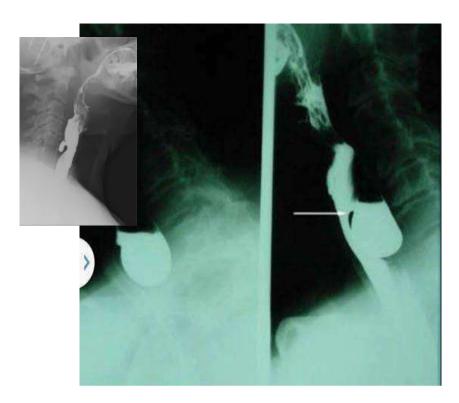
Gastrointestinal Tract (Esophagus, Stomach & Intestines)

Q: A 60 yo male patient came complaining of Dysphagia, halitosis, swelling in the neck:



Q1: What is the Dx?

Pharyngeal pouch (Mes called Zanker)

Q2: How to Dx the pt?
Barium Swallow



Q: Patient came complaining of dysphagia for both liquids & solids:

Q1: What is the sign?

- Bird peak sign

Q2: Name the study?

- Barium swallow

Q3: What is the definitive Dx?

- Achalasia

Q4: What is the definitive diagnostic test?

- Manometry

Q5: Mention 2 modalities of Mx?

Esophageal sphincter
 (Hellers) Myotomy
 Balloon dilation Presented dilation



Q: a pt came complaining of dysphagia for both solids and liquids. + Regulgitation + Chest Pain

Q1: What is the Dx?

Diffuse Esophageal Spasm (DES)

Q2: What is the sign? corkscrew appearance

Q3: How to Diagnose?

1) Barium

2) Manometry (most accurate)

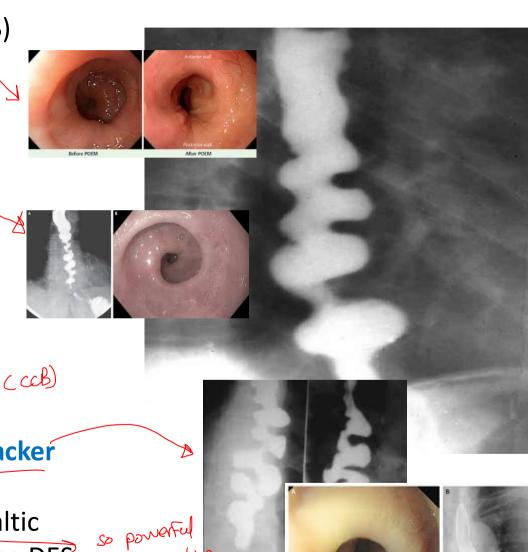
3) endoscopy

Q4: What is the Mx?

diltiazem or nifidipine and nitrates call

Q5: How to differentiate it from Nut-cracker esophagus?

By manometry (the nut cracker: peristaltic contractions with high amplitude, while the DES is non-peristalic with high contractions)



Q1: Define Barret's esophagus?

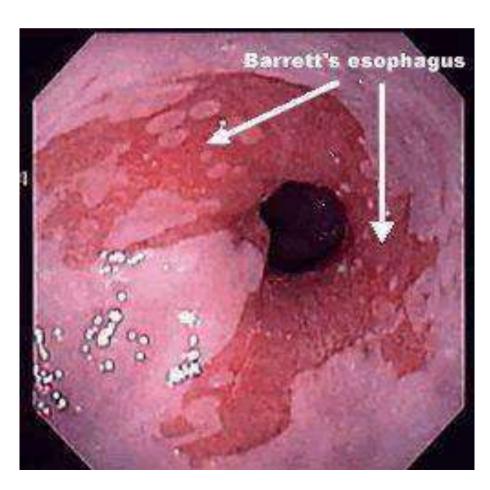
Change in the normally squamous lining of the lower esophagus to columnar epithelium (metaplasia)

Q2: What common type of cancer you will see? Adenocarcinoma

Q3: What is the cause? Chronic GERD

Q4: How to Dx? Endoscopy

Q5: Mx? PPI and follow up



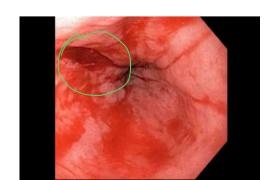


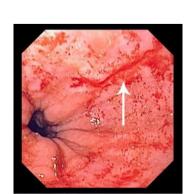
Q1: What is the Dx?
Mallory Weiss Tear Syndrome

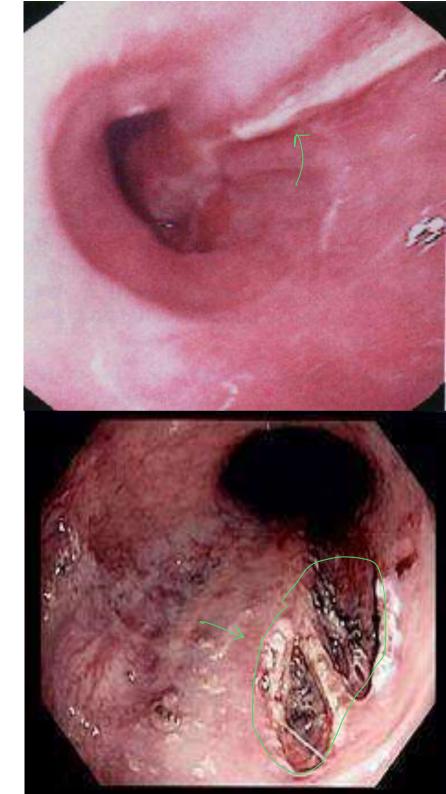
Q2: How to Diagnose it?

Hx & Upper Endoscopy

Q3: Mx?
It resolves spontaneously







Q: Patient with Intermittent dysphagia for solids only with no pain:

Q1: What is the Dx?

Schatzki ring (lower esophageal ring)

Q2: Name an abnormality associated with it?

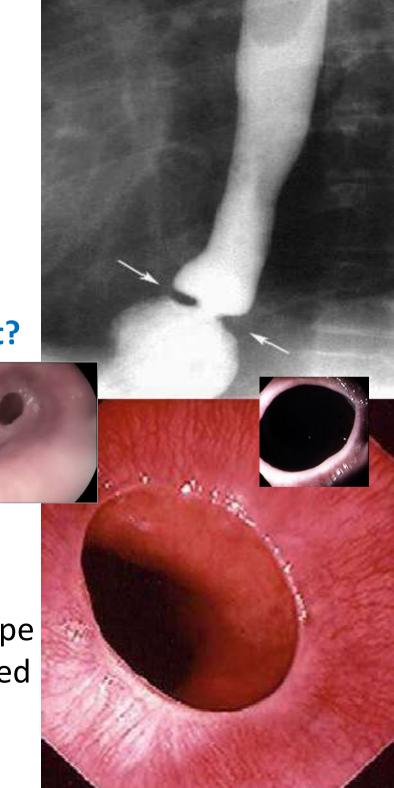
Hiatal Hernia

Q3: How to diagnose it?

Barium swallow and endoscopy

Q4: Mx?

Dilation by bougie method or through the scope hydrostatic balloon, and the patients are placed on PPI after dilation



Q: Patient with Intermittent dysphagia for solids only with no pain:

Q1: What is the Finding?

Esophageal Webs

(E.g. Plummer vinson syndrome)

From deficency anemia + dysphagia + esophageal webs

Q2: How to diagnose it?
Barium swallow and endoscopy

Q3: Mx?
Dilation



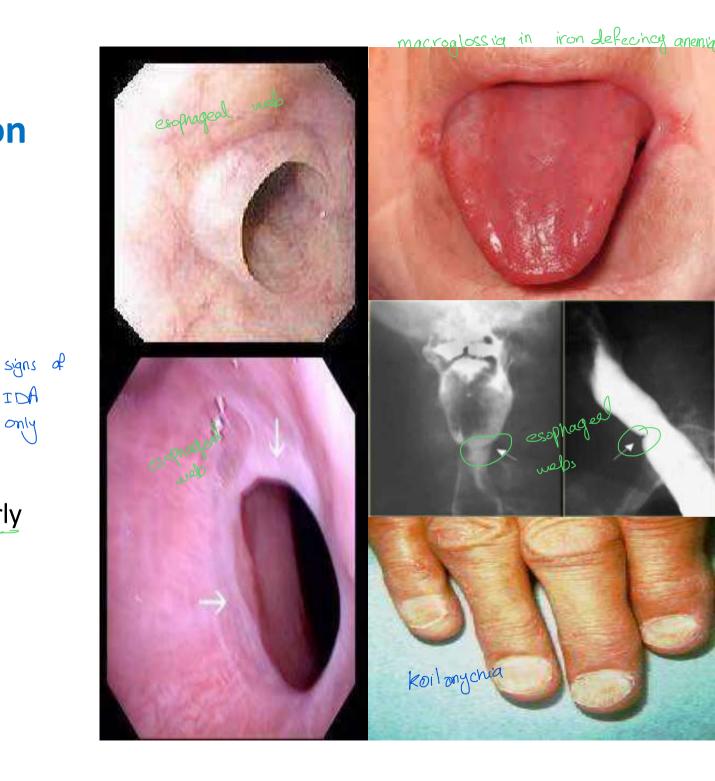
Plummer-Vinson syndrome:

the classic triad

- 1. Esophageal web
- 2. IDA
- 3. Dysphagia.
- 4. Spoon-shaped nails
- 5.Atrophic oral & tongue mucosa.

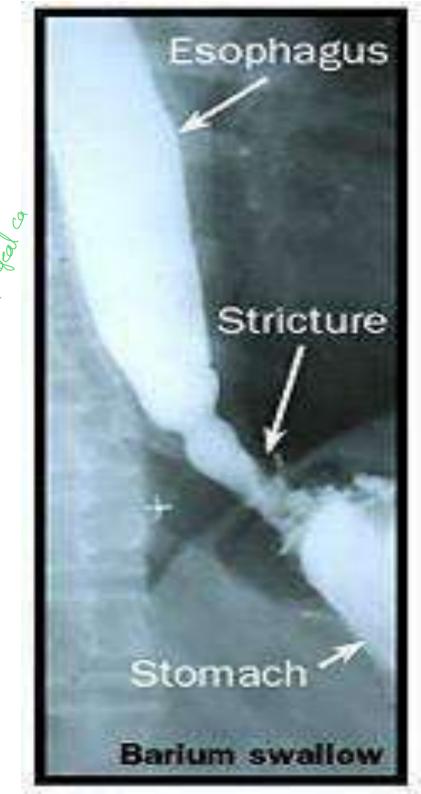
*especially occurs in elderly women; 10% develop squamous cell carcinoma.

*May respond to treatment of IDA.



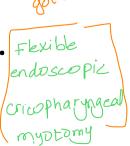
Esophageal stricture

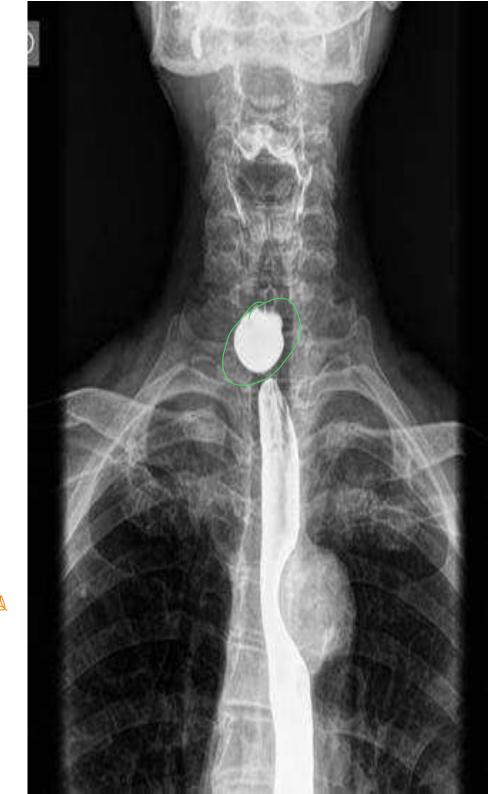
- Dysphagia : constant/ slowly progressive/ solids then liquids.
- Causes: long history of incomplete treated reflux/ prolonged NG tube placement/ lye ingestion.
 - Dx: barium swallow.
 - Treatment: dilation.



Zenker's diverticulum:

- It is a **false diverticulum** (not involving all layers of the esophageal wall).
- Outpouching of the upper esophagus.
- Halitosis / food regurgitation/ dysphagia.
- Elderly.
- Dx: **barium swallow**/ endoscopy and NG tube are contraindicated (risk of perforation).
- Treatment: surgical resection.

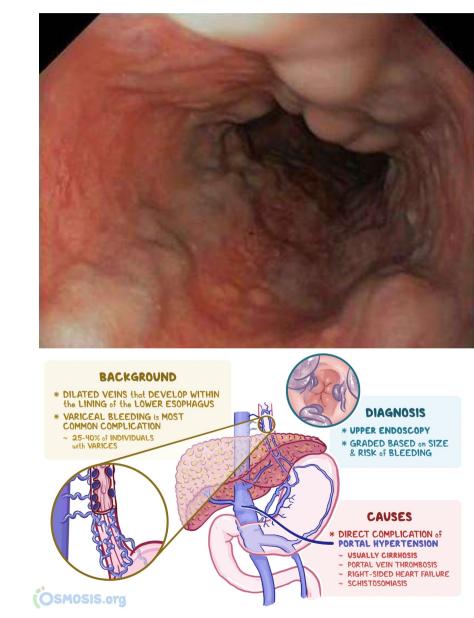




Q1: What is the Dx? Esophageal Varices

Q2: Mx?

Therapeutic endoscopy
 Ligation, banding,
 sclerotherapy
 β-blockers (e.g. propranolol).

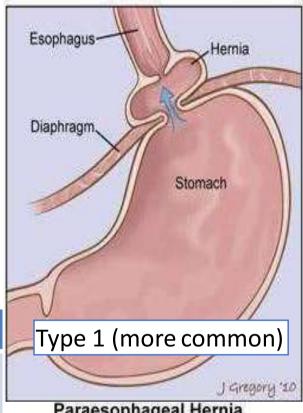


Hiatal hernia

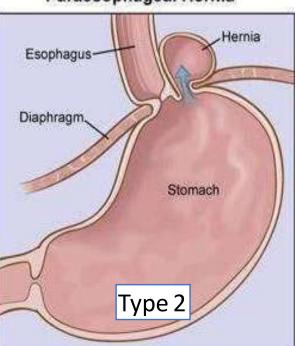
Sliding hernia (type 1) Para esophageal hernia (2) Dysphagia/ stasis gastriculcer/ Mostly asymptomatic but can cause reflux no reflux Complications :reflux> Complications: esophagitis> Barrett's esophagus hemorrhage/obstruction/ > cancer/ aspiration pneumonia strangulation. Treatment: medical with Treatment: surgical. antacids, PPI, H₂ blockers/if failed: surgical (lap. Nissen

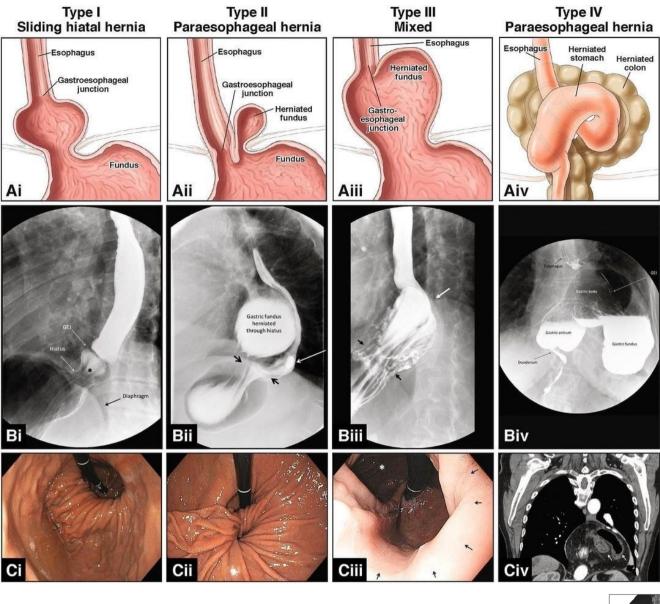
fundoplication)

Sliding Hernia



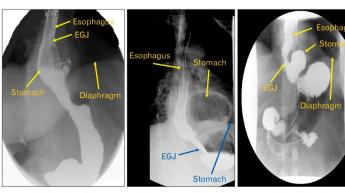
Paraesophageal Hernia









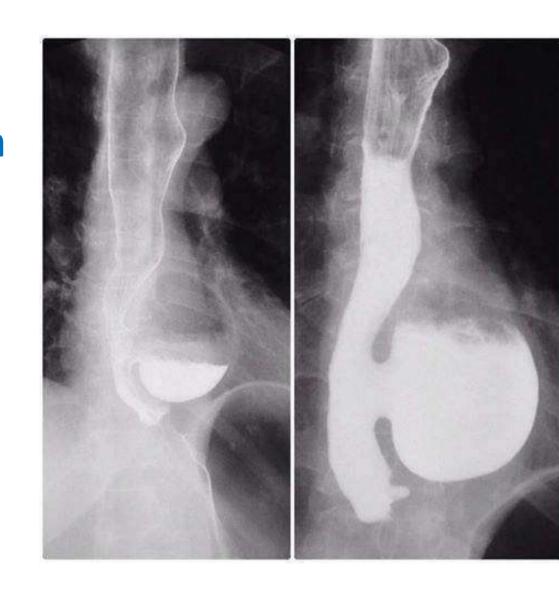


Paraesophageal/type 2

Epiphrenic diverticulum

Presentation: Dysphagia to solid foods with upper abdominal discomfort.

Often associated with hiatal hernia.

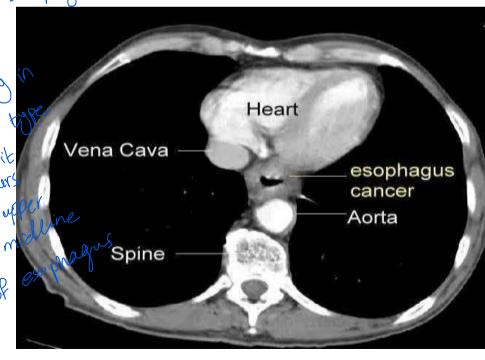


esophageal cancer

- -is more after 50 years, most between 60-70 years.
- -more in males.
- -risk factors: smoking, alcohol, and hot fluid drinkers.
- -Relevant Hx: GERD and Barrett's, stricture, Plummer Vinson syndrome, Celiac disease, Esophageal achalasia and diverticulum.
- -common symptoms are dysphagia, reflux, weight loss, and mediastinal invasion symptoms (chest pain, hoarseness, etc.)
- -they might also suffer from anemia due to so nutritional deficiency.
- -treatment : surgical resection if small and localized.
- If large or Metz: combination of CTX and RTX prior to surgery.



progressive continous to solid intially



easy mnemonic to remember esophageal CA risk factors ABCDEFGH:

- A- Achalasia/Alcohol
- B- Barrett's esophagus
- **C- Cigarettes**
- D-Diverticula
- E- Esophageal web, stricture
- F- Fat/Family hx
- G- GERD
- H- Hot liquid

Gastric cancer

Adenocarcinoma: m.c type (95%).

R.F: diet (smoked meat, high nitrates,

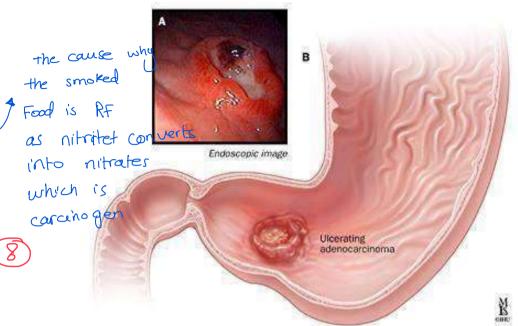
3low fruits and vegetables), smoking, family history, blood group type A, H. pylori, prev. partial gastrectomy, adenomatous gastric polyps, atrophic gastritis.

