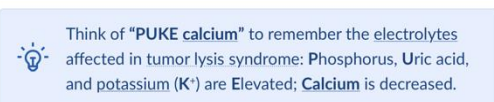


- 6- Removal of hepatic metastasis is proven to have benefit to which cancer?
- A. Lung
  - B. Stomach
  - C. Colon
  - D. Breast
  - E. Pancreas

Ans: C

- 7- Regarding Tumor lysis syndrome, which of the following is True?
- A. Hypercalcemia
  - B. Hyperuricemia
  - C. Hyponatremia
  - D. Hypokalemia

Ans: B



- 8- True about hepatic hemangiomas?
- A. asymptomatic mostly
  - B. best to obtain biopsy
  - C. has malignant transformation risk
  - D. Most common symptom is jaundice
  - E. Is the second most common benign liver tumor

Ans: A

- 9- Which of the following is Not found in Child Pugh score for liver cirrhosis?
- A. Bilirubin
  - B. Prothrombin test
  - C. ALT
  - D. Ascites
  - E. Hepatic encephalopathy

Ans: C

**ABCDE : A(albumin), B(bilirubin),C(coagulation INR),D(distended abdomen ascites), E(encephalopathy) child's components**

- 10- Regarding abdominal wall hernias: -
- A. Trial reduction of inguinal hernia in adults is recommended
  - B. Most inguinal hernias are direct
  - C. Defect in direct inguinal hernia is in the posterior wall of the inguinal canal
  - D. They are not a risk for strangulation of hernia
  - E. Direct more common than femoral in female

Ans:C

**Inguinal hernias are the most common type of groin hernia, and can be further subdivided based on anatomic location: an indirect inguinal hernia protrudes lateral to the inferior epigastric vessels through the deep inguinal ring, whereas a direct inguinal hernia protrudes medial to the inferior epigastric vessels through a defect in the posterior wall of the inguinal canal.**

- 11- which of the following is the most important factor in development of gastric Cancer?
- A. H.Pylori
  - B. Obesity
  - C. Alcohol
  - D. Smoking

Ans: A

**The main risk factor for developing gastric cancer is infection with Helicobacter pylori. Other risk factors include GERD, a diet high in salts and nitrates, and tobacco use**

- 12- True about cholangiocarcinoma:
- A. liver is the most common primary site
  - B. if involved intrahepatic biliary tree, jaundice is the key symptom
  - C. resection is associated with good prognosis
  - D. confluence of the bile duct is the main site
  - E. Liver isn't required to be resected to have R0 free margin

Ans:D

**\*While early-stage disease is treatable with surgery followed by adjuvant chemotherapy, approximately 90% of patients have advanced, unresectable disease at presentation. For**

these patients, disease progression can be delayed with chemotherapy, targeted treatments, and/or radiotherapy. Patients with biliary obstruction may benefit from biliary decompression and stenting.

**\*Cholangiocarcinoma (CCA) is a malignancy of the bile duct**

- 13- All of the following are signs of unresectability of gastric cancer except:
- A. liver mets
  - B. Malignant ascites
  - C. para-aortic lymph node involvement
  - D. left gastric artery lymph node involvement
  - E. peritoneal deposits in upper abdomen

Ans:D

**Unresectable gastric cancer :**

**\*locally advanced disease ( pancreas , peritoneum , diaphragm , vertebral column or major vascular structures [aorta , hepatic artery , SMA , celiac axis ]**

**\*distant mets (liver, peritoneal carcinomatosis, distant lymph node involvement, lung , bone, brain .**

**\* malignant ascites or peritoneal cytology +ve for cancer cells .**

**\* patient not fit for surgery**

- 14- True diverticulum:
- A. zenker
  - B. jejunal
  - C. epiphrenic
  - D. traction esophageal
  - E. Sigmoidal

Ans:D

#### **Traction diverticulum**

A herniation of the gastrointestinal wall (most commonly in the esophagus) caused by scarring and retraction from inflammatory processes (e.g., fungal infections, tuberculosis). Usually all layers of the wall are involved (true diverticulum).

#### **Pulsion diverticulum**

A herniation of the gastrointestinal wall caused by increased intraluminal pressure (e.g., due to achalasia). Usually only the mucosal tissue is involved (false diverticulum). Examples include Zenker diverticula and colonic diverticula in diverticulosis.


- A- 56-year-old man presented with acute onset upper abdominal pain that is relieved by leaning forward, lipase was 1300, what is the most likely etiology of his presentation:

- A. cholethiasis
- B. Alcohol ingestion
- C. triglyceride level>1000
- D. Tumor in the head of pancreas

Ans: A

Ethology of acute pancreatitis:

#### Most common causes <sup>[1]</sup>

- Biliary pancreatitis (~ 40% of cases; mostly caused by **gallstones**) 
- Alcohol-induced (~ 20% of cases)
- Idiopathic (~ 25% of cases)

Acute pancreatitis > Diagnosis

#### Diagnosis

##### Diagnostic criteria for acute pancreatitis <sup>[4][5][6]</sup>

Two of the three following criteria should be met for a diagnosis of acute pancreatitis to be made. 

