GIT-MiniOSCE

QMA Team

Objectives

- **Esophageal diseases.**
- **Stomach diseases.**
- **Liver diseases.**
- **Pancreatic ERCP.**
- **Small and Large bowel disorders.**
- **Cases.**
- **Macleod.**

Esophageal diseases

Diffuse esophageal spasm, Achalasia, GERD, Hiatal Hernia, Barret’s esophagus.

Diffuse esophageal spasm

Diffuse esophageal spasm	
Pathophysiology	• Uncoordinated, simultaneous contractions of esophageal body
Symptoms	• Intermittent **chest pain** • **Dysphagia** for solids & liquids
Diagnosis	• Esophagram: **"Corkscrew"** pattern • Manometry: Intermittent peristalsis, multiple **simultaneous contractions**
Treatment	• Calcium channel blockers • Alternate: Nitrates, tricyclics

Diffuse esophageal spasm

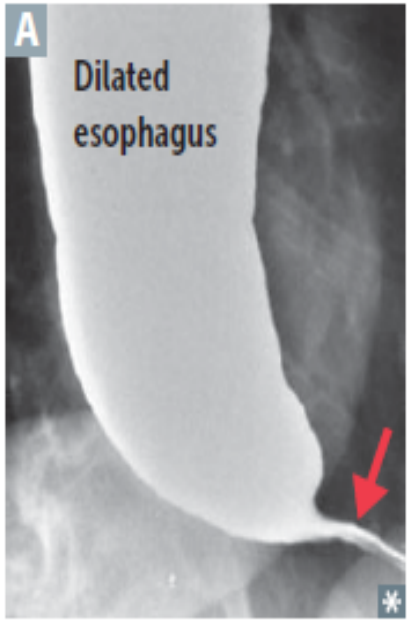
- 32 year old male complaining of (crushing) chest pain precipitated by cold drink, no sweating, no vomiting, ECG normal, cardiac enzyme negative, barium swallow was done and show:

- What is the diagnosis ?
- What is the test that confirm Diagnosis ?

1)Diffuse esophageal spasm
2) esophageal manometrey

Achalasia

Achalasia



Failure of LES to relax due to loss of myenteric (Auerbach) plexus → loss of postganglionic inhibitory neurons (that contain NO and VIP). High LES resting pressure and uncoordinated or absent peristalsis → progressive dysphagia to solids and liquids (vs obstruction—solids only). Barium swallow shows dilated esophagus with an area of distal stenosis. Associated with ↑ risk of esophageal cancer.

A-chalasia = absence of relaxation.

"Bird's beak" on barium swallow **A**.

2° achalasia may arise from Chagas disease (*T cruzi* infection) or extraesophageal malignancies (mass effect or paraneoplastic)

Achalasia

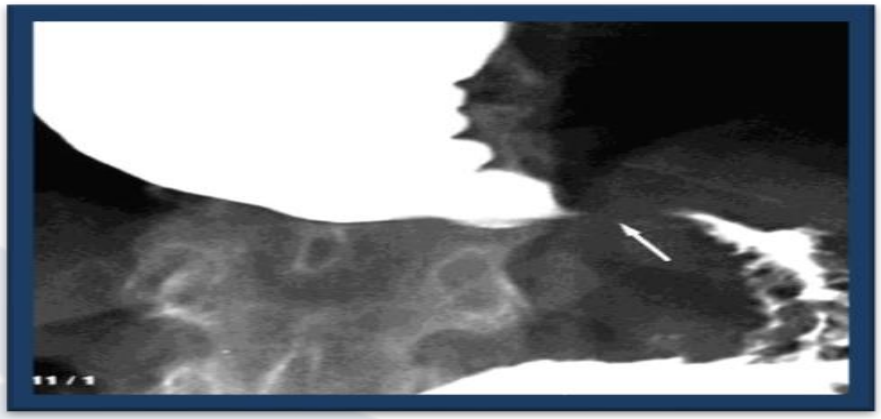
General	**Degeneration of myenteric gangilion cells** ----- Failure of LES relaxation and lower esophagus peristalsis. Can be: 1. **Idiopathic**. 2. **Autoimmune**. 3. **Malignancy** (**adeno Ca**). 4. **Chagas disease**.
Clinical presentation	1- **Dysphagia** (long standing, to both food and fluid). 2- **Regurgitation of foods** (cause halitosis). 3- **Chest pain** (could be mistaken with MI). 4- Aspiration pneumonia (may cause lung abscess, bronchiectasis, or hemoptysis). 5- Weight loss.
Diagnosis	1- **Esophageal manometry** (a. Incomplete relaxation of the LES b. Aperistalsis of esophagus) (to confirm the Diagnosis). 2- **Barium esophagram** (**bird peak sign**). 3- **Endoscopy** (with biopsy to rule out esophageal malignancy).
Treatment	1- medication (nifedipine,nitrate,nitroglycerate). 2- Balloon(pneumatic) dilatation. 3- Surgical myotomy. 4-Botulinum toxin injection(to relax lower esophageal sphincter).
Others	differential diagnosis of this condition: 1- diffuse esophageal spasm. 2- Gastroesophageal reflux disease. 3- esophageal carcinoma. 4- Scleroderma.