Subtypes: A mets by lymphatic & transmural

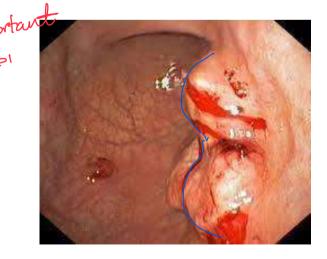
diffuse type: 70%, from lamina propria, **proximal**, worse than intestinal type, invasive and Metz, in youngerpt.

= mets by hematogenus

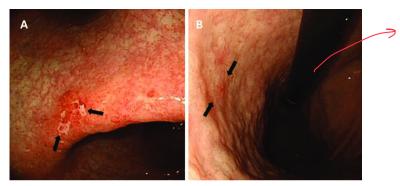
intestinal type: 30%, from gastric mucosa, distal, ass with H.pylori, well formed glandular structures.



Ulcerating adenocarcinoma



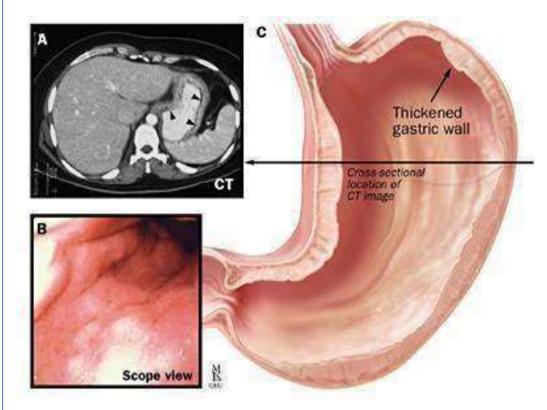
Intestinal type



Diagnosis: endoscopic with biopsy is the method of choice/ double contrast barium meal.

Treatment: surgical resection with wide margin >5cm and lymph nodes dissection .

If tumor is proximal or midbody do total gastrectomy with rouxen-y, if tumor is distal do distal subtotal gastrectomy. diffuse type



A. CT image of Linitis plastic (arrows denotes a thickened gastric wall).

Linitis Plastica (leather bottle):

when the entire stomach is involved and looks thickened .

Q1: What is the Dx?

Gastrointestinal Stromal Tumor (GIST)

Q2: What is the MC site?

Greater curvature (Stomach)

Q3: What are the cells of origin?

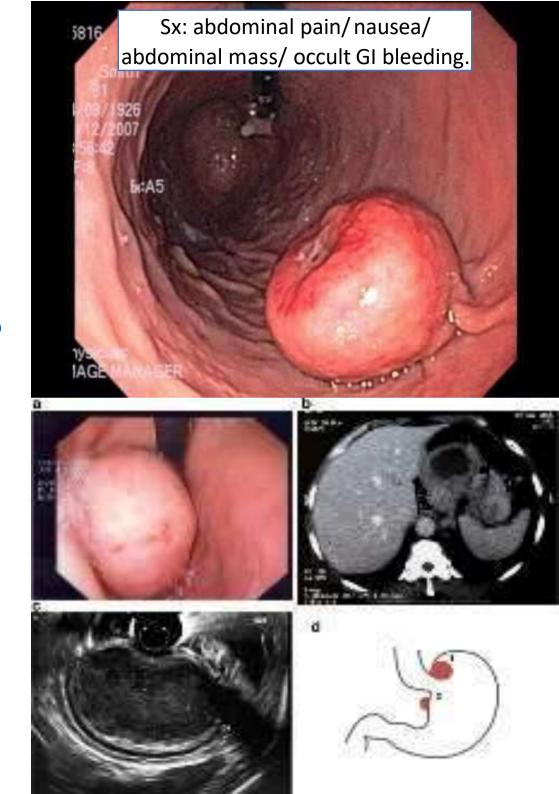
Cells of Cajal

Q4: Name the Gene Mutation? C-KIT

Q5: How to Mx?

Resection
Chemo (Imatinib)

Q6: How to Diagnose? CT / EGD/colonoscopy



altered metabolic activity occurs in 2/3 pt with

Q: A 50-years old male patient has recently become cachectic and developed ascites.

1. Name the findings on examination (lower picture) and CT scan (upper picture).

- Sister Mary Joseph Nodule

2. Mention 2 possible sources for this lesion.

- GI cancers, Gynecological cancers, Melanoma



Q: You are doing endoscopy and you found this lesion?

Q1: Describe what you see?

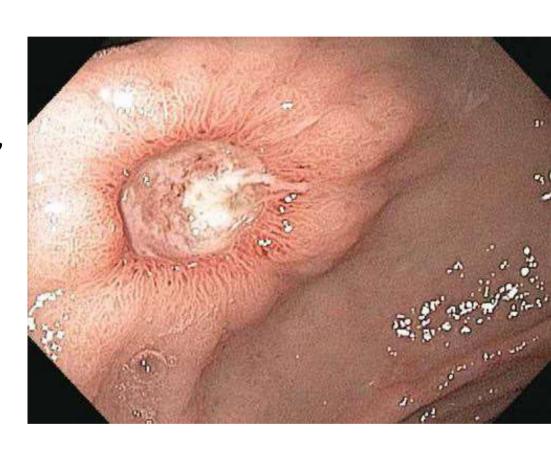
 Comment on the shape, size, location, color, presence of necrosis, discharge, etc..

Q2: What is the likely Dx?

- Stomach cancer or ulcer



- Biopsy



+ duoderal -> caused by 1 gastric acid

Q: You are doing endoscopy and you found this lesion, pain is relived by eating and exacerbated in empty stomach?

Q1: What is the likely Dx?

- Peptic (duodenal) ulcer

Q2: name 2 complications?

1) Perforation

2) Bleeding



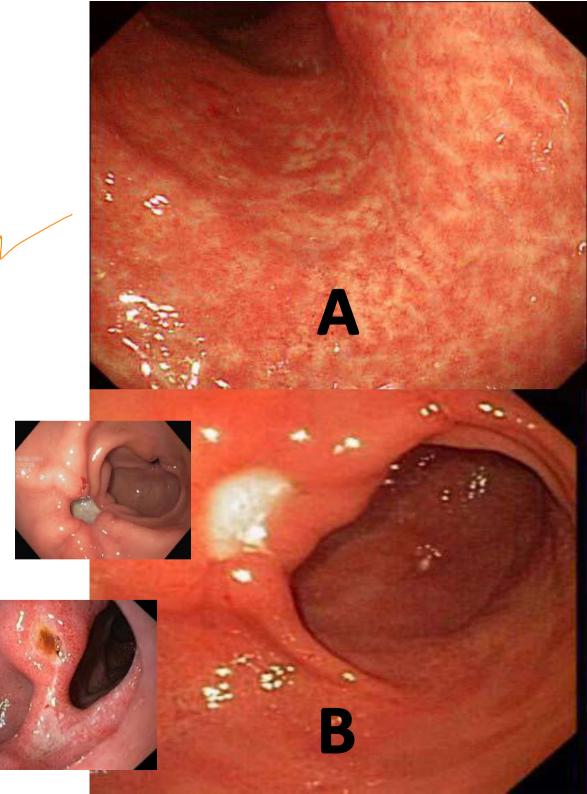
Q1: What is A and B?

A > Gastritis "not sure"

B > Duodenal Ulcer

Q2: Name 2 causes? 1) NSAID

2) H. Pylori



Q: The patient presented with sudden severe pain and abdominal distension:

Q1: What is the sign?

- Coffee bean sign ¿

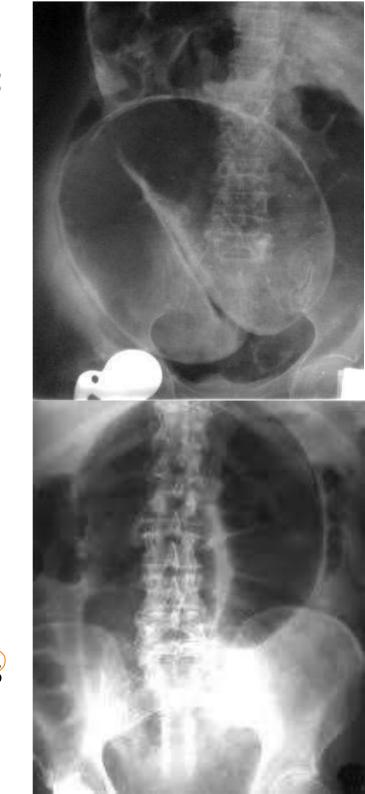


Q2: Name the signs you?

- 1) Dilated large bowel
 - 2) Coffee bean sign

Q3: What is your Dx? Sigmoid volvulus

Q4: What is the MC site? in Sigmoid



Sigmoid Volvulus



Diagnosis

- · Plain film (low specificity) [U-shaped, bent inner tube]
- Abdominal CT scan
- Contrast enema

Risk factors

- · Nursing home patients
- · Elderly
- Bed bound
- · Chronic constipation

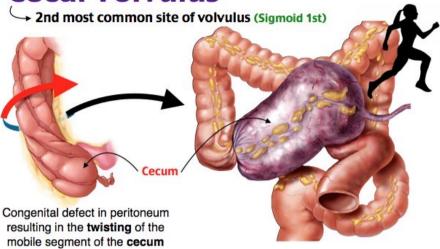
Clinical

- · Insidious onset of slowly progressive abdominal pain
- · Abdominal distension
- Nausea, constipation
- · Vomiting (several days after pain onset)

Management

- Flexible sigmoidoscopy (to reduce volvulus)
- · Surgery (to prevent recurrence)

Cecal Volvulus



Risk factors

- Relatively younger than sigmoid volvulus (30s-50s)
- · Associated with marathon runners
- Increased in GI malignancy

Diagnosis

- · Plain film (coffee-bean or comma cecum) [Low specificity]
- · Abdominal CT (90% of patients) [Whirl sign]
- · Surgical exploration (10% of patients)

Management

Surgical





Coffee bean appearance



Comma appearance

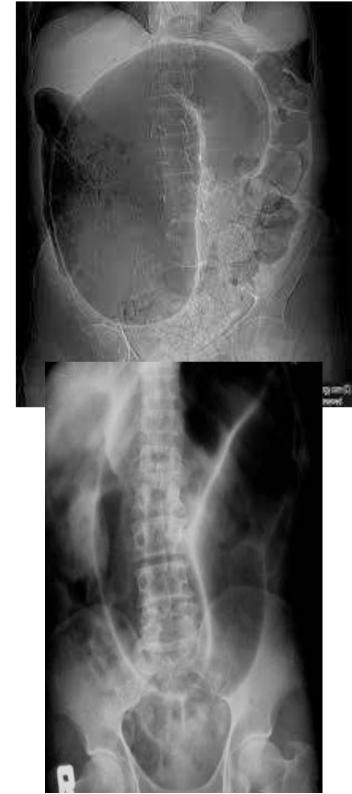
Q5: Mx?

Resuscitation and untwist (detorsion)
 the bowel and go for surgery (this is done by means of sigmoidoscopy or colonoscopy

Q6: Mention 2 causes for this condition?

- Chronic constipation
 - Sigmoid tumor





Q1: What is the study?

- Barium Enema

Q2: What is the Dx?

- Volvulus

Q3: What is the Mx?

- Detorsion

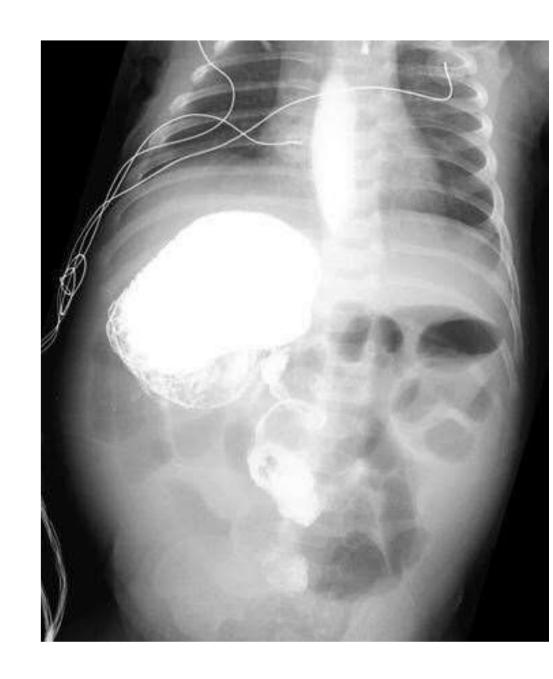


Q1: What is the study?

- Barium follow through

Q2: What is the pathology?

- Midgut volvulus



Q1: What is the Dx?

- Volvulus (Midgut)

Q2: If the bowel was viable and not gangrenous, what to do?

- Viable SB > Close and observe

- Other option: Ladd's Procedure



Q1: What is the study?

- Barium follow through

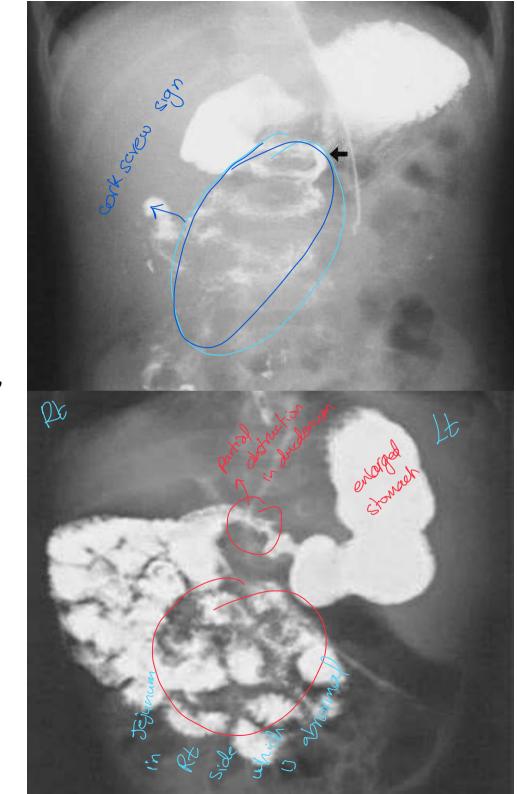
Q2: What is the pathology?

- Midgut volvulus due to malrotation

Q3: What is the Clinical ER Presentation?

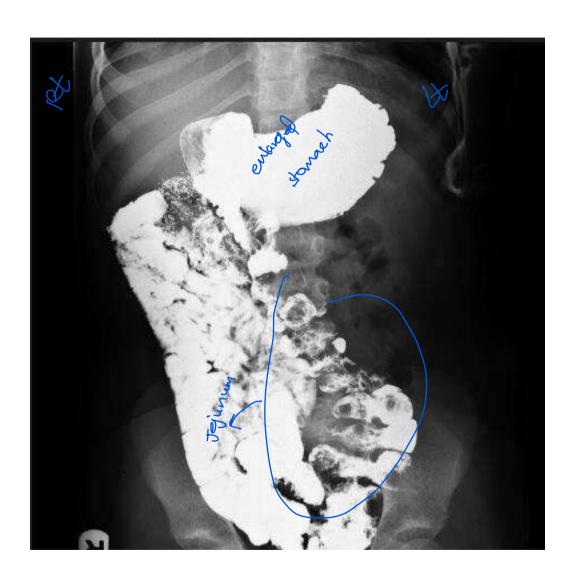
 acute abdominal pain , destination , constipation , vomiting





Malrotation

normally the duodenojejunal junction is to the left of the spine. In malrotation it is to the right of the spine.



Q1: What is the Dx?

Small intestinal obstruction (controlly)

Q2: What is the radiological findings?

Dilated bowel loops (Jejunal), and air in the rectum

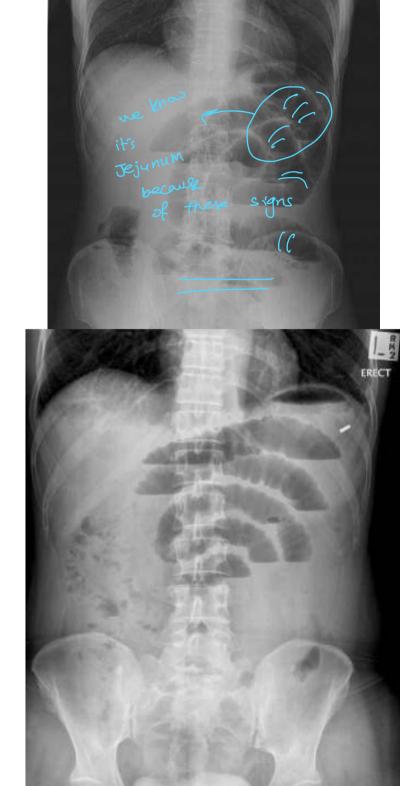
Q3: This is a picture of obstruction, Is it partial/complete? Why?

- Partial obstruction
- Because there is air in rectum

Q4: What is the appearance?

Step-ladder appearance





Q: A 30 year old female presented with sudden abdominal pain and fever and diffuse tenderness of the abdomen:

Q1: What is the Dx?

Perforated viscus

Q2: What is the radiological finding?

Air under diagram

Q3: What is the Mx?

Laparotomy and exploration

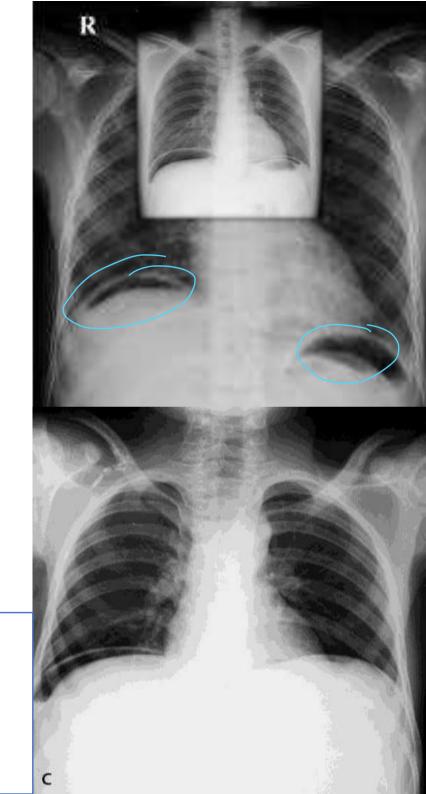
Q4: What is the mcc?

Post-op

Causes:

- 1. Perforation of duodenal ulcer.
- 2. Following Laparoscopic procedure
 - 3. Following Tubal Insufflation Test
- 4. Infection with gas forming organisms
- 5. Most common cause is post operative.

6.Chilaiditi's sign-due to interposition of colon between the Diaphragm and the Liver such a gas shadow can be obtained even in a normal individual.



Q: A 55 years old patient with PUD came with forceful vomiting:

Q1: What is the pathology?

Gastric outlet obstruction (pyloric obstruction) – Pyloric Stenosis

Q2: What is the electrolyte disturbances the patient has?

- Hypokalemic hypochloremic metabolic alkalosis

Q3: What is the gold standard for Dx?

- US "not sure"

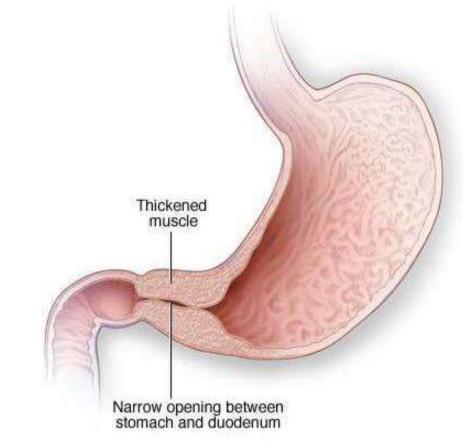
Q4: Mention 2 causes?