- Characteristic abdominal pain
- ↑ Serum pancreatic enzymes: lipase or amylase  $\geq 3 \times$  ULN
- Characteristic findings of acute pancreatitis on cross-sectional imaging (e.g., abdominal ultrasound, contrast-enhanced CT abdomen)

16–18-year-old male presented to the ED with acute upper abdominal pain that radiates to the back, vital signs are stable, the only site of pain is epigastric, diagnosis?

- A. Perforated peptic ulcer
- B. Acute pyelonephritis
- C. Acute diverticulitis
- D. Acute pancreatitis
- E. Viral hepatitis



Ans:D

17- which of the following is not from Charcot triad?

- A. Abdominal pain
- B. Jaundice
- C. Fever>24 h
- D. Hypotensive and confused
- E. Sensitivity and specificity of acute cholangitis 79.8%,82.6%

Ans:D

#### Acute cholangitis

- Charcot cholangitis triad (25–70% of patients present with all three features)  <sup>[1][5]</sup>
  - **Abdominal pain** (most commonly RUQ)
  - High **fever**
  - **Jaundice** (least common feature)
- Reynolds pentad: Charcot cholangitis triad PLUS hypotension and mental status changes 

- 18- Unconjugated bilirubin?
- A. Hemolysis
  - B. Rotor syndrome
  - C. Pancreatic tumor
  - D. Dubin Johnson syndrome

Ans: A

- 19- In contrast to ulcerative colitis, Crohn's disease:
- A. less incidence of perineal fistula
  - B. may cause bowel obstruction
  - C. is segmental rather than continuous
  - D. Cause heavy lower GI bleeding

Ans:C

- 20- Which of the following is a cause of conjugated hyperbilirubinemia?
- A. Gilberts syndrome
  - B. physiological jaundice
  - C. Cholestasis
  - D. Increased formation of bilirubin
  - E. Decreased absorption of bilirubin

Ans:C

**Conjugated hyperbilirubinemia** ^

**Background**

- **Definition:** elevated direct bilirubin (normal serum direct bilirubin:  $\leq 0.3$  mg/dL) [20]
- **Pathogenesis:** associated with intrahepatic and/or posthepatic conditions
  - ↓ Drainage of bilirubin via biliary tract
  - ↑ Reuptake of bilirubin

A- patient has noticed painless left groin swelling 1 week after he had right inguinal hernia repair, there were no signs of hernia recurrence, which of the following is the next step:

- A. US guided drainage
- B. IV antibiotics
- C. Conservative management

D. surgical exploration

Ans:D

**\*new left groin swelling after a right inguinal hernia repair raises concern for a vascular complication, such as an injury to the iliac vessels leading to a pseudoaneurysm or arteriovenous fistula.**

**\* US-guided drainage → Not suitable because this swelling could be a vascular complication rather than a simple fluid collection. Drainage without identifying the cause could lead to significant bleeding.**

22- Patient with abdominal pain presented with large amount of bilious non-malodorous vomiting and minimal abdominal distention, he was found to have gastric outlet obstruction, which of the following is the most likely site of obstruction:

- A. proximal small intestine
- B. distal small intestine
- C. large intestine with competent ileocecal valve
- D. large intestine with incompetent ileocecal valve

Ans: A

23- In order to diagnose acute pancreatitis, 2 out of three which of the following criteria are required?

- A. Epigastric pain, radiological evidence of pancreatitis, serum lipase at least 2 times normal
- B. Epigastric pain, radiological evidence of pancreatitis, serum amylase at least 3 times normal
- C. Cholelithiasis, radiological evidence of pancreatitis, serum amylase at least 3 times normal
- D. Epigastric pain, cholelithiasis, serum lipase at least 2 times normal
- E. Cholelithiasis, R/E of pancreatitis, serum lipase at least times normal

Ans: B

Acute pancreatitis > Diagnosis

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**Diagnosis**

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**Diagnostic criteria for acute pancreatitis** [4][5][6]

Two of the three following criteria should be met for a diagnosis of acute pancreatitis to be made. ☐

- Characteristic abdominal pain
- ↑ Serum pancreatic enzymes: lipase or amylase  $\geq 3\times$  ULN
- Characteristic findings of acute pancreatitis on cross-sectional imaging (e.g., abdominal ultrasound, contrast-enhanced CT abdomen)

24- Not a risk factor for adenocarcinoma of the esophagus?