Q: A 30 year-old male patient comes with difficulty of swallowing food and drinking water for 10 years. Associated with foul breath smell and weight loss. Above is the x-ray with barium (Ba) meal showing a stricture.

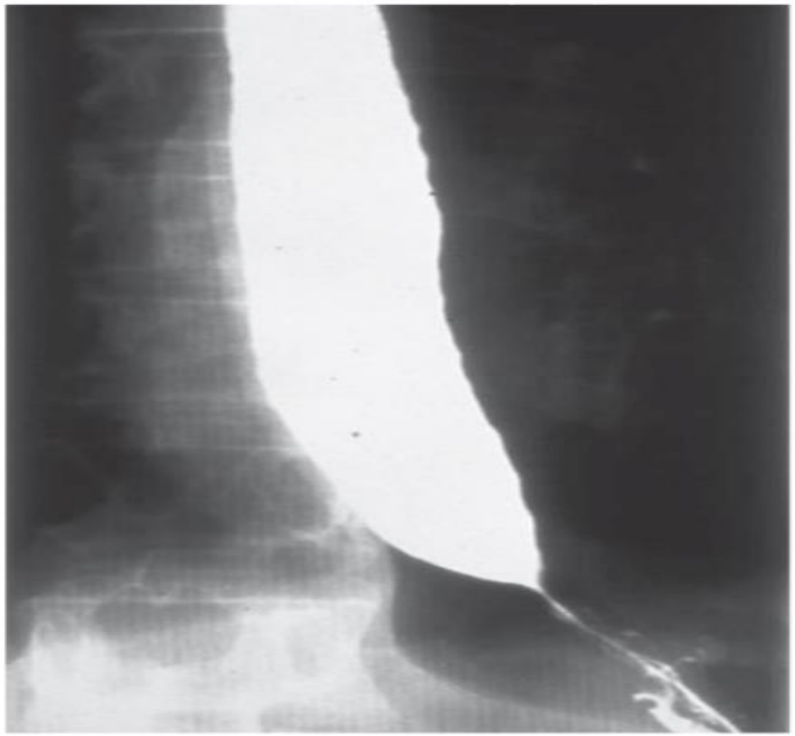
-What is this condition?
-What other differential diagnosis of this condition?
-What causes/mechanisms of this condition?
-What are the clinical presentation of this condition?
-What investigation(s) should be done to confirm the diagnosis?
-What are the treatment of this condition?

Q: This patient presented with intermittent dysphagia.

- What 's your diagnosis?
- Absolute criteria for diagnosis of Achalasia?
- Causes?



12. This patient presented with dysphagia for both solids and liquids, what is the cause and what is the diagnostic test for it?



- Achalasia
- Esophegeal manometry

GERD

General	**Causes of this condition?** 1- Inappropriate relaxation of LES. 2- Hypotensive LES. 3- Decreased esophageal acid clearance. 4- Impaired salivation. 5- Hiatus hernia. **Common group of people to have this disease?** 1) Pregnant women 2) Obese 3) Smokers.
Clinical presentation	**1- Esophageal:** Dysphagia, Chest pain, Water brash, Nausea and vomiting, Belching Hiccup. **2- Extraesophageal:** Recurrent pneumonitis, Nocturnal choking, Hoarseness of voice Sore throat, Dental disease, Globus sensation.
Diagnosis	1- Barium esophagram. **2- Esophagogastroduodenoscopy**. 3- Esophageal manometry. **4- Ambulatory 24-hour pH monitoring**.
Treatment	**1- Lifestyle modifications.** **2- Pharmacology** (Antacids/ H2-blockers /PPIs). 3- Endoscopy therapy (Sterrata procedure / Entyrex / Gate keeper anti-reflux repair / Gastric placation). 4- Anti-reflux surgery.
Others	**Differential diagnosis of this condition?** 1- Esophagitis. 2- Gastritis. 3- Coronary Artery sclerosis. 4- Irritable bowel syndrome. 5- Esophageal cancer. 6- Peptic ulcer disease. **Complications?** 1- Stricture formation. 2- Chronic blood loss. 3- Barrett's epithelium. 4- Adenocarcinoma.