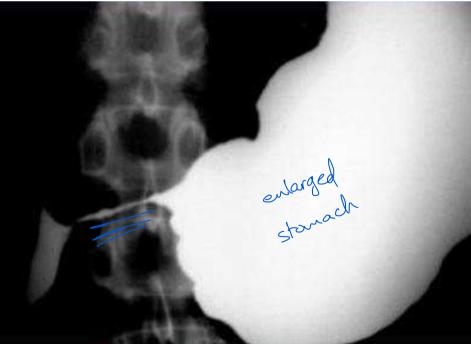
1) Gastric Carcinoma

2) Peptic ulcer disease (PUD)

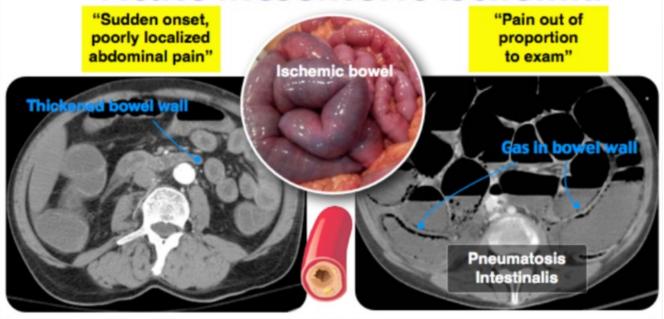
Q5: Name it's effect on ventilation?

- Hypoventilation





Acute Mesenteric Ischemia



| Mesenteric Ischemia | |
|------------------------|--|
| Type of occlusion | Predisposing factor |
| Arterial occlusion | Dysrhythmias (atrial fibrillation) Atherosclerotic heart disease Valvular heart disease Recent MI |
| Venous thrombosis | History of prior thromboembolic eventsHypercoagulable states |
| Non-occlusive ischemia | Use of diuretics or vasoconstrictive medications Heart failure |

Q: A 48-years old patient presented with acute abdomen. PMH shows atrial fibrillation. Laparotomy was done:

Q1: What is the Dx?

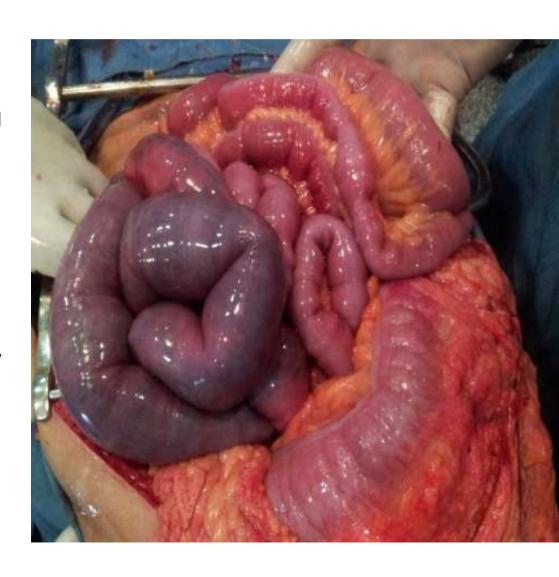
- Acute Mesenteric Ischemia

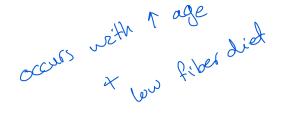
Q2: What is the most affected artery in this condition?

- Superior mesenteric artery

Q3: Appropriate Mx?

- Resection & Anastomosis





Q1: What is the Dx?

- Diverticulosis

Q2: Mention 2 complications?

- 1) Infection
- 2) Perforation
- 3) Obstruction

Q3: What is the most common site?

- Sigmoid



Diverticulosis or Diverticular disease of the sigmoid colon

Dx. Colonoscopy
Mx. Mainly
supportive: diet rich of
fiber

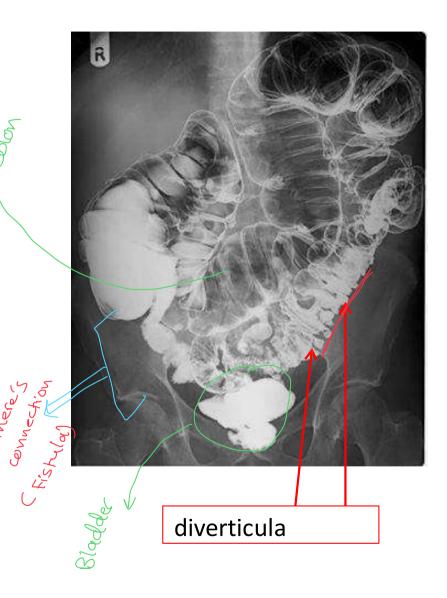


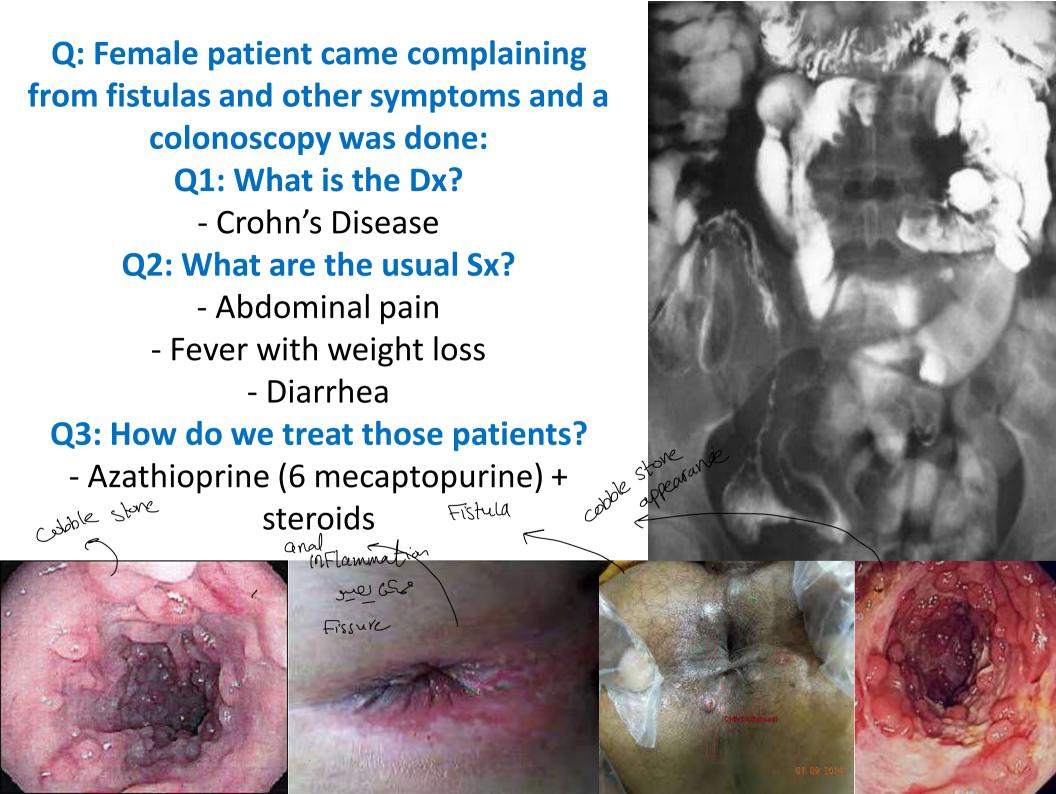
Colovesical fistula

- the most common cause is diverticulitis and it's the most common fistula formed in DD.

- other causes : colon CA ,crohn's , radiotherapy ,trauma.

- This picture is double contrast barium enema.



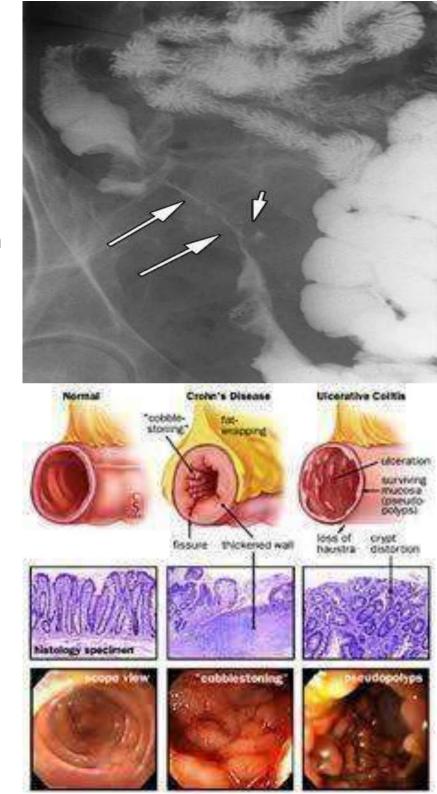


Crohn's disease (IBD):

- Autoimmune disease O Cliocelic 36%

- SKIP LESIONS

- the m.csite is the terminal ileum,
- often no involvement of the rectum (in UC the rectum is always involved)
- Extraintestinal manifestations: arthritis, pyoderma gangrenosum, erythema nodosum
- it involves the full thickness of the bowel wall, with the serosa ,mesentery and regional LNs (while in UC it was only the mucosa that's involved)
- Macroscopically: the bowel wall in thick and red (in UC its very thin), the mucosa has a cobblestone appearance
- Microscopically we will find non- caseating granulomas, with narrow deep fissure ulcers.
- Complications : strictures and fistulae (in UC : hemorrhage, perforation, CA, and toxic megacolon)
- Radiology: Barium enema --> STRING SIGN
- Surgery plays a minor role in the treatment



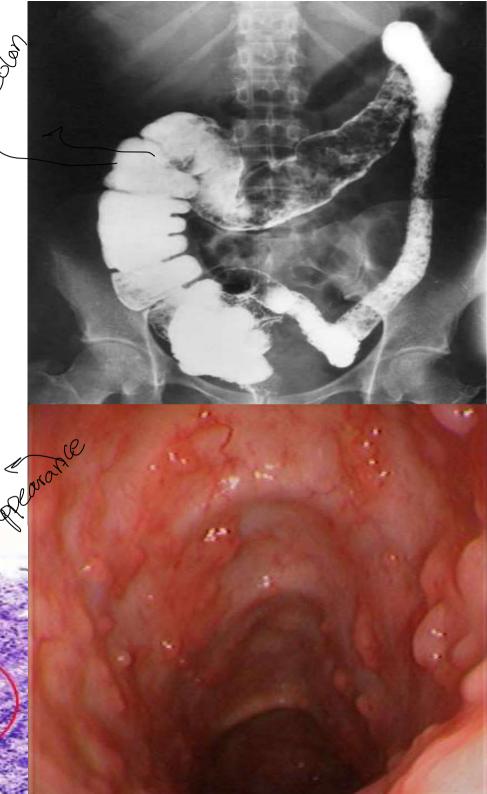
Q1: What is the Dx?

- Ulcerative colitis

Q2: Mention 2 drugs used in Mx?

1) Steroid

2) Azathioprine



Q: Known case of UC, with Hx of bloody diarrhea and abdominal pain:

Q1: What is the abnormality?

- Transverse Toxic megacolon

Q2: One complication?

- Perforation
- Peritonitis



Ulcerative colitis (IBD)

UC is an autoimmune disease the rectum is always involved

red cohn

* smoking: protective.

- extracolonic manifestations:

arthritis (sacroiliitis and ankylosing spondylitis), eyes (iritis, keratitis), renal (calculi & pyelonephritis, Skin (erythema nodosum & pyoderma gangrenosum), blood (anemia & higher risk of DVT), hepatic disease & cholangitis (PSC) if sacroing type

- investigations:
 - if perforated --> Air under diaphragm on AXR
 - in chronic UC --> LEAD PIPE colon + and TOXIC MEGACOLON on AXR.
- Treatment :
 - medical : mainly steroids ,/
 - Surgery (proctocolectomy with Brooke ileostomy) is indicated when : medical treatment is failed , toxic megacolon , perforation and subsequent peritonitis , too frequent relapses , duration of more than 10 years (>15 years --> 5% risk of CA)





Q1: What is the Dx?
Colon Cancer

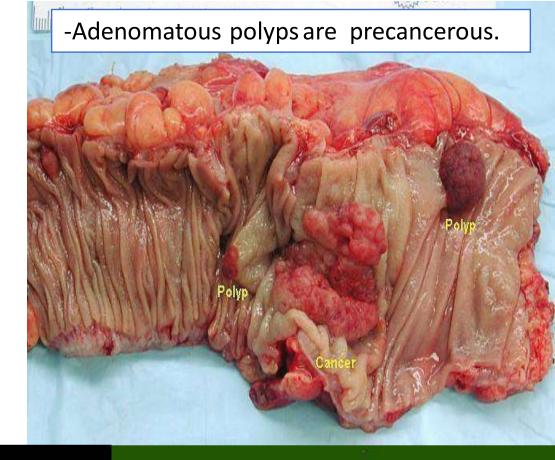
Q2: What is the screening method?
Colonoscopy

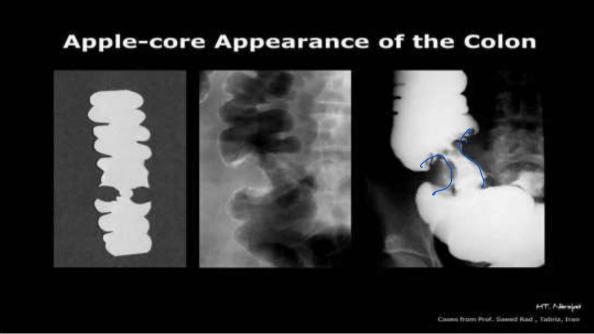
Q3: What is the tumor marker?

CEA

Q4: What is the appearance?

Apple-core



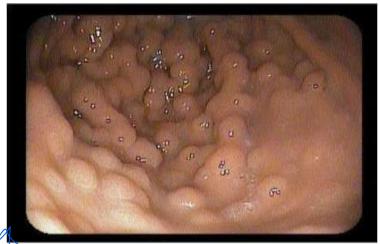


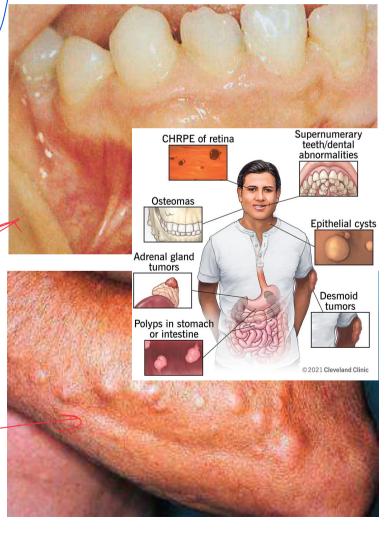


Gardner's Syndrome

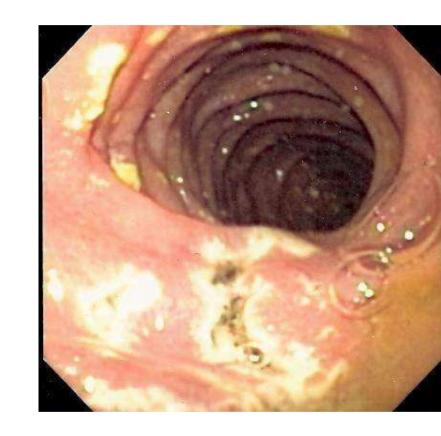
(AD)

- 1) Colonic polyps (hundreds with 100% risk of malignancy if untreated).
- 2) Ostromas (the picture of an osteoma of the mandible).
- 3) Lipomas and epidermoid cysts (on the forearm)



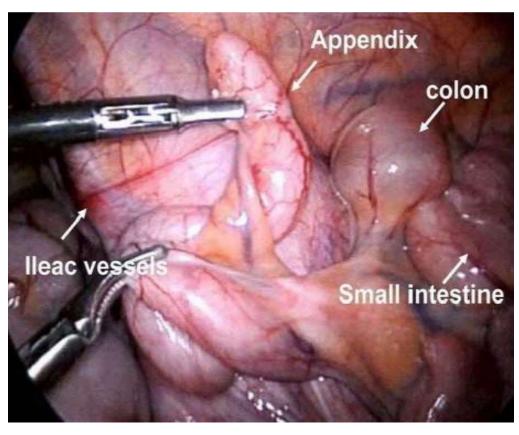


multiple small ulcers located in the distal duodenum in a patient with gastrinoma (Zollinger- Ellison syndrome)



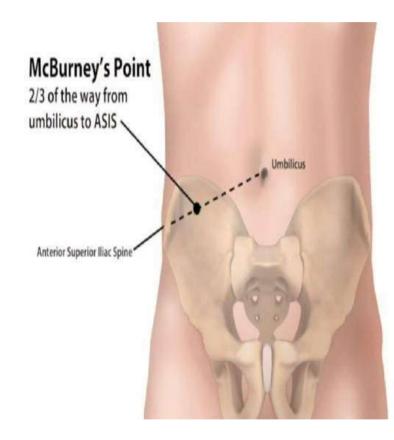
Q: What is the Dx? Gross Appendicitis





Acute appendicitis

- Sx: pain (periumbilical area) >> nausea and vomiting >> anorexia >> pain migrates to RLQ (constant and intense, usually < 24 hrs.).
- Tenderness maximally at McBurney's point.
- Obturator sign/ psoas sign/ rovsingsign/ valentino sign.
- Appendectomy is the m.c.c of emergent abdominal surgery.
- Dx of ruptured appendix : fever >39 / high WBC/ rebound tenderness/ periappendiceal fluid collection on ultrasound.
- If normal appendix is found upon exploration, take it out (even in chron's).
- Appendiceal abscess: percutaneous drainage/antibiotics / elective surgery 6 wks later.



Q: Appendicitis Scenario:

Q1: What is the pathology?

- Acute Appendicitis

Q2: What is the name of it's scoring system?

- Alvarado scoring system

Q3: What is the sequence of the pain?

- Visceral somatic sequence of pain

Q4: Write 2 features found on US?

- 1) Blind-ending tubular dilated structure >6mm
 - 2) Appendiocolith with acoustic shadow
 - 3) Distinct appendiceal wall layers
 - 4) Periappendiceal fluid collection
- 5) Periappendiceal reactive nodal enlargement

Alvarado scoring system (Appendicitis)

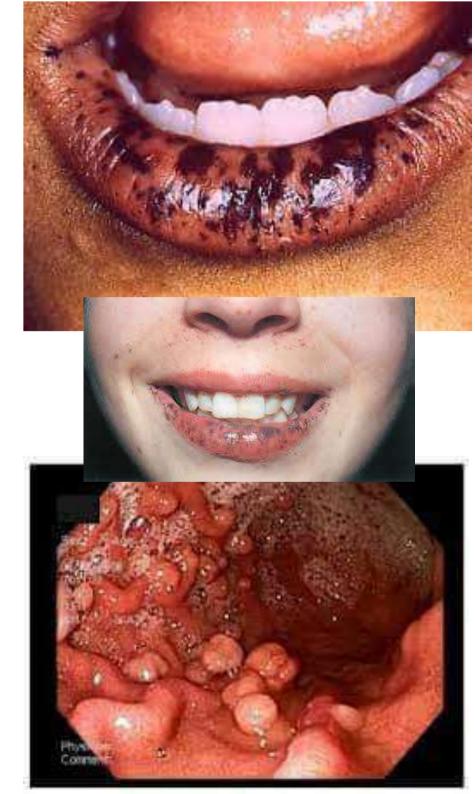
| Mnemonic (MANTRELS) | Value | |
|------------------------------------|-------|--|
| Symptom | | |
| Migration | 1 | |
| Anorexia-acetone | 1 | |
| Nausea-vomiting | 1 | |
| Signs | | |
| Tenderness in right lower quadrant | 2 | |
| Rebound pain | 1 | |
| Elevation of temperature >37.3°C | 1 | |
| Laboratory | | |
| Leukocytosis | | |
| Shift to the left | 1 | |
| Total score | | |

Q: What is the Dx?