- A. Alcohol
- B. Smoking
- C. Obesity
- D. GERD
- E. Caustic injury

Ans: E/A

## Etiology

### Adenocarcinoma <sup>[4]</sup>

- **Exogenous risk factors**
  - Smoking (twofold risk)
  - Obesity
- **Endogenous risk factors**
  - Male sex
  - Older age (50–60 years)
  - Gastroesophageal reflux
  - Barrett esophagus
- **Localization:** mostly in the lower third of the esophagus



The most important risk factors for esophageal adenocarcinoma are gastroesophageal reflux and associated Barrett esophagus.

25- The modality of choice to diagnose a patient with gastric cancer is:

- A. Flexible endoscopy with multiple biopsies
- B. Diagnostic laparoscopy
- C. Double contrast barium swallow
- D. CT
- E. Endoscopic ultra sound

Ans: A

26- True about internal hemorrhoids

- A. usually present with heavy bleeding
- B. both internal and external hemorrhoids are composed of venous blood
- C. usually, internal hemorrhoids are not palpable
- D. blood is sometimes mixed with stool

Ans:C

- 27- True about gallbladder stones:
- A. 50% of stones are cholesterol stones
  - B. 50% of stones are symptomatic
  - C. Caucasian women are 2 folds more likely to develop gallstones compared to men

Ans: C

**\*Cholesterol stones (~ 80% of cases)**

**\*Most gallstones are asymptomatic**

- 28- Which of the following is NOT true about Anal fissure?
- A. anterior midline fissures are most common
  - B. Multiple lateral fissures are usually from Crohn disease
  - C. most acute anal fissures heal conservatively
  - D. sphincterotomy is successful in 90% of anal fissures

Ans: A

\*Anal fissures are a longitudinal tear in the anoderm, typically located distal to the dentate line in the posterior midline, and are most commonly caused by increased anal sphincter tone

- 29- The most common indication for surgery in Crohn's disease is:
- A. ileal stricture
  - B. ileal perforation peritonitis
  - C. Enterovesical fistula
  - D. GI bleeding
  - E. Enterocolonic fistula

Ans: A

- 30- The polyp with higher malignant potential is?
- A. Tubular
  - B. Tubulovillous
  - C. Hyperplastic
  - D. Hamartomata's
  - E. Pseudo polyp

Ans: B

- 31- Which of the following doesn't create zone of high pressure in lower esophagus
- A. Crus of diaphragm
  - B. Tonic contraction in lower esophageal muscles
  - C. Sling fibers of the cardia
  - D. Transmitted pressure from the abdomen
  - E. Primary peristalsis

Ans: E (**temporary contraction does not maintain high pressure at lower esophagus**)



A- 35-year-old patient came to ED with fresh painless rectal bleeding and constipation. His weight is steady, his appetite is normal. Which of the following is the most appropriate diagnosis?

- A. Right colon cancer
- B. Hemorrhoids
- C. Anal fissure
- D. Diverticulosis
- E. Volvulus

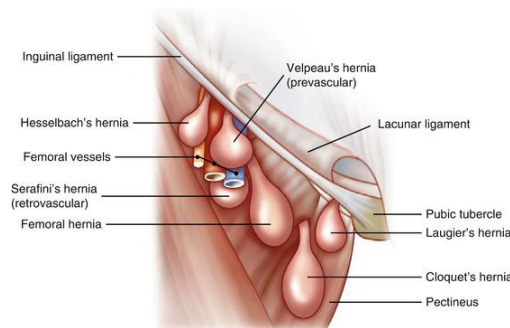
Ans: B

33- All of the following is correct about Femoral hernia EXCEPT:

- A. More common in women
- B. The risk of strangulation is more as compared with inguinal hernia
- C. It presents as a swelling below and medial to Pubic tubercle
- D. The sac may contain omentum
- E. Can be a cause of small bowel obstruction

Answer: C

- **Patients present with a globular swelling inferior to the inguinal ligament and medial to the femoral vein that worsens with coughing or straining.**



34- Abdominal Anatomy, all of the following are true except:

- A. Pancreas is related to medial side of duodenum
- B. Liver and gallbladder lie anteriorly to 2nd part of duodenum
- C. The portal vein is created by the splenic vein and Inferior Mesenteric Vein
- D. The gastroduodenal artery originates from the common hepatic artery
- E. The portal vein wall appears hyperechoic on US

Answer: C

**\*portal vein =splenic + superior mesenteric veins**

- 35- The best scolical agent for removal of hepatic hydatid cyst is?
- A. Hydrogen peroxide 10%
  - B. Hypertonic saline 3%
  - C. Chlorhexidine
  - D. Chlorhexidine 0.15% with cetrimide 1.5%

Ans: A and D are correct (A was mentioned in the GI surgery dossier)

- 36- All of the following are associated with increased formation of cholesterol gallstones except:
- A. Obesity
  - B. Rapid weight loss
  - C. OCPs
  - D. Female gender
  - E. Crohn's disease
- Ans: E

**4F's female , fat , forty , fertile**  
**Also there's family history, rapid weight loss**

# **Final Doctor 019**

1) Not a cause of acute abdomen:

Hyperthyroidism

2) Not complication of diverticular disease  
carcinoma (twice)

Diverticular disease ( Diverticulosis) can cause:

Diverticulitis  
Peritonitis  
Abscess

Intestinal obstruction  
Haemorrhage  
Fistula formation (ex. colovesical fistula )

not  
cancer!