- Peutz-Jeghers syndrome

- autosomal dominant.
- hereditary intestinal polyposis syndrome.
- hamartomatous polyps in the GI tract.
- circumoral pigmented nevi.









Q1: What is you diagnosis?

FAP (focal adenomatous polyposis – in the colon & rectum)

Q2: What is the cause of death before the age of 50?
Cancer (untreated patients develop cancer by the age of 40-50)

Q3: MOI? Autosomal Dominant

Q4: Associated tumors? Duodenal Tumors

Q5: Mx? Total Proctocolectomy and ileostomy

Q: patient with Hx of lower GI bleeding & this is the colonoscopy:

Q1: What is the Dx?

- Angiodysplasia

Q2: the Cause?

Degeneration of submucosal venous wall and formation of AVM

Q3: the Mx?

1) Laser

2) Electrocoagulation3) Surgery

Q4: What is the most common site?

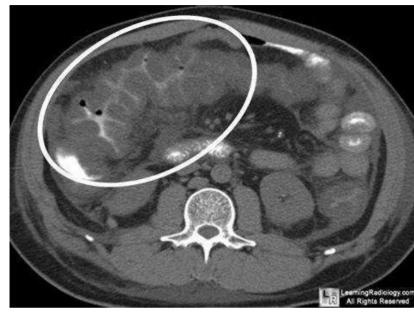
- the cecum or ascending colon



Pseudomembranous colitis







Colonoscopy showing pseudomembranes

cause: C. difficle

risk factors: use of Antibiotics.

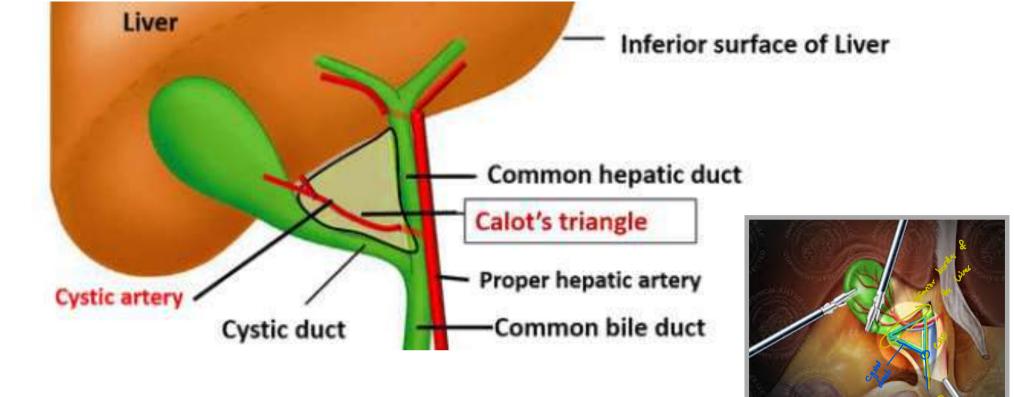
diagnosis: toxin assayin stool.

treatment: Metronidazole

- Abdominal CT.
- similarity between the thickened edematous wall of pseudomembranous colitis to that of an accordion.
 - What is the sign?
 Accordion sign.

| Name | Region & info | Indications |
|---------|-----------------------------------|--|
| Barium | to visualize the area from the | a. Symptoms of gastro-esophageal reflux |
| Swallow | mouth to the stomach | b. Dysphagia, related to: Esophageal (Web, |
| | (esophagus) | stricture, tumor, achalasia), vascular abnormalities |
| | Double contrast (gas+barium) | a. Gastro-edophageal reflux |
| Barium | to visualize the stomach and | b. Gastric or duodenal ulcer |
| Meal | the duodenum | c. Hiatus hernia |
| | | d. Gastric tumors |
| Barium | To visualize the small intestine, | a. IBS (crohns mostly) |
| follow- | taken every 1/2 hr till we reach | b. small bowel tumor/lymphoma (filling defect) |
| through | the large intestine (stool white) | c. Small bowel obstruction |
| | Double contrast (barium + air), | a. Abdominal mass |
| Barium | to visualize the colon, and it's | b. Large bowel obstruction / volvulus |
| Enema | the only contrast given in the | c. Diverticular disease |
| | rectum (by Folly's) | d. Colonic tumor |

Liver, Spleen, Pancreas, Gallbladder & The Adrenals



Q1: What is this triangle?

- Calot's Triangle

Q2: Name 3 borders?

- 1) Inferior border of the liver2) Cystic duct
 - 3) Common hepatic duct

Q: This 60-years old patient developed abdominal pain, bloody diarrhea and fever. He came back from a tour trip to a south west Asian country 3 weeks ago. CT was done.

1. What is the most likely diagnosis? Liver Abscess (Ameobic)

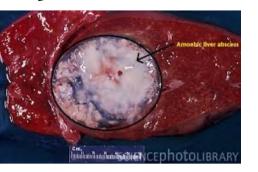
2. What is the treatment of choice? Metronidazle



the MC.
extra intestinal
manifestation
of ameda

15 Liver abcess

1) amoebic abscess



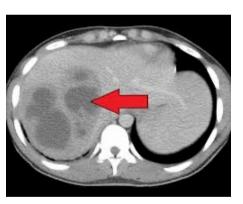
Pt comes within (1) RUQ Pain & continous & Stapping





- 3 Fever & Chills
- 9 diarrhea [non-bloody in 1/3 Cases]

2) pyogenic Liver abscess

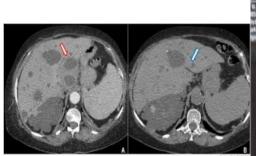




Pt comes within Ottx of gallbladder dz



3) Fungal abscess





Deaused by candida

- 2) pt may expose prolongely to Ab 3 or may have malignancy immunadeficient

Q: Name the following complications of liver cirrhosis:

A > Ascites

B > Caput medusa (dilated veins)

C > Hematoma (easily bruised)



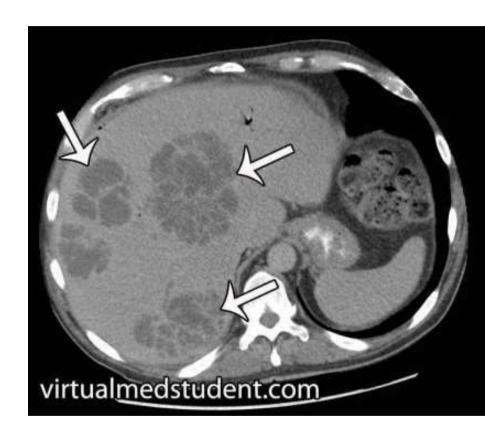


Q1: What is the sign? Caput Medusa Q2: What is the Dx? Liver Cirrhosis



Liver Abscess

- Pyogenic (bacterial "gram negative") / parasitic (amebic) / fungal.
 - Most common site is right lobe.
- Treatment: pyogenic (IV antibiotics + percutaneous drainage) / amebic (metronidazole+ drainage).
 - Indications of surgical drainage in pyogenic: multiple lobulated abscesses/ multiple percutaneous attempts failed.
- Indications of surgical drainage in amebic: refractory to metronidazole/bacterial coinfection/ peritoneal rupture.

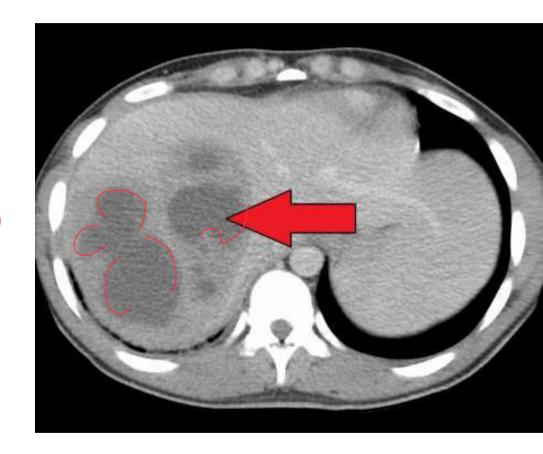


Q: Patient presented lethargic and febrile a week after a surgery for cholangitis;

Q1: What is your Dx?
- Liver abscess

Q2: Mx?

- Percutaneous drainage, &
- Antibiotic administration



Q: A 45 year old male presented with RUQ discomfort and pain, this is his abdominal CT.

Q1: What is the radiological finding?

Peri-cyst and daughter cysts (hydatid cyst disease).

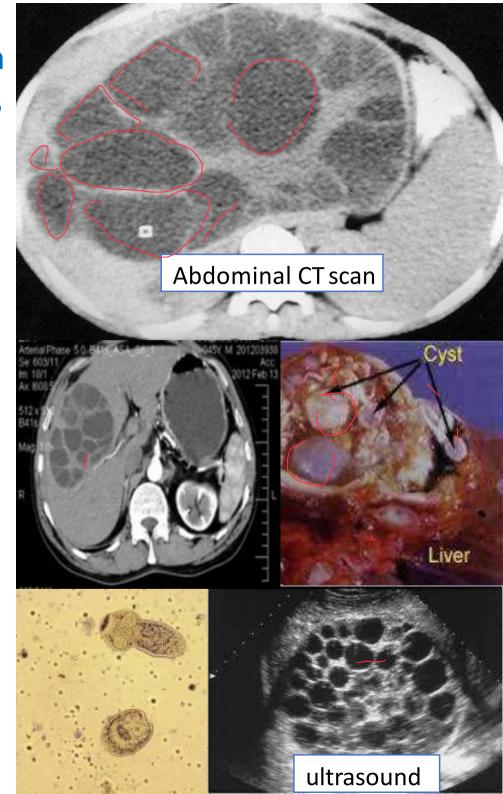
Q2: Mention 2 complications:

Rupture and anaphylaxis/ obstructive jaundice.

Q3: Give 2 drug that can be used?

Albendazole, Mebendazole

is a **parasitic infestation** by a tapeworm of the genus **Echinococcus**.



Q: Abdominal US image for a woman lives in rural area:

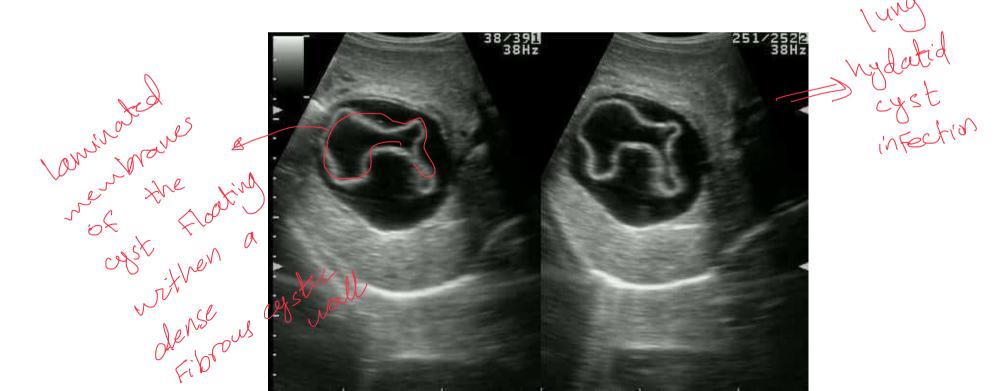
Q1: What is the name of this sign?

- Water lily sign

Q2: Most probable etiology for this sign?

- Caused by tapeworm Echinococcus granulosus

- Another cause is E. multiocularis



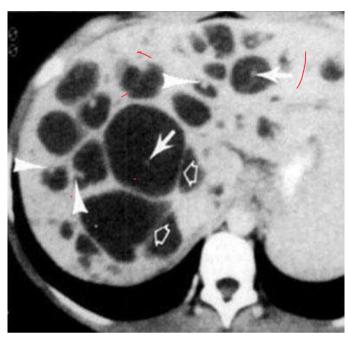
Caroli disease

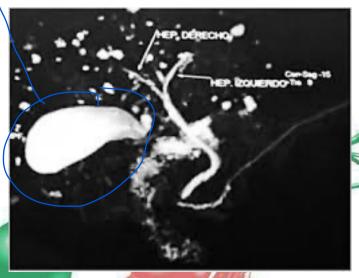
is a congenital disorder comprising of multifocal cystic dilatation of segmental intrahepatic bile ducts.

presentation is in childhood or young adulthood. The simple type presents with RUQ pain and recurrent attacks of cholangitis with fever and jaundice.

Prognosis is generally poor. If disease is localized, segmentectomy or lobectomy may be offered. In diffuse disease management is generally with conservative measures; liver transplantation may be an option.







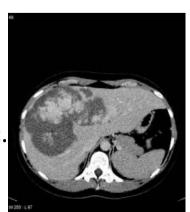


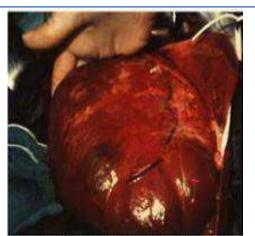
Hepatic Hemangioma

- ➤ Most common benign solid tumor.
- Variants:
- Capillary: m.c / <2cm /no need for surgery.
 - Cavernous : giant.
- ➤ Vague upper abdominal tenderness with no mass.
- > Not premalignant.
- ➤ Percutaneous biopsy is contraindicated (risk of hemorrhage).
- > U/S is the first test.
- ➤ MRI is the most sensitive & specific.



- Until recently, no medical therapy capable of reducing the size of hepatic hemangiomas had been described.
- Surgical treatment may be appropriate in cases of rapidly growing tumors. Surgery may also be warranted in cases where a hepatic hemangioma cannot be differentiated from hepatic malignancy on imaging studies.





Hepatic Adenoma

Risk factors:

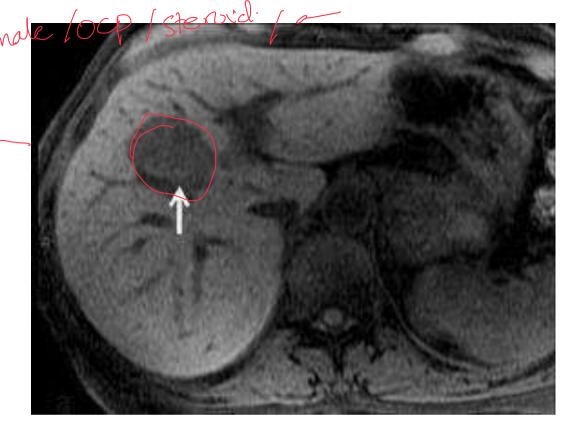
Female/ birth control pills/ anabolic steroids/ glycogen storage disease.

it is estrogen sensitive (pregnancy may cause it to increase in size, OCP).

Complications: rupture with bleeding/ necrosis/ **risk of cancer.**

Treatment: if small, stop pills> it may regress> if not, surgical resection.

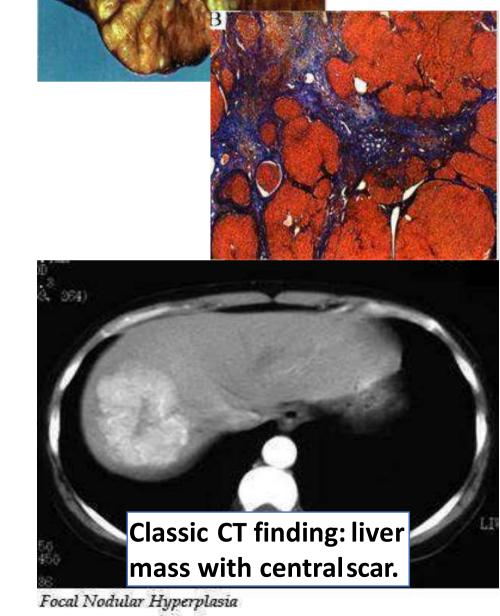
If large or complicated : surgical resection





Focal nodal hyperplasia

- ➤ Use of estrogen OCP may have a role.
- ➤ Not premalignant.
- ➤ Most are solitary, 20% multiple.
- ➤ Most common indication for surgery is inability to exclude malignancy.
- > LFT : normal.
- Angiography: hypervascular mass with enlarged peripheral vessels and a single central feeding artery.
- >ttt: nucleation/ diagnostic uncertainty will require an open excisional biopsy.



Hepatocellular carcinoma (hepatoma)

- Most common 1ry malignant liver tumor.
- Risk factors: hepatitis B / cirrhosis/ Alfa toxin/ alpha 1 antitrypsin deficiency.
- Painful hepatomegaly.
- Tumor marker: alpha fetoprotein.
- Dx: needle biopsy with CT or U/S guidance.
- The m.c site of Metz : lungs.



CT: black arrows (hepatoma)



Q1: What is the finding?

- Fluid in Morrison's pouch

Q2: The Dx?

- Hemoperitoneum (blood)
 - Ascitis (fluid)

Morison's pouch: The hepatorenal recess is the space that separates the liver from the right kidney.

Q: a patient with RUQ pain:

Q1: What is the Dx?

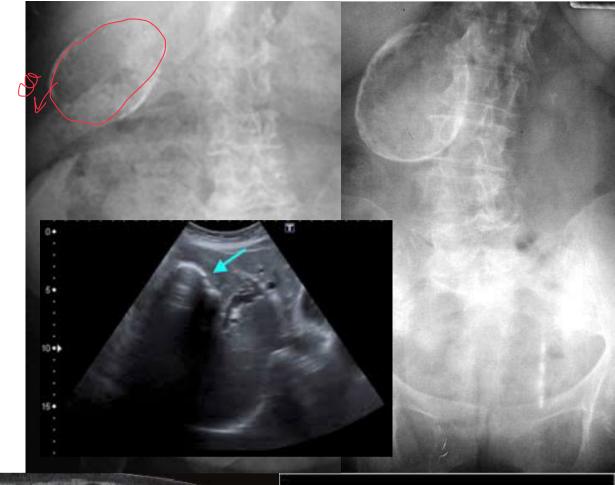
- Porcelain gallbladder

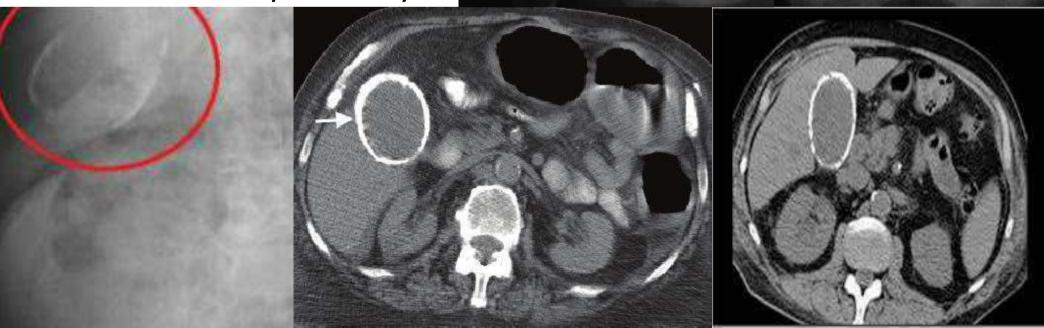
Q2: What is the major risk?

Adenocarcinoma of gallbladder

Q3: What is the Mx?

- Elective Cholecystectomy





Q: A 40 year old female patient after a bariatric surgery, presented with this US?

Q1: What is the Dx?
- Gallstone

Q2: What are the indications of performing a surgery in asymptomatic patient for this condition?

- Porcelain gallbladder
- Congenital hemolytic anemia
 - Gallstone >2.5 cm

Q3: If the organ got inflamed where would be the pain and where it would radiate?