3) Most common cause of lower GI bleeding?

Diverticular disease

Hinchey classification  
of diverticulosis

- Grade I Mesenteric or pericolic abscess
- Grade II Pelvic abscess
- Grade III Purulent peritonitis
- Grade IV Faecal peritonitis

Hinchey Score	Treatment
0	<ul style="list-style-type: none"><li>• Avoid routine use of antibiotics</li><li>• Antibiotics if immunocompromised/ multifocal CRP &gt; 140</li><li>• Liquid diet - gradually build up as tolerated</li></ul>
I	<ul style="list-style-type: none"><li>• Antibiotics</li><li>• Liquid diet - gradually build up as tolerated</li></ul>
IIa IIb	<ul style="list-style-type: none"><li>• Antibiotics</li><li>• Liquid diet</li><li>• Radiological drainage (if amenable)</li></ul>
III	<ul style="list-style-type: none"><li>• Urgent surgical intervention</li><li>• Consider sigmoid colectomy + primary anastomosis + ileostomy</li><li>• Laparoscopic peritoneal lavage - not advised</li></ul>
IV	<ul style="list-style-type: none"><li>• Urgent surgical intervention</li><li>• Likely Hartmann's procedure (sigmoid colectomy + end colostomy)</li></ul>
N/A	<ul style="list-style-type: none"><li>• Unstable/active bleeding (shock index &gt; 1) CTA to identify source -&gt; Rt urgent colonoscopy</li><li>• Double bagging for blood - from blood stained stool</li></ul>

4) Hinchy 1 treatment?

Antibiotics

#### Mechanisms of GERD

##### Impaired esophageal clearance:

- Esophageal dysmotility.
- Reduced salivation.

##### Impaired defence against epithelial injury:

- Impaired mucosal integrity.

##### Impaired gastric (reservoir) function:

- Decreased gastric compliance and increase in intragastric pressure, delayed gastric emptying.

5) Not a protective factor for GERD?

Delayed gastric emptying

6) Not indication of IBD surgery?

CRP of 50 after 4 days of steroids

#### Rule of Surgery in Acute Presentation . Cont.

- A stool frequency of >8/day or CRP >45 mg/l at **3 days** appears to predict the need for surgery in 85% of cases

Travis, S. P. et al Gut. 38(6):905-910, June 1996.

- Intravenous steroids are generally given for up to **5 days**. There is no benefit beyond 7-10 days

Turner D et al Clin Gastroenterol Hepatol 2007;5:103e10.

7) Crohns over UC?

Seldom causes hematochezia

8) Wrong about appendicitis?

Most commonly in children

#### Epidemiology

- most frequently in the **second** and **third** decades of life.
- The **incidence** is approximately 233/100,000 population and is **highest** in the 10-to-19-year-old age group
- male to female ratio of **1.4:1**

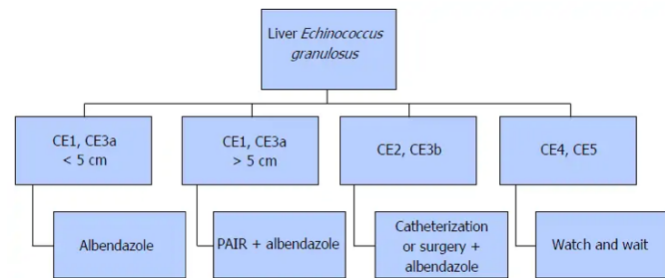
Human infection occurs by **hand-to-mouth transfer of viable tapeworm eggs from dog faeces**. The parasite eggs, which can remain viable for weeks, are distributed via local environmental contamination by faeces of tapeworm-infected canines. Mar 4, 2022

## 9) Mode of transmission of hydatid cyst?

Fecal-oral

## 10) Hydatid cyst of 5cm treatment?

Albendazole



## 11) Calcified hydatid cyst represents?

Commonly, calcification of the cyst is **interpreted in favor of cyst death**, and in the literature review, there is a few data support to the presence of vesicles or protoscolices in calcified cysts and calcification of the cyst wall is accepted as an important sign of cyst death. Nov 23, 2020

## 12) Wrong about small intestinal cancer?

More proximal benign

► Benign lesions are more common distal, while Adenocarcinoma is more common proximal.

malignant

## 13) Most common benign liver tumor?

Hemangioma

Hemangioma

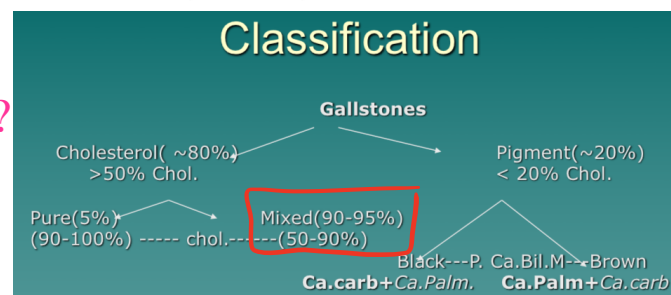
## 14) True about hemangioma?

Asymptomatic

- Most common benign tumors. 0.5-5%
- Variable sizes, single or multiple, more than 6cm Giant
- Mostly asymptomatic, pain, heaviness, early satiety, complications.
- Diagnosis: USG, CT, MRI, Angiography, Isotopic scan. Needle Bx contraindicated.
- Management: observation, resection, embolization.

## 15) Most common type of gallstones?

Mixed



## 16) Most common complication of gallstones?

Cholecystitis

# Mechanism of formation: 2)Cholesterol Saturation

## 1)Solubilization

## 3)Nucleation 4)Stone growth

17) Not in the steps of formation of cholesterol stones?

Biliary infection

18) Most common liver malignancy?

Metastatic cancer

19) Most common site of pancreatic cancer?

Head

20) Most common type of pancreatic cancer?

Ductal adenocarcinoma

- The commonly used term "pancreatic cancer" usually refers to a ductal adenocarcinoma of the pancreas (including its subtypes), which represents approximately 85 to 90% of all pancreatic neoplasms.

21) Most common of cause of pancreatitis in Jordan?

Biliary

- Even in the west, biliary pancreatitis is the most prevalent type.

22) The cause of indirect hyperbilirubinemia?

Rapid absorption of large hematoma

23) Not in early Ranson criteria?

Amylase

24) Not a cause of acute pancreatitis?

Hypermagnesemia

Cause of pancreatitis:  
I GET SMASHED

## Ranson's Criteria For Acute Pancreatitis

At Admission	At 48 hours
<ul style="list-style-type: none"> <li>• Age &gt; 55 years</li> <li>• Leukocyte count &gt; <math>16 \times 10^3/\text{mL}</math></li> <li>• Blood glucose &gt; 200 mg/dL</li> <li>• Serum LDH &gt; 350 IU/L</li> <li>• Serum AST &gt; 250 IU/L</li> </ul>	<ul style="list-style-type: none"> <li>• Decrease in hematocrit &gt; 10%</li> <li>• Increase in BUN of &gt; 8 mg/dL</li> <li>• Serum calcium less than 8 mg/dL</li> <li>• <math>\text{PaO}_2</math> &lt; 60 mm Hg</li> <li>• Base deficit &gt; 4 mEq/L</li> <li>• Estimated fluid sequestration &gt; 6,000 mL</li> </ul>

Score < 3 = Mortality 0-3% • Score ≥ 3 = Mortality 11-15% • Score ≥ 6 = Mortality 40%



25) Presentation of acute budd-chiari syndrome?

Hepatomegaly, ascites and abdominal pain

26) Resection of liver mets will improve which cancer?

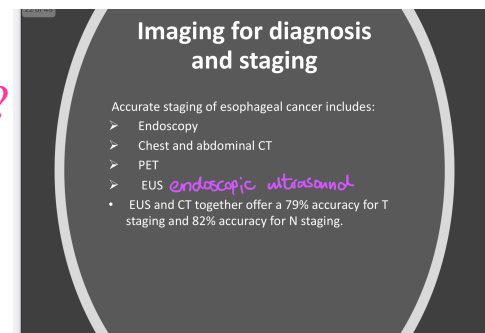
Colon

27) 60 year old male, epigastric pain improves with eating and milk, improve with NSAIDS, anemia and has an ulcer distal to the GEJ with irregular margin. Best next step?

Biopsy or stop NSAIDS and repeat endoscope (not sure)

28) Esophagus cancer T staging is done using?

Endoscopic ultrasound



29) Acid-base case?

Metabolic acidosis with respiratory compensation

30) 60-year old patient with constipation of 3 weeks without any symptoms, best next step?

A) Colonoscopy

B) hemooccult blood

C) Send home and re-evaluate after 8 weeks

31) High risk of colon CA?