- Pain would be in the RUQ, and radiate into the right subscapular area



Gallbladder stones (Cholelithiasis)



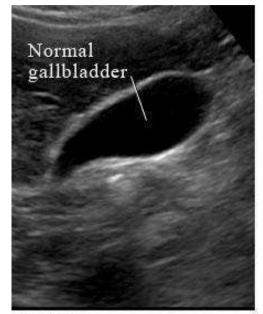
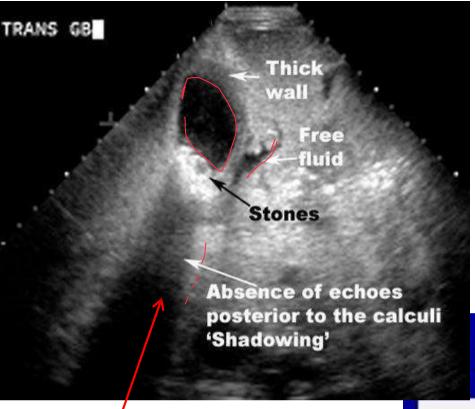




Figure 1

Acoustic shadow

- 80% of patients are asymptomatic.
- Complications: acute and chronic cholecystitis/ CBD stones/ gallstone pancreatitis/ cholangitis.
- U/S detects GB stones in more than 98% of cases.
- Abdominal X-ray detects only 15%.
- If symptomatic/complicated / asymptomatic but (sickle cell diseas, DM, pediatric, porcelain GB, immunosuppression) : cholecystectomy.



Acute cholecystitis

- HIDA scan (the most accurate test).
- U/S (the diagnostic test of choice).
- Constant pain (not biliary colic).

Sonographic findings in acute cholecystitis

acoustic shadow

- Impacted stone in cystic duct or GB neck
- Positive sonographic Murphy's sign
- Thickening of GB wall (>3 mm)
- Distention of GB lumen (> 4 cm)
- Pericholecystic fluid collections (frequent)
- Hyperemic GB wall on color Doppler (supportive test)

None of above signs pathognomonic

Combination of multiple signs make correct diagnosis

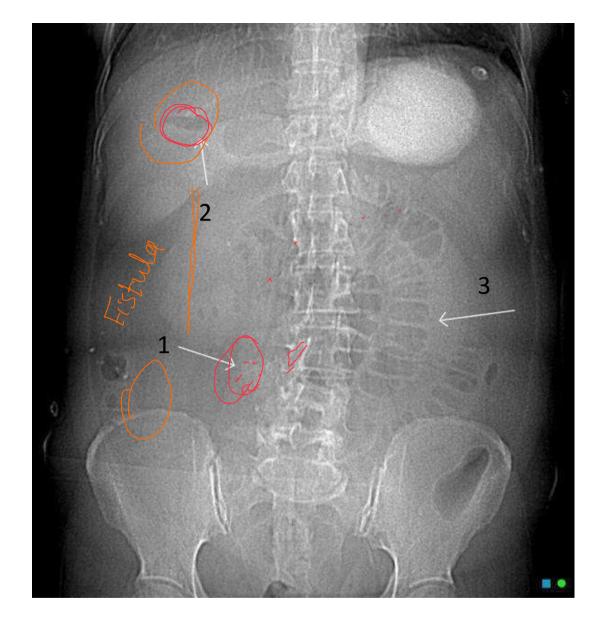
Rumack CM et al. Diagnostic Ultrasound. Elsevier-Mosby, St. Louis, USA, 3rd edition, 2005.

Gallstone ileus

 occurs when a large gallbladder stone erodes into the duodenum via a fistula, eventually obstructing the ileal lumen usually some centimeters proximal to the ileocaecal junction.

On the X-ray: 1radiopaque gallstone in the bowel.

- 2 gas in the gallbladder.
- 4- small bowel distention.



emphysematous cholecystitis

Gas forming bacteria (E.coli).

Often results in perforation.

Usually in males/ elderly/

DM.



Blurred vision + charge in mental status

Q: After RTA, the patient present with left shoulder pain:

Q1: What is your Dx?

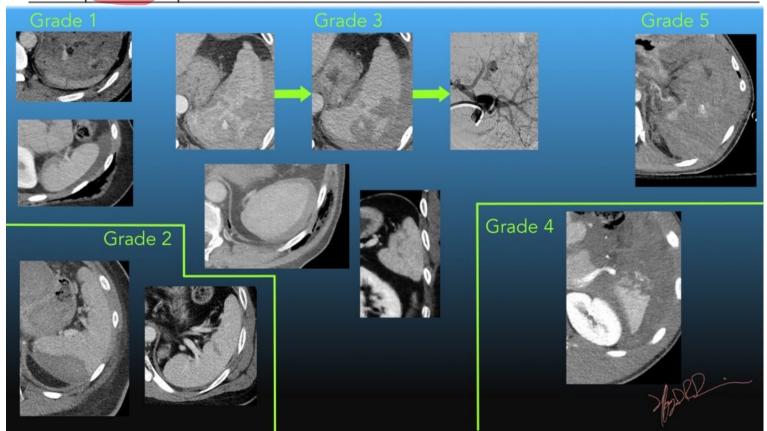
- Splenic Rupture

Q2: What is your Mx?

- Splenectomy



| Gradea | Туре | Description of Injury | | | |
|--|---|---|--|--|--|
| 1 | Hematoma | Subcapsular, < 10% surface area | | | |
| | Capsular tear, < 1 cm parenchymal depth | | | | |
| 2 | Subcapsular, 10–50% surface area | | | | |
| | | Intraparenchymal, < 5 cm in diameter | | | |
| | Laceration | 1–3 cm parenchymal depth; does not involve a trabecular vessel | | | |
| 3 Hematoma Subcapsular, > 50% surface area or expanding; ruptured subcapsular parenchymal hematoma | | | | | |
| | Laceration | > 3 cm parenchymal depth or involved trabecular vessels | | | |
| 4 | Laceration | Laceration involving segmental or hilar vessels and producing major devascularization (> 25% of spleen) | | | |
| 5 | Laceration | Completely shattered spleen | | | |
| | Vascular | Hilar vascular injury that devascularizes spleen | | | |



Grade 1 Grade 2 Grade 3

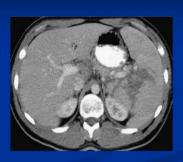
- Subcapsular hematoma of less than 10% of surface area.
- Capsular tear of less than1 cm in depth.



- Subcapsular hematoma 10-50% of surface area
- Intraparenchyml hematoma < 5cm diameter
- Laceration of 1-3cm in depth and not involving trabecular vessels

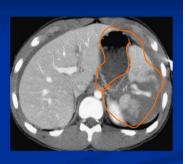


- Subcapsular >50% surface area or expanding
- Ruptured subcapsular or intraparenchymal hematoma
- Intraparenchymal haematoma >5 cm or expanding
- Laceration of greater than 3 cm in depth or involving trabecular vessels



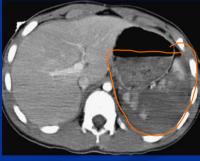
Grade 4

■ Laceration involving segmental or hilar vessels producing major devascularization (>25% of spleen)



Grade 5

Shattered spleen / Hilar vascular injury



Q: RTA patient, HR = 130, he was hypotensive, a CT was done and shows the following?

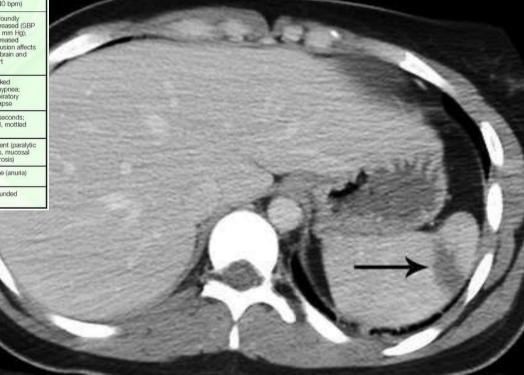
Q1: How much blood did he loss?

- Stage 3 hypovolemic shock – 30-40% - 1500-2000 ml

Q2: What does the CT show?

- Splenic Rupture

| Stage | I (compensated) | II (mild) | III (moderate) | IV (severe) |
|--------------------------|--|---|---|---|
| Blood loss | <15% (750 – 1,000 ml) | 15% — <30% (1,000 – 1,500 ml) | 30% — <40% (1,500 – 2,000 ml) | >40% (2,000 ml or more) |
| Heart rate | Normal (<100 bpm) | Tachycardia (>100 bpm) | Tachycardia (>120 bpm) | Tachycardia (>140 bpm) |
| ВР | Normal; vasoconstriction redistributes blood flow, slight rise in diastolic pressure seen | Orthostatic changes in BP; vasoconstriction intensifies in non-critical organs (skin, muscles, gut) | Markedly decreased (SBP <00 mm Hg); vasoconstriction decreases perfusion to kidneys, pancreas, liver, and spleen | Profoundly decreased (SBP <80 mm Hg); decreased perfusion affects the brain and heart |
| Respiration | Normal | Rate mildly increased | Moderate tachypnea | Marked tachypnea; respiratory collapse |
| Capillary refill time | Normal (<2 seconds) | >2 seconds; clammy skin | Usually >3 seconds; cool, pale skin | >3 seconds; cold, mottled skin |
| Bowel sounds | Present, all four quadrants | Hypoactive | Absent (paralytic ileus) | Absent (paralytic ileus, mucosal necrosis) |
| Urinary output | >30 ml/hr | 20 – 30 ml/hr | <20 ml/hr | None (anuria) |
| Mental status | Normal or slightly anxious | Mildly anxious or agitated | Confused, agitated | Obtunded |



| Table 7-4 Signs and Symptoms of Advancing Stages of Hemorrhagic Shock | | | | | | | |
|---|---------------------|----------------|----------------------|------------------------|--|--|--|
| | Class I | Class II | Class III | Class IV | | | |
| Blood loss (mL) | Up to 750 | 750-1500 | 1500-2000 | >2000 | | | |
| Blood loss (%BV) | Up to 15% | 15-30% | 30-40% | >40% | | | |
| Pulse rate | <100 | >100 | >120 | >140 | | | |
| Blood pressure | Normal | Normal | Decreased | Decreased | | | |
| Pulse pressure (mmHg) | Normal or increased | Decreased | Decreased | Decreased | | | |
| Respiratory rate | 14-20 | 20-30 | 30-40 | >35 | | | |
| Urine output (mL/h) | >30 | 20-30 | 5-15 | Negligible | | | |
| CNS/mental status | Slightly anxious | Mildly anxious | Anxious and confused | Confused and lethargic | | | |

BV = blood volume; CNS = central nervous system.

Acute Pancreatitis

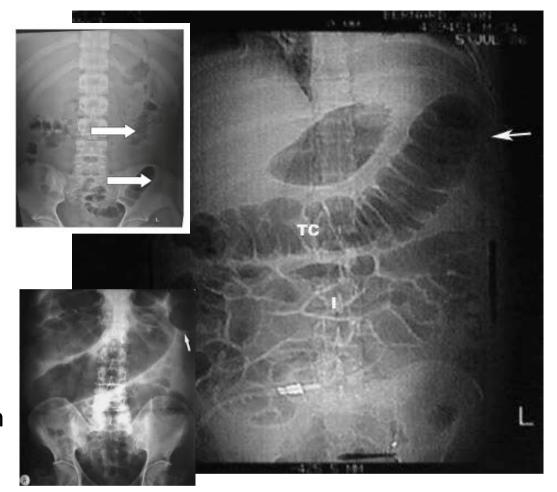
-Cut off sign and lleus.

-White arrow points to Transverse colon cut off at Splenic flexure.

-No air in descending colon.

-TC: Transverse colon.

- I: Represents small bowel loopswith air suggestive of lleus.



Causes: gallstones/ ethanol/ trauma/ steroids/ mumps/autoimmune/ scorpion bite/ hyperlipidemia/ drugs (diuretics, INH)/ ERCP.

Treatment: supportive (90% resolve spontaneously)

Q: A 45-years old male patient, alcoholic, presented with a 24-hour history of upper abdominal pain and repeated vomiting. On examination of the abdomen, he was found to have these signs.

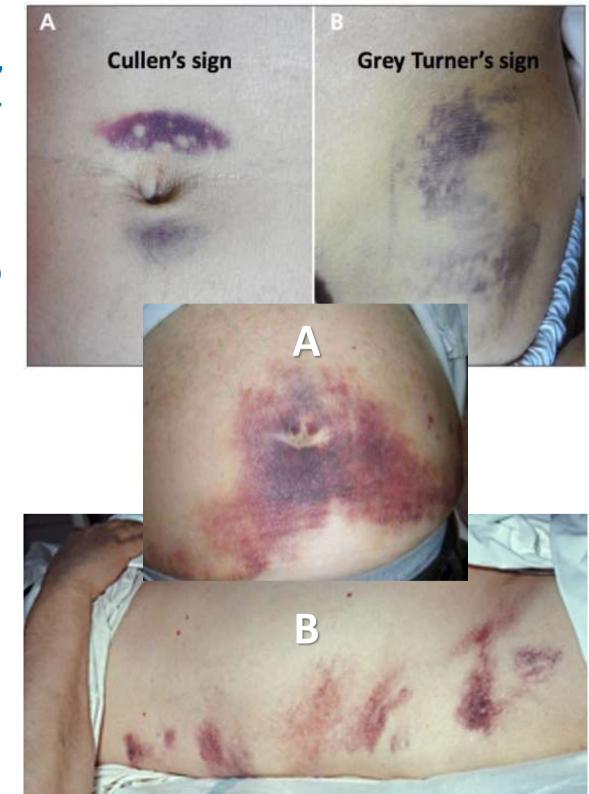
Q1: Name those signs?

A > Cullen's

B > Grey Turner's

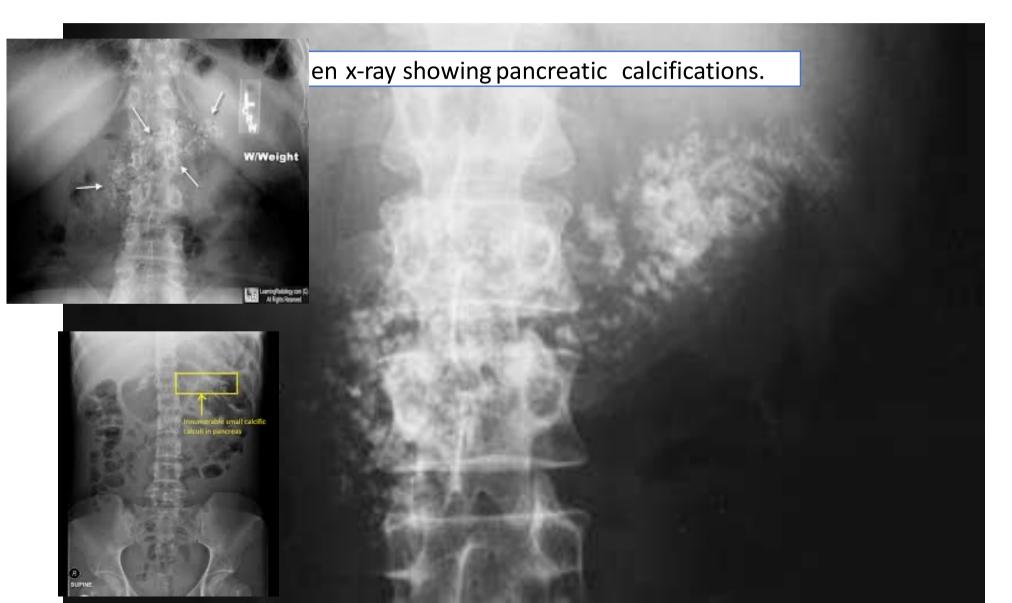
Q2: Mention 2 causes?

- Any retroperitoneal hemorrhage
- 1) Acute hemorrhagic pancreatitis
- 2) Abdominal trauma bleeding from aortic rupture



Chronic Pancreatitis

most common cause is chronic alcoholism.



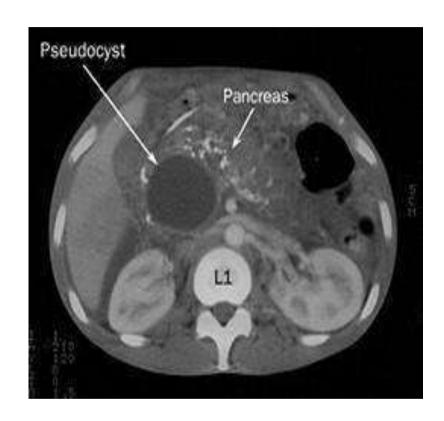
Pancreatic necrosis

- Dx: abdominal CT with contrast.
- Dead pancreatic tissue doesn't take up the contrast.



Pancreatic pseudocyst

- The m.c.c is chronic alcoholic pancreatitis.
- findings: high amylase/ fluid filled mass on ultrasound/
- it is a collection of fluid rich in pancreatic enzymes, blood, and necrotic tissue.
- to exclude malignancy >>you have to check the level of CA 19-9 (tumor marker).
- Complications: bleeding into the cyst/ infection/ pancreatic ascites.

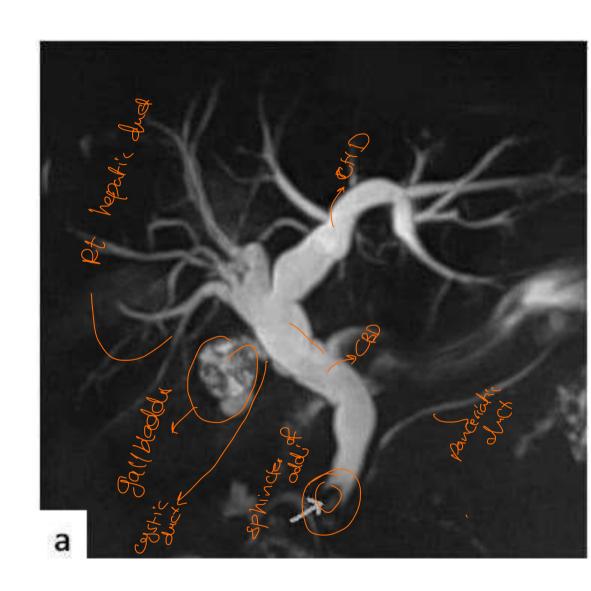


 If not resolved spontaneously within 6 weeks: drainage.

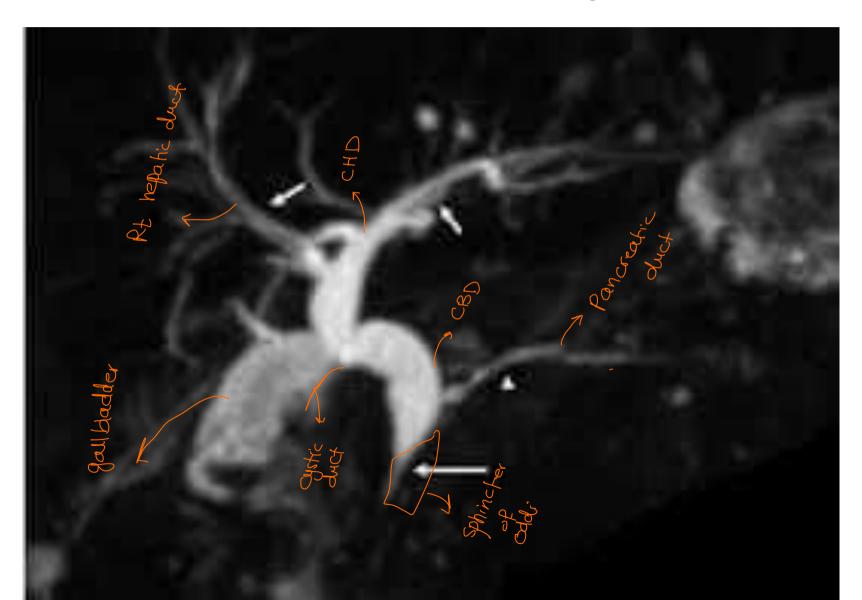
Q1: What is the type of imaging? - MRCP

Q2: Mention 2 abnormalities?