## Unexplained anemia

Presentation	
<b>Higher risk</b>	<ul style="list-style-type: none"> <li>Rectal bleeding with a change in bowel habit to looser stools or increased frequency of defecation persisting for 6 weeks (all ages)</li> <li>Change in bowel habit as above without rectal bleeding and persisting for 6 weeks (&gt; 60 years)</li> <li>Persistent rectal bleeding without anal symptoms (&gt; 60 years)</li> <li>Palpable right-sided abdominal mass (all ages)</li> <li>Palpable rectal mass (not pelvic) (all ages)</li> <li>Unexplained iron deficiency anaemia (all ages)</li> </ul>
<b>Low risk</b>	<ul style="list-style-type: none"> <li>Patients with no iron deficiency anaemia, no palpable rectal or abdominal mass</li> <li>Rectal bleeding with anal symptoms and no persistent change in bowel habit (all ages)</li> <li>Rectal bleeding with an obvious external cause, e.g. anal fissure (all ages)</li> <li>Change in bowel habit without rectal bleeding (&lt; 60 years)</li> <li>Transient changes in bowel habit, particularly to harder or decreased frequency of defecation</li> <li>Abdominal pain as a single symptom without signs and symptoms</li> </ul>

32) Does not affect the risk of malignancy?

Shape (Not sure at all)

Pathological staging	
<b>Macroscopic description</b>	<ul style="list-style-type: none"> <li>Size of the tumour (greatest dimension).</li> <li>Site of the tumour in relation to the resection margins.</li> <li>Any abnormalities of the background bowel.</li> </ul>
<b>Microscopic description</b>	<ul style="list-style-type: none"> <li>Histological type.</li> <li>Differentiation of the tumour, based on the predominant grade within the tumour.</li> <li>Maximum extent of invasion into/through the bowel wall (submucosa, muscularis propria, subserosa).</li> <li>Serial involvement by tumour, if present.</li> <li>A statement on the completeness of excision at the cut ends (including the 'lengths' from stapling devices) and at any radial margin.</li> <li>The number of lymph nodes examined, the number containing metastases, and whether or not the apical node is involved.</li> <li>Extramural vascular invasion if present.</li> <li>Pathological staging of the tumour according to Dukes' classification.</li> </ul>

33) High risk of malignancy on histology?

Villous

34) Bilious vomiting, non-odor and minimally distension and periumbilical colicky pain... which level of obstruction?

Proximal small intestine (not sure)

35) Does not cause gastric mucosal damage?

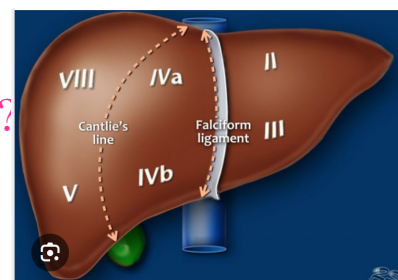
(Bile or E.coli), probably E.coli

36) Main oxygenation of the liver?

The liver receives a blood supply from two sources. The first is the **hepatic artery** which delivers oxygenated blood from the general circulation. The second is the hepatic portal vein delivering deoxygenated blood from the small intestine containing nutrients.

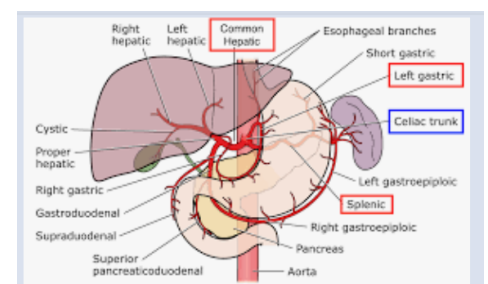
37) Segments to the right of the falciform ligament?

4a and 4b



38) Not a branch of the celiac trunk?

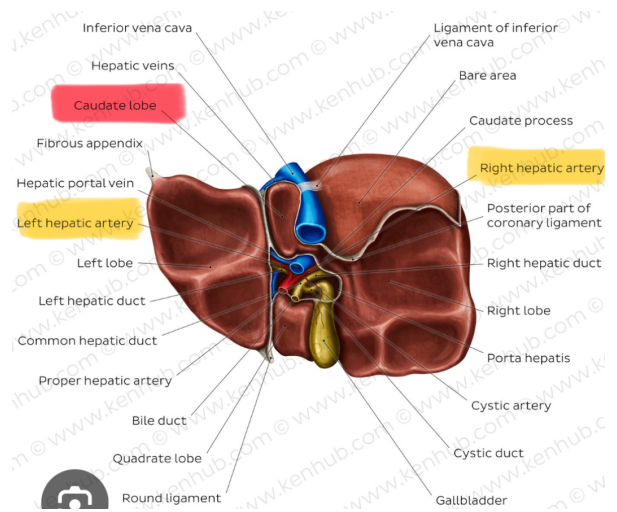
Anterior inferior pancreaticoduodenal artery