Stone in the CBD
 (arrow – filling defect)
 Dilated CBD



Q1: What is the study? MRCP
Q2: The structure pointed? Pancreatic duct (Stricture)
Q3: What is the next step? ERCP

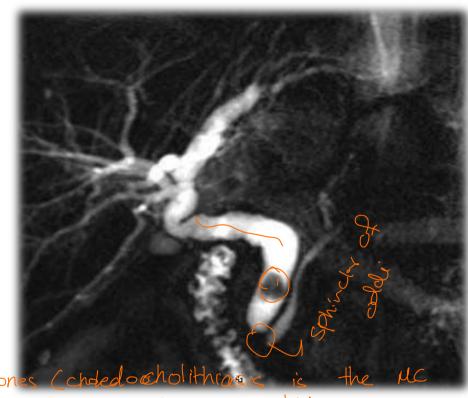


Q: 60 year old female with RUQ pain and fever.

Q1: Identify this type of image: **MRCP**

Q2: Give two radiological findings: CBD stone shadow/ CBD dilation.

Q3: What is your diagnosis? CBD Stones Condedocholithras Ascending cholangitis.



cause of cholangitis

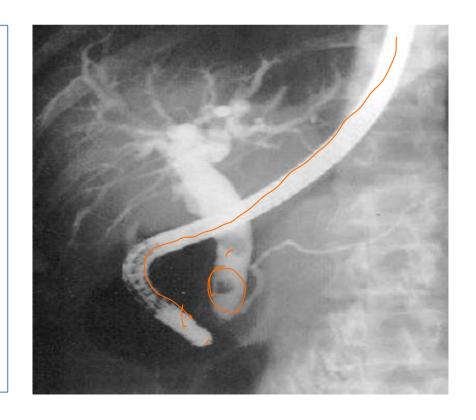
Choledocolithiasis

- Common bile duct stones.
- ERCP (the diagnostic test of choice, also therapeutic).
- If ERCP fails, CBD is opened surgically and stones removed.

The huge tube is the endoscope. It is going down from the esophagus, through the stomach, to the duodenum (1st then 2nd parts), and stops near the ampulla of vater.

A tube in the endoscope is pushed into the ampulla and fills the CBD with a dye. X-ray is taken.

As you can see, there is a black shadow stone in the CBD.



Q1: What is the name of this investigation? ERCP Q2: Mention two abnormalities seen in this picture:

Filling defect & distended common bile duct



Q1: What is the type of imaging? - ERCP

Q2: Indications?

- Obstructive jaundice

Q3: Complications of ERCP?

- Pancreatitis

Q4: Mention 2 findings?

1) Dilated CBD

2) Multiple stones



Q1: What is the Dx?

- Primary sclerosis cholangitis (Beading)

Q2: Which disease is associated with it?

- Ulcerative colitis

Q3: Which type of malignancy the patient may develop?

- Cholangiocarcinoma



Q4: Diagnostic test?

- ERCP

Q: a patient with thyroid medullary cancer, & a CT was done:

Q1: What is your next step? (not sure what the dr. meant so here is the possibilities):

- Assess the functionality of the adrenal tumor by hx, physical ex and ordering lab tests: KFT (Na, K, Creatinine, Urea) / Aldosterone levels/ cortisol/ metanephrine / noremetanephrine / vanillyl mandelic acid (VMA)
 - pheochromocytoma
 - 24h urine analysis for catecholamine metabolites (VMA/Meta)

Q2: If the patient has no genetic abnormality and the lesion is not functioning what will you do next?

 Because it is very large > surgery adrenalectomy, the dr said : If it was more than 4 cm then you have to remove it immediately



Q: a patient presented with episodic sweating and hypertension:

Q1: What is the Dx?

- Pheochromocytoma

Q2: What is the 1st thing to do?

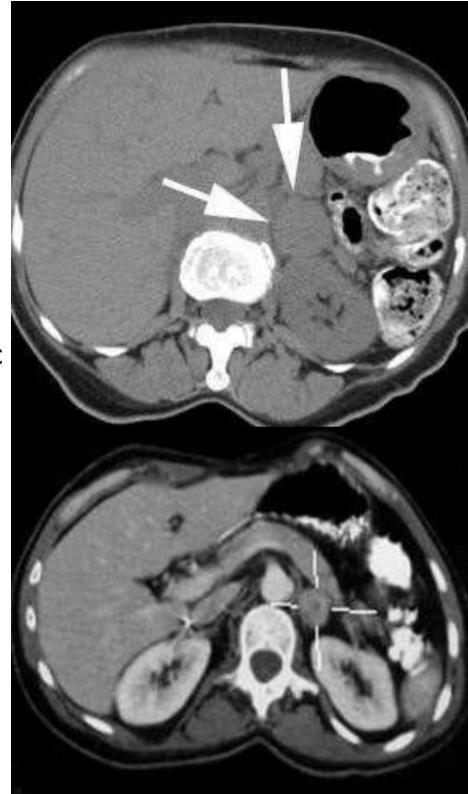
- Check if functional or not by checking cortisol, renin, angiotensin and VMA,... etc

Q3: What raise the possibility of malignancy?

- >4 cm
- necrosis
- hemorrhage

Q2: What is the size that would be considered an indication for surgery?

- >4 cm



Q: Lab investigations show high aldosterone level and high ratio of PAC to PRA:

Q1: What is your Dx?

- Conn's tumor

Q2: Mention a common presentation for this patient?

- Hypertension



Functional adrenal tumors can cause several problems depending on the hormone released. These problems include:

1. Cushing's Syndrome:

This condition occurs when the tumor leads to excessive secretion of <u>cortisol</u>. While most cases of Cushing's Syndrome are caused by tumors in the pituitary gland in the brain, some happen because of adrenal tumors. Symptoms of this disorder include diabetes, high blood pressure, obesity and sexual dysfunction.

2. Conn's Disease:

This condition occurs when the tumor leads to excessive secretion of aldosterone. Symptoms include personality changes, excessive urination, high blood pressure, constipation and weakness.

3. Pheochromocytoma:

This condition occurs when the tumor leads to excessive secretion of adrenaline and noradrenaline. Symptoms include sweating, high blood pressure, headache, anxiety, weakness and weight loss.

Q: A 40-years-old female, previously healthy, presented with acute abdominal pain, fever and itching

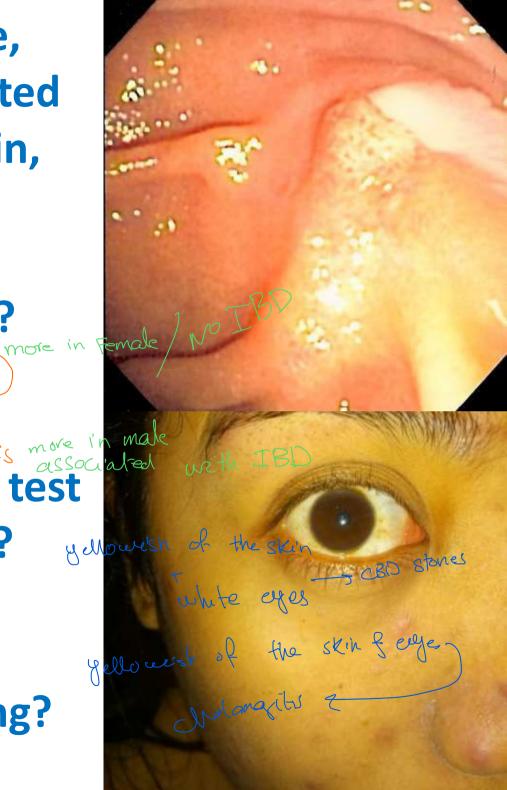
1. What is the diagnosis?

Ascending Cholangitis

2. What is the next imaging test to order for this patient?

MRCP, ERCP

3. Why is she having itching?
Bile salts accumulation

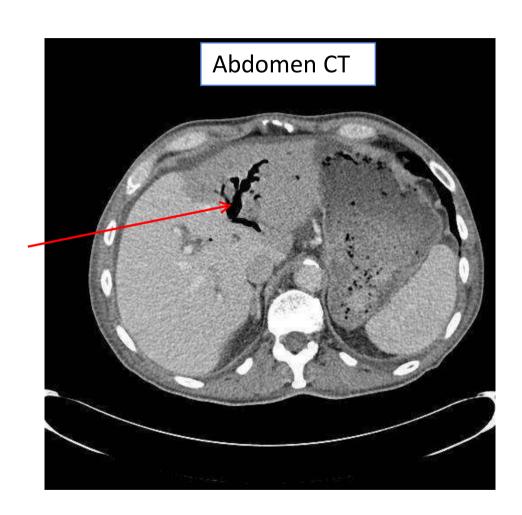


Pneumobilia

(Air in the biliary tree)

Causes:

- -Recent biliary instrumentation (e.g. ERCP or PTC)
- -Incompetent sphincter of Oddi (e.g. sphincterotomy, following passage of gallstone.)
- -Biliary-enteric surgical anastomosis.
- -Spontaneous biliary-enteric fistula (cholecystoduodenal accounts for ~70%).
- -Infection (rare) (e.g. ascending cholangitis, anaerobes).



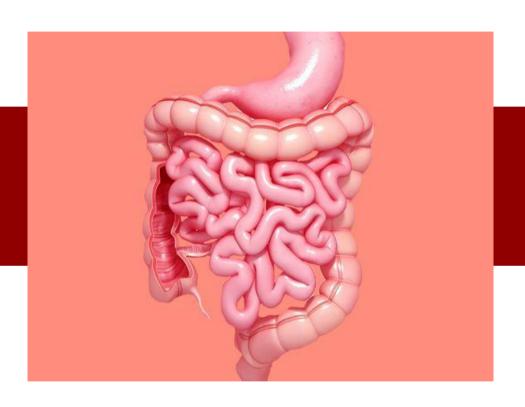


GENERAL SURGERY

MINI OSCE PAST PAPERS

لجنة الطب البشري – الجامعة الهاشمية





GITRACT

(ESOPHAGUS, STOMACH, INTESTINE)



Yaqeen 2025

QUESTION

60 yo Patient bedridden with intestinal obstruction symptoms

- 1. What is the diagnosis?
- 2 mention 2 risk factors(causes):





ANSWER

- 1.colon Volvulus
- 2.bedridden (decrease motility of bowel) + chronic constipation, sigmoid tumer + elder



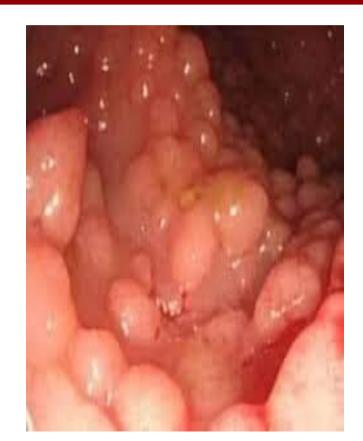
• QUESTION

وي ردي.

Yaqeen 2025

15 y/o with hundreds of this lesions:

- 1. What is the diagnosis?
- 2. What is the cause?





ANSWER if the Q mintion other extraintestinal manifestin alongs to this lesion, then the ansower 1-DDx: FAP (Familial adenomatous polyposis) S Gardner's Syndrome

2- the cause: hereditary (autosomal dominant)



Wateen 2023

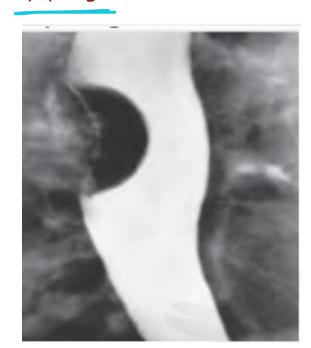
> If it's grant, regurgitation &

A young adult female with complain of dysphagia had this barium image.

A) Your Diagnosis?

B) What is the treatment?

c) dx





- A. Esophageal lieomyoma Mc benight tumor
 - B. Excision
- c. endoscopic ultrasonography & biopsy is contraindicated



Wateen 2023

• QUESTION

this is barium swallow for the esophagus, what is the diagnosis?





Leiomyoma



Wateen 2023

QUESTION

60 year old male with chronic constipation, left iliac fossa pain and episodes of painless bleeding per rectum. Resection of affected segment of bowel had this uppearance.

What is your diagnosis?





Diverticular disease



Wateen 2023

QUESTION

During an appendectomy for an acute appendicitis for a 21 year old male, the surgeon encountered a structure as appears in this image

. A. Name this finding?

B. what is the best next step in management of this patient?





- A. Meckel's diverticulum
- B. Diverticulum resection , if inflammed high fiber diet



Wateen 2023

• QUESTION

Name the finding





Stromal tumor

Not sure

It could be : (1) Bist Drielanoma

But there's no case presentation!

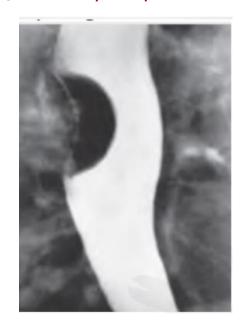


QUESTION

Harmony 2022

- 7. This is a Barium swallow of the Esophagus, what is your provisional diagnosis?
- a. Nutcracker Esophagus
- b. Simple cyst
- c. Leiomyoma
- d. Adenocarcinoma

Answer: C





محرر علق بون

A 48-years old patient presented with acute abdomen. PMH shows atrial fibrillation.

Laparotomy was done:

1: What is the Dx?

2: What is the most affected artery in this condition?

3:Appropriate management?





- 1. Acute Mesenteric Ischemia
- 2. Superior Mesenteric Artery (main mesentric artery)
- 3. Resection & Anastomosis



SOUL 2021

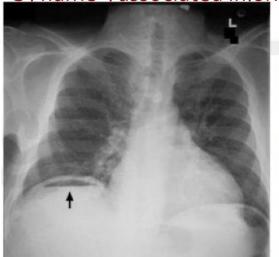
• QUESTION

31 year old male, presented to ER after RT

A) Name the signs

B) What is the management

C) name a associated injuries







> MC cause is perforation of abdominal viscus

- A. 1 Air under the diaphragm
- 2. Seat belt injury



◆B. Diagnostic Laparotomy and bowel repair

- C)1) Flail chest
- 2) Small bowel injury
- 3) Cervical spine injury



SOUL 2021

• QUESTION

وي ر_ا رادن

female, with family history of colon ca, did this colonoscopy:

- A) What is the diagnosis
- _B) What is the surgical management





A. familiäre adenomatöse polyposis coli

B. Prophylaxis colectomy



40 yr old male, present with GERD symptoms

A) During history taking , name symptoms that indicate to do gastroscopy:

B) Mention an indication for anti-reflux surgery:

(No picture)



-upper abdominal pain/maxNSWER

indicates progent

A. Wt loss, atypical symptoms (pulmonary), no response to prior medical ttt,...

B. Faliure of medical treatment

Complications like stricture, cough, aspiration





From google SOUL 2021

Pt presented with right lower fossa pain, nausea appendicitis, was suspected, Ct

showed free fluids around duodenum

A) What is the diagnosis:

B) What is the next step in management: Perforation (No picture)

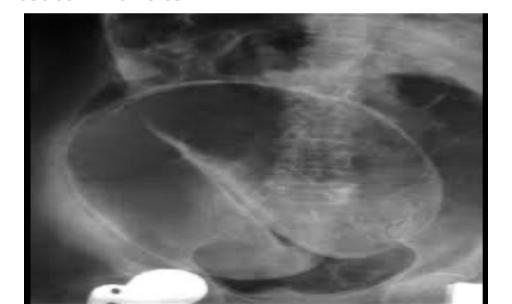




- A. Valentino sign (read about it) => considered ddx to appendicitis
- B. Appendectomy with bowel repair repair the ruptured PU



- 1. What is the name of this sign?
- 2. Where is the Most common site?





1.Coffee bean sign

2. in sigmoid colon



ر الماري الماري

- 1. What is the name of this sign?
- 2. Name the study?
- 3. What is the definitive Dx?
- 4. Mention 2 modalities of Mx?



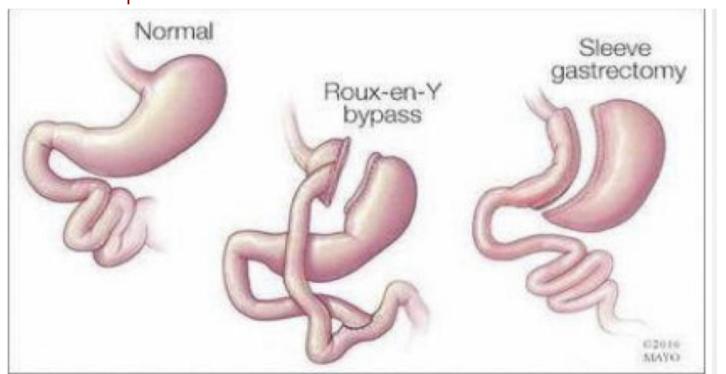


- 1.Bird peak sign
- 2. Barium swallow
- 3.Achalasia
- 4.1) Esophageal sphincter (Heller's) Myotomy 2) Balloon dilation



らう。 SOUL 2021

Name the procedures:





- 1. Roux en y bypass
- 2. Sleeve gastrectomy



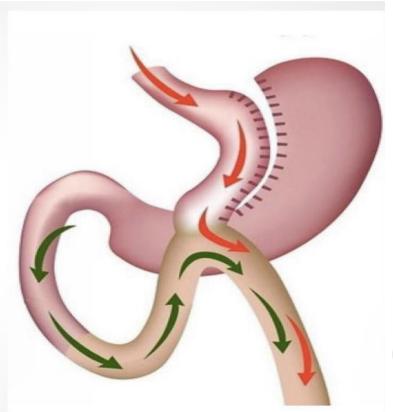
65, 55.

SOUL 2021

1. Name this Surgery?

2. Mention 2 mechanisms (types)?

3. What BMI is an indication for a sure





1. Mini-Gastric By pass

2. 1)Roux-en-Y gastric bypass 2) Duodenal switch 3) Jejunoileal bypass



QUESTION

IHSAN 2020

colongitis usually (20-40 yrs)

A 40-years-old female previously healthy, presented with acute abdominal pain, fever and itching Jaunch'ce

A.What is the diagnosis?

B.What is the next imaging test to order for this patient?



A. Ascending cholangitis triad [RVQ pain, Fever, Jaundice)

B. Some said ERCP & some said MRCP the defenitive dx is ERCP or PTC.



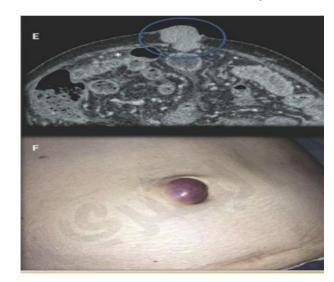


IHSAN 2020

Hashemite Universit

A 50-years old male patient has recently become cachectic and developed ascites

- Name the findings on examination (lower picture) and CT scan .(upper picture)
- 2. Mention 2 possible underlying sources for .this lesion



1. Sister Mary Joseph Nodule

2.GI cancers, Gynecological cancers, Melanoma

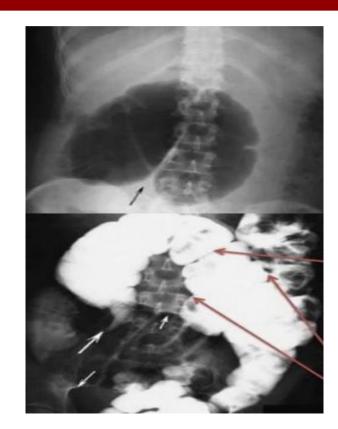


्रेट्ट IHSAN 2020

1: What is the study?

2. What is the Dx?

3. What is the Mx?





1.Barium Enema

2. Volvulus

I3.. Detorsion



-03 IHSAN 2020

A Patient that needed to reduce weight ASAP, and this surgery was :done

I: Which procedure is this?

2.: mention 2 Complications for it?





ANSWER

I. Gastric Sleeve

II. Complications: 1) Blood clots. 2) Gallstones 3) Hernia. 4) Internal bleeding 5) Leakage. 6) Perforation 7) Stricture

1001 PM 9





IHSAN 2020

I: What is this?