### 39) Blood supply of the caudate lobe?

Right and left hepatic



### 40) Wrong about portal vein?

Formed by IMV and splenic vein

Portal vein = Superior mesenteric vein + splenic vein

### 41) Wrong about hemorrhoids?

Rectal prolapse

#### DIFFERENTIAL DIAGNOSIS of Hemorrhoids .....

- ☐ Rectal mucosal prolapse
- ☐ Hypertrophied anal papillae
- ☐ Rectal polyps
- ☐ melanoma
- ☐ carcinoma
- ☐ rectal prolapse
- ☐ Fissure

### 42) Which of the following is considered a stimulant laxative?

Bisacodyl

Stimulant laxatives

These stimulate the muscles that line your gut, helping them to move poo along to your back passage. They take 6 to 12 hours to work. They include: bisacodyl (also called by the brand name Dulcolax)

### 43) All of the following are true regarding sigmoid and cecal volvulus except:

Narrow mesentery is a risk factor for sigmoid volvulus

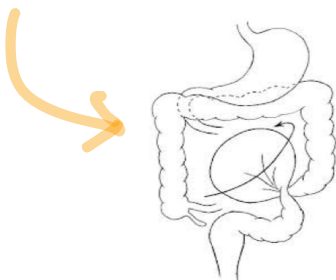
Volvulus

- ☐ when the colon twists on its mesentery, which impairs the venous drainage and arterial inflow. The cecum and sigmoid colon are most commonly affected.
- ☐ Volvulus typically occurs in elderly, debilitated individuals; patients living in an institutionalized setting; or patients with a history of chronic constipation (western type).
- ☐ African type is related to high fiber diet
- ☐ during pregnancy, most commonly occurring in the third trimester

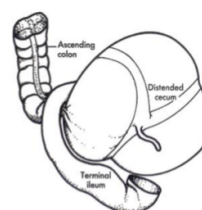
#### Volvulus management

- Endoscopic reduction and decompression of a sigmoid volvulus can be performed in the absence of peritoneal signs. This procedure is also contraindicated when evidence of mucosal ischemia is present on endoscopy
- Recurrence after decompression is as high as 50%; thus, surgical resection is indicated.
- Emergency surgery is indicated in patients with evidence of perforated or ischemic bowel, or if attempts at endoscopic reduction and decompression are not successful.
- The preferred treatment for cecal or transverse colon volvulus is surgical resection and anastomosis.
- Endoscopic detorsion and decompression is an option when the patient is a poor surgical candidate.

Volvulus (sigmoid)



Volvulus (cecal)



**Final  
Doctor 018  
(Unmodified)**

# Gastrointestinal surgery

**82. What is the most common benign liver tumour?**

- A. Hepatocellular adenoma
- B. Focal nodular hyperplasia
- C. Hamartoma
- D. Hemangioma
- E. Hepatoblastoma

**Answer: D**

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**83. The most common microorganism causing liver abscess is:**

- A. Klebsiella
- B. Staphylococcus
- C. Proteus
- D. Pseudomonas
- E. E-coli

**Answer: E**

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**84. A 72-year-old female patient presented to ER with abdominal pain & diarrhea of 1 month. She has 6-10 depositions daily of liquid stool mixed with mucus & blood. Her medications include losartan, propafenone, & a COX-2 inhibitor. Her labs show a leukocyte count of 18000 with 79% neutrophils. Colonoscopy reported a sigmoid colon mucosal edema & congestion with yellow-white plaques. Which of the following is wrong about this case?**

- A. Most likely affects elderly patients with comorbidities.
- B. The use of cephalosporin based antibiotics is a risk factor.
- C. Surgery is the first line of management.
- D. Oral but not intravenous vancomycin is of help in this case.
- E. Can be diagnosed by performing flexible sigmoidoscopy.

**Answer: C**

**85. A 57-year-old man comes to the medical clinic because he has had fatigue & unintentional weight loss of 20 lb during the past month. He also has had inability to swallow solid foods for the past two weeks. He has a 30-pack-year history of cigarette smoking. Medical history includes Barrett esophagus, achalasia, alcohol use disorder (alcohol abuse), & ingestion of lye at 15 years of age. Esophagogastroduodenoscopy confirms the suspected diagnosis of adenocarcinoma of the distal esophagus. Which of the following findings in this patient's history is his greatest risk factor for this condition?**

- A. Achalasia
- B. Alcohol use disorder (alcohol abuse)
- C. Barrett esophagus
- D. Cigarette smoking
- E. Ingestion of lye

**Answer: C**

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**86. A case of vomiting & peptic ulcer?**