II: Name 2 pathologic finding?

III: Name 2 therapeutic procedures done with it?





I. Colonoscopy

II. 1)Angiodysplasia Diverticulosis (2 Colon tumor (3 Polyps, 4)masses

III. 1) Laser Ablation

2)Polyps Resection



2019 - Before

1. What is thename of this modality of investigation?

2- what is this pathology?

3- how do we treat those patients in uncomplicated cases?

4. What is the pathology?





1. Abdominal Ultrasound

- 2.Intussusception
- 3. Resuscitatio, Hydrostatic (pressure) reduction using gas air or barium enema
- 4.Intussusception



QUESTION



2019 - Before

Female patient came complaining from fistulas and other symptoms.

Colonoscopy was done

1. What is the likely diagnosis?

2. What are the patients usual symptoms?

3. How do we treat those patients?

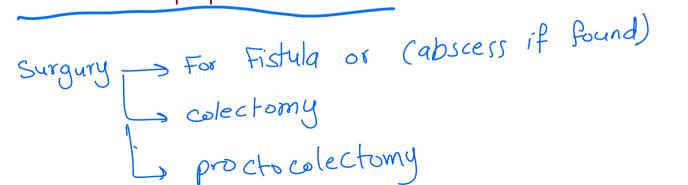






ANSWER

- 1. Crohns Disease
- 2.abdominal pain, fever, weight loss, diarrhea
- 3. I am not sure if they wanted a surgical or medical approach medical= 6 mercaptopurine and steroids





OTHER PICTURES FOR THE PREVIOUS QUESTION







QUESTION



2-month-old male with abdominal distention and history of delayed

passage of meconium at birth.

1. • Name this imaging study

2. Name the gold standard diagnostic method for this .problem





1.Contrast/barium enema

2. Rectal biopsy

Note: diagnosis is Hirschsprung's disease





This is an abdominal x-ray of 40-year-old patient known case of ulcerative colitis and presented with abdominal pain and increasing abdominal distension

- 1. What is the most likely Diagnosis?
- 2. Mention one possible complication





ANSWER

1.Toxic dilatation of transverse colon(toxic mega-colon)

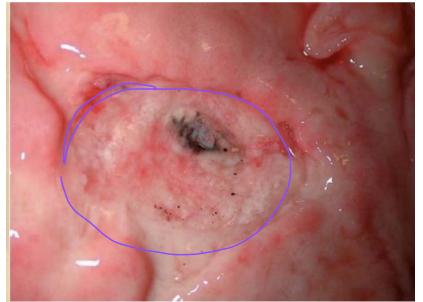
2. perforation + severe bleeding & dehydration + Osteopresis



2019 - Before

While performing an upper GI endoscopy, you saw this lesion in the stomach

- 1. Describe what you see
- 2. What is the most likely diagnosis
- 3. What is your next step?





1.Ulcer

2. Gastric Cancer

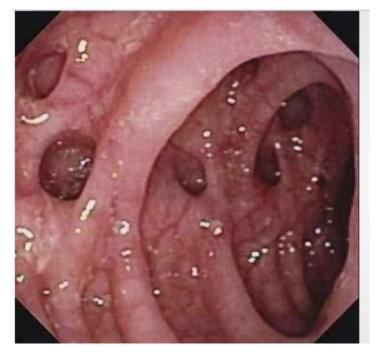
3. Biopsy





While performing a colonoscopy you found this abnormality

- 1. Name this pathology
- 2. What is the most common location
- 3. Mention 2 possible complications





1. diverticular disease

2. sigmoid colon

3. Bleeding, perforation, stricture, diverticulitis

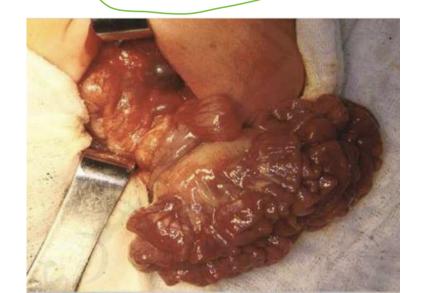




2019 - Before

1. What is the Dx?

2.the bowel was viable and not gangrenous, what to do?





1.Volvulus (Midgut)

2. Viable SB > Close and observe



2019 – Before

1. What is the diagnosis?

2.most common site?





1.Sigmoid volvulus

2.Sigmoid colon

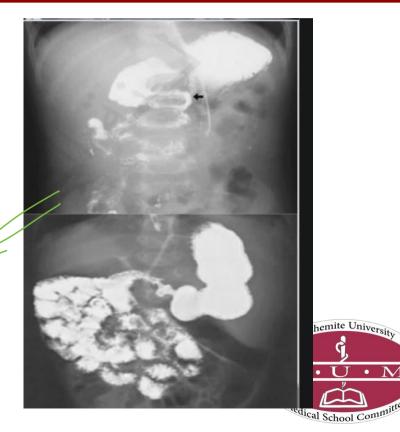


2019 – Before

1. What is the study?

2. What is the pathology / Clinical ER Presentation?

Jo, O Jord (2)



1.Barium meal

2. Midgut volvulus due to malrotation



NOTE

| | 9 |
|-----|----|
| Λ | 15 |
| (5) | 55 |

| Name | Region & info | Indications |
|------------------------------|--|--|
| Barium | to visualize the area from the | a. Symptoms of gastro-esophageal reflux |
| Swallow | mouth to the stomach (esophagus) | b. Dysphagia, related to: Esophageal (Web, stricture, tumor, achalasia), vascular abnormalities |
| Barium Meal | Double contrast (gas+barium) to visualize the stomach and the duodenum | a. Gastro-edophageal reflux b. Gastric or duodenal ulcer c. Hiatus hernia d. Gastric tumors |
| Barium follow- through | To visualize the small intestine, taken every 1/2 hr till we reach the large intestine (stool white) | a. IBS (crohns mostly) b. small bowel tumor/lymphoma (filling defect) c. Small bowel obstruction |
| Barium Enema | Double contrast (barium + air), to visualize the colon, and it's the only contrast given in the rectum (by Folly's) | a. Abdominal mass b. Large bowel obstruction / volvulus c. Diverticular disease d. Colonic tumor |





2019 - Before

1. This is a picture of obstruction, Is it partial/complete? Why?





Partial obstruction - Because there is air in rectum



2019 - Before

case of UC, with a history of bloody diarrhea and abdominal pain:

1. What is the abnormality?

2. What is the abnormality?





1.Transverse Toxic megacolon

2.Perforation - Peritonitis



QUESTION

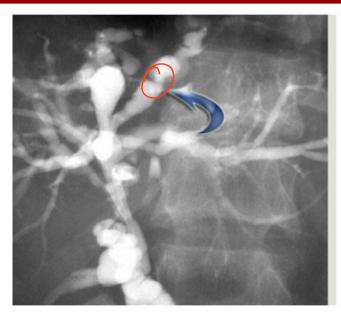
2019 - Before

1. What is the Dx?

2. Which disease is associated with it?

3.which type of malignancy the patient may develop?

4. Diagnostic test?





- 1.primary sclerosis cholangitis (Beading)
- 2. Ulcerative colitis
- 3. Cholangio carcinoma
- 4.ERCP



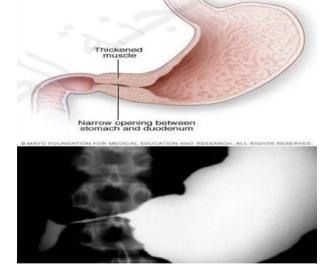


2019 - Before

 $\sqrt{\$}$

A 55 years old patient with PUD came with forceful vomiting

- 1.What is the pathology?
- 2. What is the electrolyte disturbances the patient has?
- 3. What is the gold standard for Dx?
- 4. Mention 2 causes?





ANSWER

- 1.gastric outlet obstruction (pyloric obstruction) Pyloric Stenosis
- 2.hypokalemic hypochloremic metabolic alkalosis



4.1)Gastric Carcinoma 2) Peptic ulcer disease (PUD





2019 - Before

What is the diagnosis?







ANSWER

Peutz-Jeghers syndrome

Note: PJS is an autosomal dominant inherited disorder characterized by intestinal hamartomatous polyps in association with a distinct pattern of skin and mucosal macular melanin deposition



2019 - Before

Appendicitis Scenario

- 1. What is the pathology?
- 2. What is the name of it's scoring system?
- 3. What is the sequence of the pain?
- 4. Write 2 features found on US?





ANSWER

- 1. Acute Appendicitis
- 2. Alvarado scoring system
- 3. Visceral somatic sequence of pain
- 4.1) Blind-ending tubular dilated structure >6mm 2) Appendiocolith with acoustic shadow 3) Distinct appendiceal wall layers 4) Peri appendiceal fluid collection 5) Peri appendiceal reactive nodal enlargement



NOTE ALVARADO SCORING SYSTEM (APPENDICITIS)

| Mnemonic (MANTRELS) | Value |
|------------------------------------|-------|
| Symptom | |
| Migration | 1 |
| Anorexia-acetone | 1 |
| Nausea-vomiting | 1 |
| Signs | |
| Tenderness in right lower quadrant | 2 |
| Rebound pain | 1 |
| Elevation of temperature >37.3°C | 1 |
| Laboratory | |
| Leukocytosis | 2 |
| Shift to the left | 1 |
| Total score | 10 |



2019 - Before

Patient with a history of lower GI bleeding & this is his colonoscopy:

- 1. What is the diagnosis?
- 2.the Cause?
- 3.the management?
- 4. What is the most common site?



-51,



- 1. Angiodysplasia
- 2. Atherosclerotic cardiovascular disease
- 3.1) Laser 2) Electrocoagulation 3) Surgery
- 4.the cecum or ascending colon

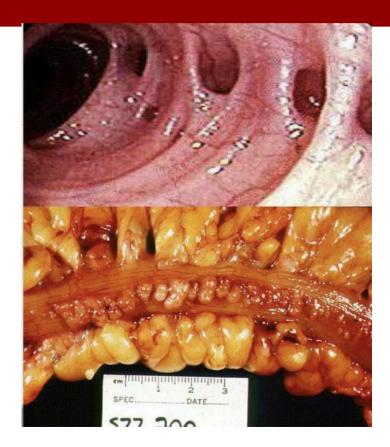


2019 - Before

1.What is the Dx?

2.mention 2 complications?

3. What is the most common site?



33, 7



- Diverticulosis
- 2.1) Infection 2) Perforation 3) Obstructio
- 3.Sigmoid colon

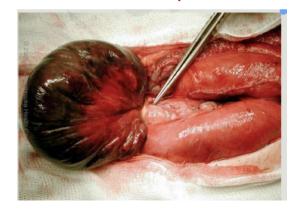


2019 - Before

Patient presented with painful lump in his belly button:

1. What is the Dx?

2.if the bowel still the same despite of all measures, what's your next step?





1.Strangulated Hernia

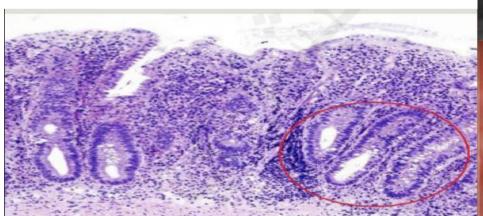
2. Resection and Anastomosis

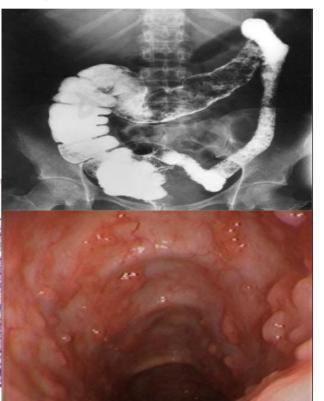


2019 - Before

1. What is the diagnosis?

2.Mention 2 drugs used in the management:







1. Ulcerative colitis

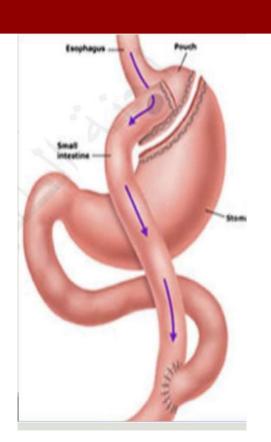
2.1) Steroid 2) Azathioprin



2019 - Before

1. Name this surgery?

2. Mention 2 mechanisms?



35° (,) 5°



- 1. Roux-en-y bypass
- 2.1)decrease gastric absorption
- 2) Early satiety



2019 - Before

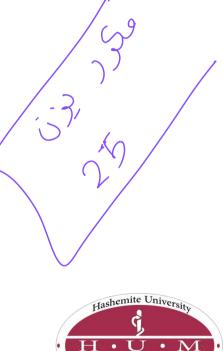
You are doing endoscopy and you found this lesion?

1.Describe what you see?

2. What is the likely Dx?

3. Next step in Mx?





1.comment on the shape, size, location, color, presence of necrosis, discharge, etc..

2. Stomach cancer or ulcer

3.Biopsy



2019 - Before

You are doing endoscopy and you found this lesion; pain is relived by eating and exacerbated in empty stomach?

1. What is the likely diagnosis?

2.name 2 complications?







1. Peptic (duodenal) ulcer

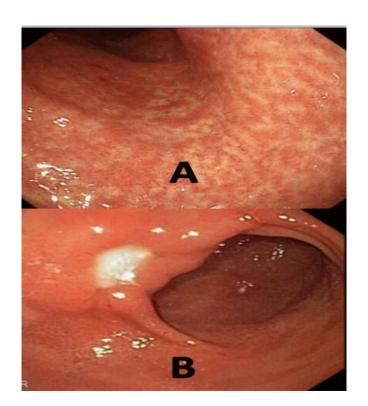
2.Perforation,Bleeding



2019 - Before

1. What is A and B?

2.Name 2 causes?







1. A> Gastritis "not sure" B > Duodenal Ulcer

2.1)) NSAID 2) H. Pylori



QUESTION

2019 - Before

Picure of GIST (Gastrointestinal Stromal Tumor):

1. What is the most common site?

2. What are the cells of origin?





1. Greater curvature

2.cells of cajal



QUESTION

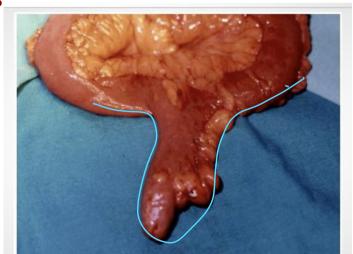
2019 - Before

16 years old female patient with 24 hours complaint of right lower abdominal pain, this pathology was found in the distal small bowel

- 1. What is the pathology shown?
- 2. This structure is the remnant of which embryological duct?
- 3. Name 3 possible complications for this

structure:

4. Mention One common ectopic tissue you can find?





ANSWER

1.Meckel's Diverticulum

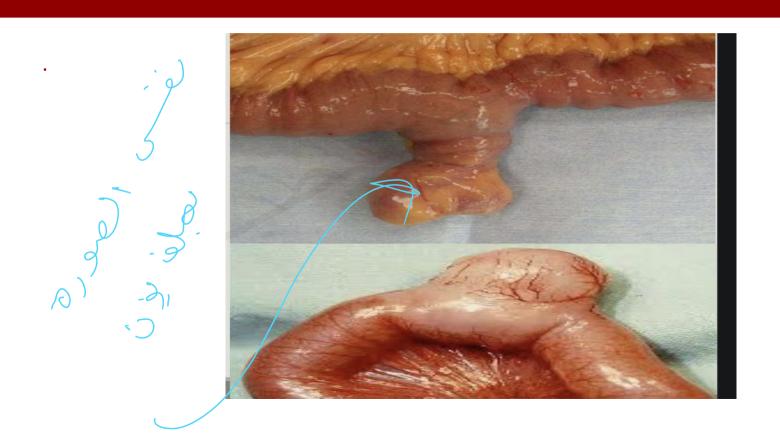
2. omphalomesenteric duct

3.Intestinal hemorrhage, Intestinal obstruction, Diverticulitis

4. Gastric and pancreatic tissues



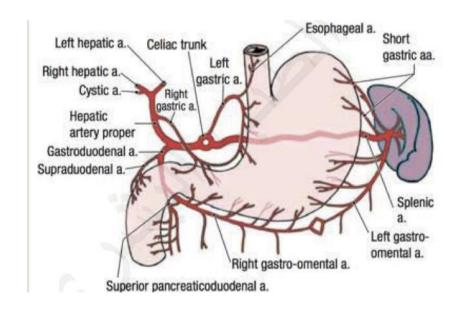
OTHER PICTURES FOR THE SAME QUESTION





2019 - Before

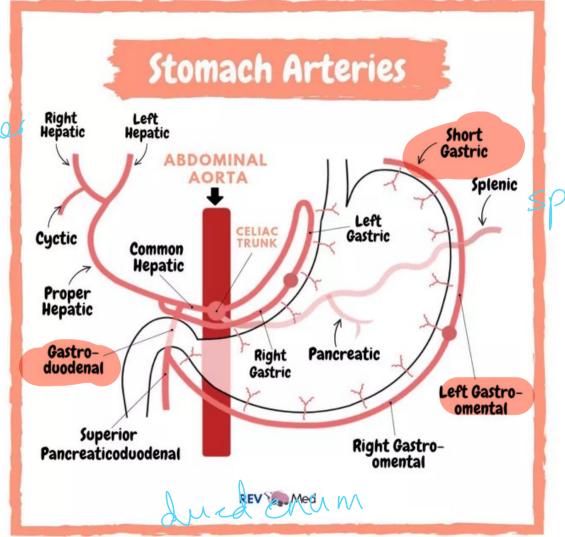
Question was asking about the following arteries?





ANSWER

- 1- Left gastroepiploic artery
- 2- Gastroduodenal artery
- 3- Short gastric arteries







2019 - Before

1. Define Barret's esophagus?

2. What common type of cancer you will see?





ANSWER

1. Change in the normally squamous lining of the lower esophagus to columnar epithelium (metaplasia)

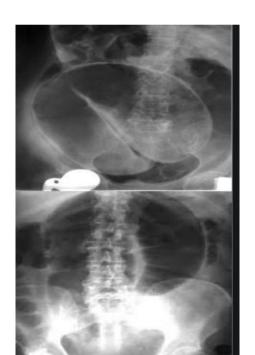
1. Adenocarcinoma



presented with sudden severe pain and abdominal distension:

30

- 4.What is the sign?
- 2. Name the signs you?
- 3. What is your diagnosis?
- 4.the most common site
- 5 What is the management?
- 6 Mention 2 causes for this condition?





ANSWER

- 1. Coffee bean sign
- 2.1) Dilated large bowel 2) Coffee bean sign
- 3. Sigmoid volvulus
- 4.in Sigmoid colon
- 5.Resuscitation And untwist (detorsion) the bowel and go for surgery (this is done by means of sigmoidoscopy or colonoscopy
- 6.Chronic constipation Sigmoid tumor





QUESTION

woman living in a rural area presents with pressure symptoms and her US reveals the following image.

Q1: What is the name of this sign?

Q2: Most probable etiology for this sign?





- 1.Water lily sign
- 2.- Caused by tapeworm Echinococcus granuloses
- Another cause is E. multiocularis



32 'U'S, Sefore

1. What is the study?

2. What is the pathology?





1.Barium meal

2.Midgut volvulus



• QUESTION 33 JS 2019 – Before

1. What is the finding?

2.The Diagnosis?





ANSWER

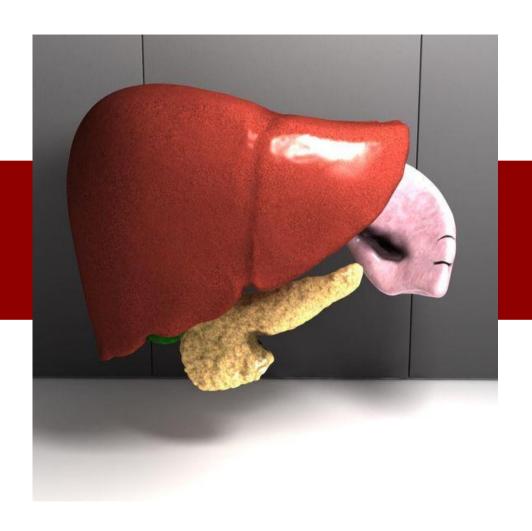
- 1.Fluid in Morrison's pouch
- 2.Hemoperitoneum(blood)

Ascites(fluid)

Note

Morison's pouch: The hepatorenal recess is the space that separates the liver from the right kidney.**

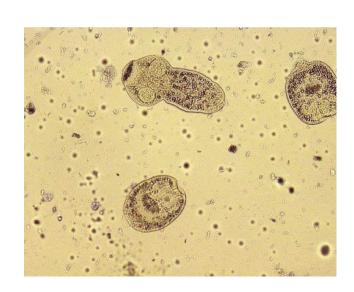




LIVER, SPLEEN, PANCREAS, GALLBLADDER & ADRENALS



- 1. What is the diagnosis?
- 2. What is the investigation?
- 3. Mention 2 drugs used in the management:







- 1.Hydatid cyst
- 2. CT scan
- 3. Albendazole , Mebendazole



Hope 2024

• QUESTION.

Name two possible tumor markers for this lesion





CA 19,9, alpha feto protein



Hope 2024

QUESTION

35 Year old female patient presented with acute abdominal pain and epitastric tenderness. The CI scan confirmed the diagnosis of acute panceratitis?

- 1. Is there any prognostic value for serum amylase or serum ligase?
- 2. What are the two commonest causes of acute pancreatitis?





- A. lipase
- B. Gallstones, alcohol



30 day old with yellowish discoloration of skin and sclera

1. Name 2 diagnostic imaging modalities helpful in diagnosing this condition preoperatively?

9 Scarling

2. Name the most likely surgical diagnosis after excluding all medical conditions?

causes of aundice obstructive Jaundice

inblussia l'aves as hepatitis & hemolytic d2

view & lose vices colongitis



ANSWER

A. Mrcp, ct — I think (EACP & PTC) as they're

B. ercp — considered the defenitive dx procedures

obstructive Jaundice caused by ascending Colongitis



Wateen 2023

• QUESTION

This is a liver CT scan for a 22 years male patient with RUQ Pain

A) What is the diagnosis?

B) Mention other possible site for this pathology?





- A. Hydatid cyst
- B. Lung long bone



Wateen 2023

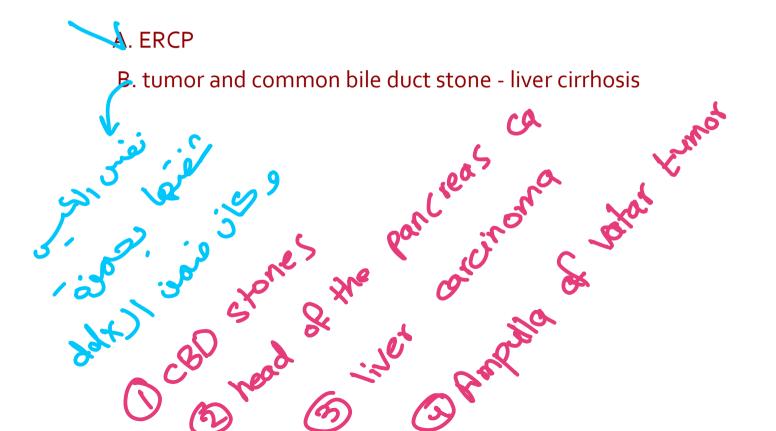
QUESTION

This 40 year old male patient with history of cholecystectomy 3 weeks ago presented with painless jaundice, pale stool and dark urine.

- A) The diagnostic imaging for this patient is?
- B) Mention two causes for obstructive jaundice?









Wateen 2023

• QUESTION

45 year old male known case of hepatitis C for 10 years duration, presented with abdominal distention as in this image.

A. What is your spot diagnosis?

B. mention a clinical maneuver to prove your diagnosis?







A. Ascites

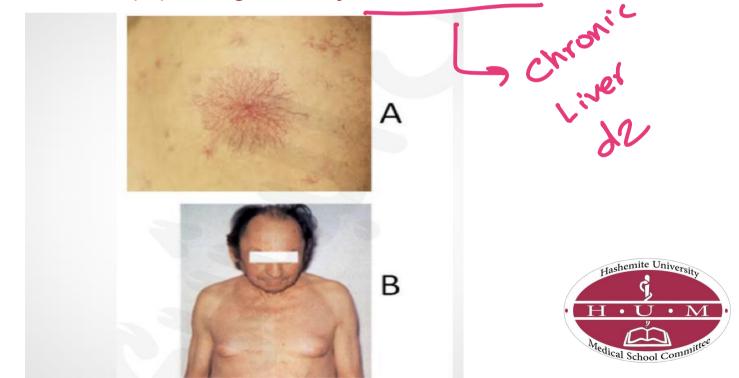
B. Fluid thrill and shifting dullness



Wateen 2023

• QUESTION

Name these abdominal and chest physical signs in this jaundiced male Patient



- A. Spider nevi
- B. Gynecomastia



Harmony 2022

- 13. All of the following are possible early post ope complication of trauma related splenectomy except
- a. Wound infection
- b. Bowel injury
- c. Pneumococcus pneumonia
- d. Abscess formation
- e. Bleeding

Answer: C

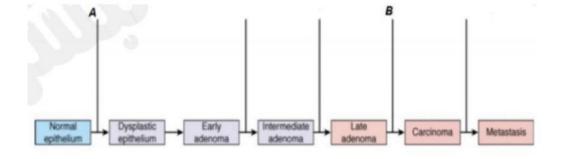
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Harmony 2022

- 19. The gene at site B is:
- a. FAP
- b. KRAS
- c. APC
- d. P53

Answer: D





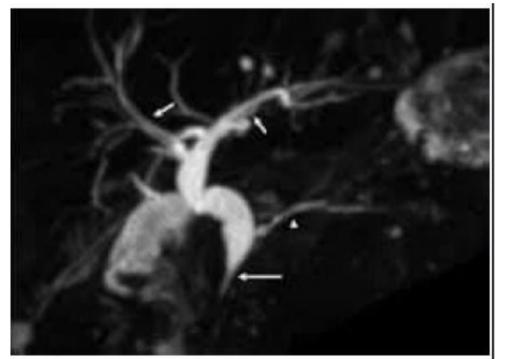
Harmony 2022

A. What is the following study?

B. the structure pointed?

C. what is the next step?

3. 3. 3. 36.





- A. MRCP
- B. pancreatic duct (stricture)
- C. ERCP

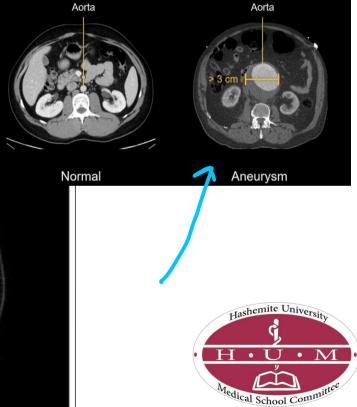


Harmony 2022

A. What is the following study?

B. what is the spot diagnosis?





A. CT scan

B. AAA (aortic artery aneurysm)





Harmony 2022

A. What is the sign in the following picture?

B. what is the diagnosis?





A. Caput medusa

B. Liver cirrhosis



Harmony 2022



GIST,

A. most common site?

B. gene mutation?

(No picture found)





- A. Stomach
- B. KIT



patient with thyroid medullary cancer & a CT was done:

Q1: What is your next step?

Q2: If the patient has no genetic abnormality and the lesion is not functioning

what will you do next?

Q3: What disease you have to rule out?

Q4: cut off size to remove?





ANSWER

1. (not sure what the dr. meant so here are the possibilities):

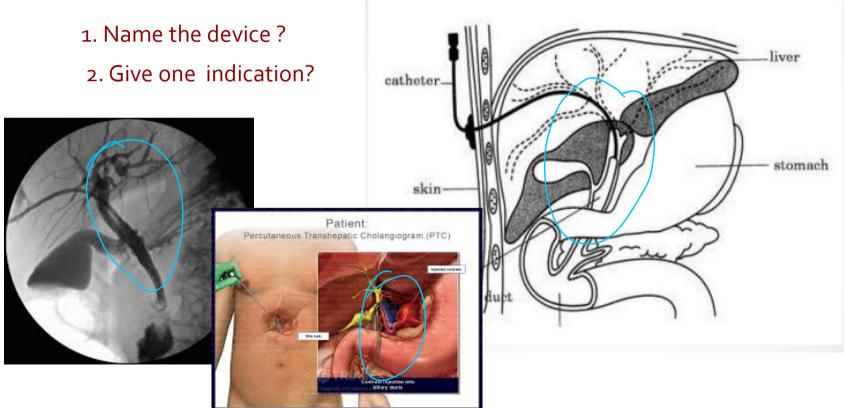
Assess the functionality of the adrenal tumor by hx, physical ex and ordering lab tests: KFT (Na, K, Creatinine, Urea) / Aldosterone levels/ cortisol/ metanephrine/normetanephrine/vanillylmandelic acid (VMA)// pheochromocytoma// 24h urine analysis forcatecholamine metabolites

- 2. Because it is very large > surgery adrenalectomy, the dr said : If it was more than 4 cm then you have to remove it immediately
- 3. Pheochromocytoma
- 4. more than 4 cm



SOUL 2021

• QUESTION





ANSWER

1. PTC (Percutaneous Transhepatic

Cholangiography)

2. Failed ERCP attempt





SOUL 2021

This is an MRI of 37 years old patient complains of uncontrolled hypertension,
A) List 2 possible causes





- 1. pheochromocytoma
- 2. Cushing's disease



SOUL 2021

A) What is the name of the investigation:

B) What is the :finding





A. ERCP

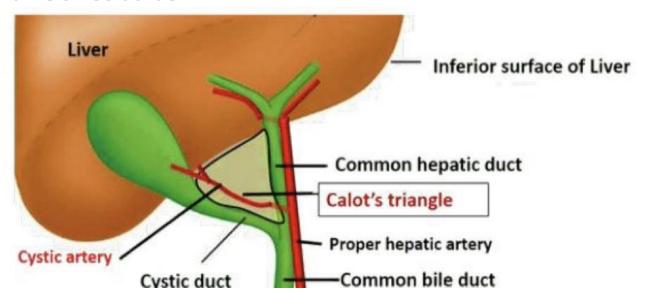
B. Dilated CBD Filling defect



SOUL 2021

1. What is the name of this triangle?

2. Name three border?





Calot triangle

2. Inferior border of the liver

Cyst duct

Common hepatic duct



QUESTION

IHSAN 2020

This 6o-years old patient developed abdominal pain, bloody diarrhea and fever. He came back from a tour trip to a south west Asian country 3 weeks .ago. CT was done

- 1. What is the most likely diagnosis
- 2. What is the treatment of choice





ANSWER.

1.Liver Abscess (Ameobic)

2.Metronidazole



QUESTION

IHSAN 2020

A 45-years old male patient, alcoholic, presented with a 24-hour history of upper abdominal pain and repeated vomiting. On examination of the abdomen, he was

found to have the following .signs

.1. Name the signs shown in (1) and (2)

2. Name the most likely underlying pathology that .caused these signs

3.Mention2 causes





- 1. Cullen's sign (2) Grey-Turner's sign (1)
- 2. Acute Hemorrhagic Pancreatitis
- 3. any retroperitoneal hemorrhage
- 1) Acute pancreatitis
- 2) Abdominal trauma bleeding from aortic rup



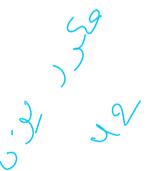
IHSAN 2020

Female present with fever and itching and jaundice

1.: What is the Dx

2. Why she is having Itching







I. Ascending cholangitis

II. Bile salts accumulation



2019 - Before

1. What is the name of this investigation?

2. Mention two abnormalities seen .in this picture

3.Indications

4. Complications of ERCP?







ANSWER

1.ERCP

- 2. -
- 1) Dilated CBD 2) Multiple filling defects (stones) in CBD
- 3. Obstructive jaundice
- 4.Pancreatitis



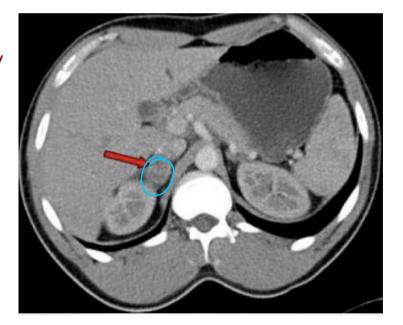


2019 - Before

This lesion was detected incidentally on CT of the abdomen.

1. The next step in evaluating the patient is

2. Name 2 indications for surgery





ANSWER

Not sure about the answer but I think it's adrenal mass so the answer would be

1.cortisol blood test

2.>4cm, functional, CT density>20



QUESTION

2019 - Before

The figure represents a finding in a 40-year-old female undergoing abdominal US prior to a bariatric procedure

- 1. What is the diagnosis?
- 2. Name two indications for surgery in asymptomatic patients with this condition.
- 3. In case of inflammation, name two locations where the pain will be felt.





- 1.Gallstone
- 2. Porcelain gallbladder, Congenital hemolytic anemia, Gallstone > 2.5cm
- 3.pain would be in the RUQ, and radiate into the right subscapular area



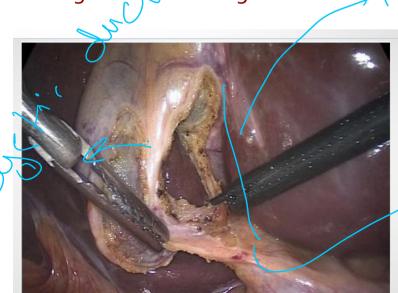
QUESTION

2019 - Before

You are holding the laparoscope

1. What is the name of the procedure

2. Name the area the surgeon is dissecting



FINE boods Viver



mostly the answer are correct

- 1.cholecystectomy
- 2.callot triangle

Not sure



2019 - Before

patient post-splenectomy due to RTA:

1. What is the micro-organism causing this?

2. How can you prevent it?





ANSWER

- 1. Meningococcus
- 2.meningococcal vaccine on day 14 post splenectomy, then revaccination at the appropriate time interval



NOTE: POST SPLENECTOMY VACCINATION

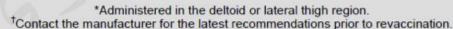
- Non-elective

- Non-elective splenectomy patients should be vaccinated on or after postoperative day 14.
- Asplenic patients should be revaccinated at the appropriate time interval for each vaccine.

Elective

- Elective splenectomy patients should be vaccinated at least 14 days prior to the operation.
- Asplenic or immunocompromised patients (with an intact, but nonfunctional spleen) should be vaccinated as soon as the diagnosis is made.
- Pediatric vaccination should be performed according to the recommended pediatric dosage and vaccine types with special consideration made for children less than 2 years of age.
- When adult vaccination is indicated, the following vaccinations should be administered:
 - Streptococcus pneumoniae
 - Polyvalent pneumococcal vaccine (Pneumovax 23)
 - Haemophilus influenzae type B
 - Haemophilus influenzae b vaccine (HibTITER)
 - Neisseria meningitidis
 - Age 16-55: Meningococcal (groups A, C, Y, W-135) polysaccharide diphtheria toxoid conjugate vaccine (Menactra)
 - Age >55: Meningococcal polysaccharide vaccine (Menomune-A/C/Y/W-135)

| Vaccine | Dose | Route | Revaccination |
|---|--------|------------------|------------------------------|
| Polyvalent pneumococcal | 0.5 mL | SC* | Every 6 years |
| Quadravalent meningococcal/diphtheria conjugate | 0.5 mL | IM upper deltoid | Every 3-5 years [†] |
| Quadravalent meningococcal polysaccharide | 0.5 mL | SC* | Every 3-5 years |
| Haemophilus b conjugate | 0.5 mL | IM* | None |





• NOTE

Mole (Melanocytic nevus): increased no., abnormal clusters, normal or increased production Ephelides (freckle) Junctional naevus Compound naevus Intradermal naevus Blue naevus Normal Normal no. Increased no. Position Normal position Normal position Density ests of naevus cells Naevus cells only in dermis Nests in dermis Nocules of dendritic but cells get smaller with depth Normal production cells deep in dermis Production Increased production





QUESTION



2019 - Before

Apatient presented with episodic sweating and hypertension:

- 1. What is the diagnosis?
- 2. What is the 1st thing to do?
- 3. What raise the possibility of malignancy?
- 4. What is the size that would be considered
- 5. an indication for surgery?





ANSWER

- 1.Incidentaloma (Dr. Sohail's answer)
- 2. Check if functional or not by checking cortisol, renin, angiotensin and VMA, ... etc.
- 3.>4 cm Rapid growth
- Necrosis Family history Hemorrhage Calcifications
- 4.>=4cm



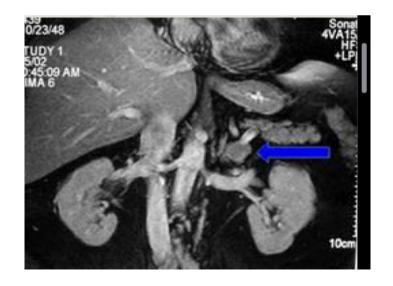
QUESTION



2019 - Before

Lab investigations show high aldosterone level and high ratio of PAC to PRA

- 1. What is your Dx?
- 2. Mention a common presentation for this patient





1.Conns disease

2.Hypertension



• NOTE

Functional adrenal tumors can cause several problems depending on the hormone released. These problems include:

1. Cushing's Syndrome:

This condition occurs when the tumor leads to excessive secretion of cortisol. While most cases of Cushing's Syndrome are caused by tumors

in the pituitary gland in the brain, some happen because of adrenal tumors. Symptoms of this disorder include diabetes, high blood pressure, obesity and sexual dysfunction.

2. Conn's Disease:

This condition occurs when the tumor leads to excessive secretion of aldosterone. Symptoms include personality changes, excessive

urination, high blood pressure, constipation and weakness.

3. Pheochromocytoma:

This condition occurs when the tumor leads to excessive secretion of adrenaline and noradrenaline. Symptoms include sweating, high blood

pressure, headache, anxiety, weakness and weight loss.



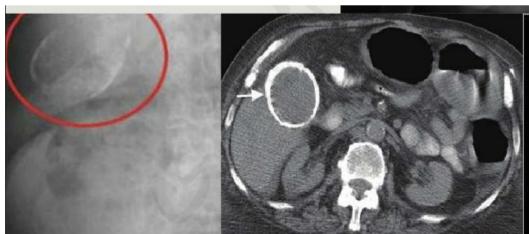
50 / So

2019 - Before

A patient presented with RUQ pain:

1. What is the diagnosis?

2. What is the major risk?









- 1.Porcelain gallbladder
- 2. Adenocarcinoma of gallbladder
- 3. Elective Cholecystectomy



2019 - Before

1. What is the type of imaging

2.Mention 2 abnormalities? 49

6.2





1.MRCP

2.1)Stone in the CBD (arrow – filling defect) 2) Dilated CBD



QUESTION

2019 - Before

Apatient presented lethargic and febrile a week after a surgery for cholangitis:

1. What is your diagnosis?

2. What is the management?







1.Liver abscess

2. Percutaneous drainage, & - Antibiotic administration



2019 - Before

ub is, so

Name the following complications of liver cirrhosis:







- A.Ascites
- B.Caputmedusa (dilated veins))
- C.Hematoma (easily bruised)





2019 - Before

After RTA, the patient presented with left shoulder pain:

Q1: What is your diagnosis?

2. What is your management?





1.Splenic Rupture

2.Splenectomy