- A. Hypokalemic, hypochloremic metabolic acidosis
- B. Hypokalemic, hyperchloremic metabolic alkalosis
- C. Hyperkalemic, hypochloremic metabolic alkalosis
- D. Hypokalemic, hypochloremic metabolic alkalosis
- E. Hypokalemic, hypochloremic, hypernatremic metabolic acidosis

**Answer: D**

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**87. Which electrolyte is most abundant in the gastric secretion?**

- A. Sodium
- B. Potassium
- C. Chlorine
- D. Hydrogen ions
- E. Bicarbonate

**Answer: C**

**88. A 35-year-old male was admitted to the hospital due to appetite loss & RUQ pain. He stated that the pain is worst after heavy meals. On examination, the patient was obviously jaundiced & had RUQ tenderness. Labs showed a slightly elevated AST & ALT, but a markedly increased ALP. ERCP reported a normal CBD, & ultrasound didn't detect a stone in the biliary ducts. What is the most likely diagnosis?**

- A. Mirizzi syndrome
- B. Pancreatitis
- C. Choledocholithiasis
- D. Hepatitis
- E. Cholangitis

**Answer: A**

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**89. A 34-year-old female who's previously healthy presented to the ER complaining of abdominal pain. She was hemodynamically unstable. An abdominal x-ray was done & showed coffee bean sign. What's the best next step?**

- A. Pneumatic decompression
- B. Open surgery
- C. Observe the patient
- D. Do a CT to determine the level of obstruction
- E. Give IV fluids & stabilize the patient

**Answer: E**

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**90. All of the following are true about pruritis ani EXCEPT:**

- A. It can be caused by hemorrhoids
- B. It can be idiopathic
- C. It's classified as primary & secondary
- D. Surgery is the first line treatment
- E. It affects 1-5% of the population

**Answer: D**

**91. Which of the following is NOT associated with fistula formation?**

- A. Amebic infection
- B. Crohn's disease
- C. Colon cancer
- D. Radiation
- E. Diverticulosis

**Answer: A**

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**92. Which marker do surgeons use to divide the liver into right & left lobes?**

- A. Calot's triangle
- B. Falciform ligament
- C. Ligamentum teres
- D. Coronary ligament
- E. Cantlie's line

**Answer: E**

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**93. Which of the following is a stimulant laxative?**

- A. Psyllium
- B. Senna
- C. Lactulose
- D. Fibers
- E. Polyethylene glycol

**Answer: B**

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**94. Which of the following is true regarding familial adenomatous polyposis?**

- A. It is inherited as an autosomal recessive condition
- B. It is characterized by polyp formation in late adulthood
- C. It is best treated by total proctocolectomy & ileal pouch construction
- D. It is due to a mutation on the short arm of chromosome 15
- E. Malignant transformation occurs in 75% of untreated patients

**Answer: C**

**95. A 39-year-old man presents with fresh painless rectal bleeding. He is constipated, his weight is steady, & his appetite is normal. He has no family history of large bowel cancer. What is the most likely diagnosis?**

- A. Anal fissure
- B. Hemorrhoids
- C. Diverticulosis
- D. Thrombosed piles
- E. Colon cancer

**Answer: B**

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**96. All the followings are complications of diverticular disease of the colon EXCEPT:**

- A. Carcinoma
- B. Stricture
- C. Lower gastrointestinal bleeding
- D. Paracolic abscess
- E. Fistulae

**Answer: A**

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**97. A 22-year-old male patient presented to the ED with right iliac fossa pain for 18 hours. He has reduced appetite & nausea, no urinary symptoms or diarrhea. On examination, his temperature was 38.5°C & his abdomen was tender at the RIF with guarding. The most appropriate next step of action after performing the necessary investigation is to:**

- A. Admit the patient at the surgical ward to start regular IV antibiotics to cover Gram negative & anaerobes.
- B. Refer the patient to the urology team for further treatment.
- C. Arrange the patient for theatre as a definitive treatment for his illness.
- D. Discharge the patient home & re-evaluate after 6 hours at the outpatient clinic.
- E. Book him for upper endoscopic examination next morning.

**Answer: C**

**98. Which of the following parameters is NOT a part of Ranson's criteria?**

- A. AST
- B. Age
- C. LDH
- D. Amylase
- E. WBC

**Answer: D**

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**99. All the following are associated with increased incidence of gallbladder carcinoma EXCEPT:**

- A. Primary sclerosing cholangitis
- B. Multiple small gallstones
- C. Choledochal cyst
- D. Gallbladder polyps more than one cm
- E. Porcelain gall bladder

**Answer: B**

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**100. A case of Hinchey 2 diverticulitis:**

- A. Give oral antibiotics & repeat the CT in 2 days.
- B. Give IV antibiotics & repeat the CT in 5 days.
- C. Admit the patient & ...
- D. ...
- E. ...

**Answer: A**