Q: A pregnant woman comes with retrosternal sensation of burning associated with regurgitation of the food and chronic cough.

What is this condition?
What causes this condition?
What other differential diagnosis of this condition?
What complications could happen due to this condition?
What investigation should be done to diagnose this condition?
What other symptoms might come with this condition?
What are treatment of this condition?
Name 3 common group of people to have this disease.

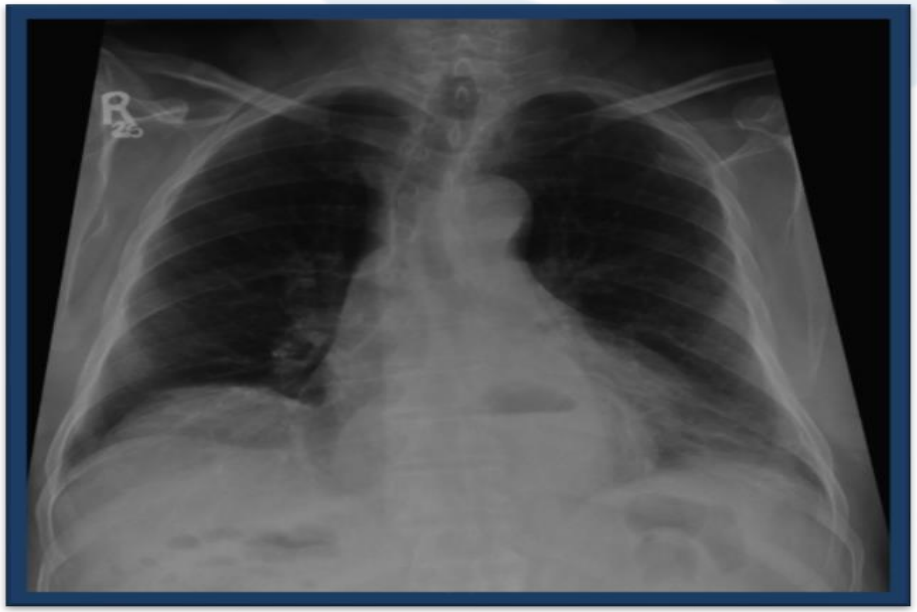
Hiatal Hernia

Q:What's your diagnosis?

Hiatal hernia

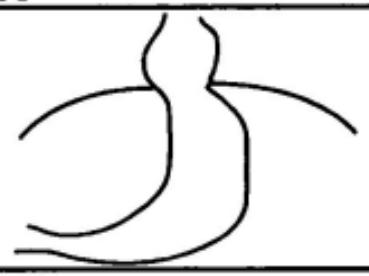
Radiological sign?

Rounded density with air-fluid level superimposed over the cardiac silhouette.



Hiatal Hernia

General: Herniation of GI elements through the diaphragmatic esophageal hiatus. Generally a congenital abnormality, but can develop post-surgery or trauma. Major risk factor obesity

Subtype	Definition	Appearance
Sliding Type I	- GE Junction displaced above the diaphragm -May cause GERD	
Paraesophageal Types (II / III/IV).	- Upward displacement of gastric fundus through defect in phrenoesophageal membrane - Rarely cause GERD Usually by surgeries - lead to N/V/ pain	

Clinical:

- Often asymptomatic (Incidentaly)
- High association with GERD. Can also cause nonspecific abdominal pain.

Diagnosis:

- Generally discovered incidentally with barium swallow, endoscopy, or some other imaging (like CT/MRI ..etc).

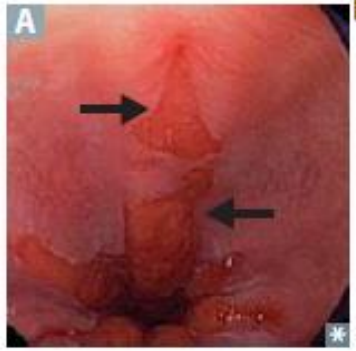
Management:

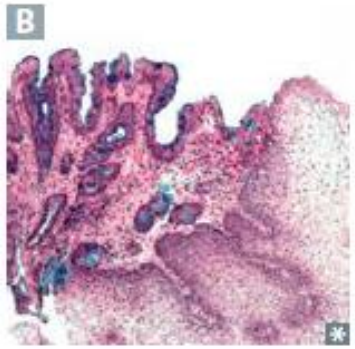
- Sliding Hiatal Hernia: Manage GERD
- Paraesophageal: Surgery in those with gastric complication from the hernia

Barret's Esophagus

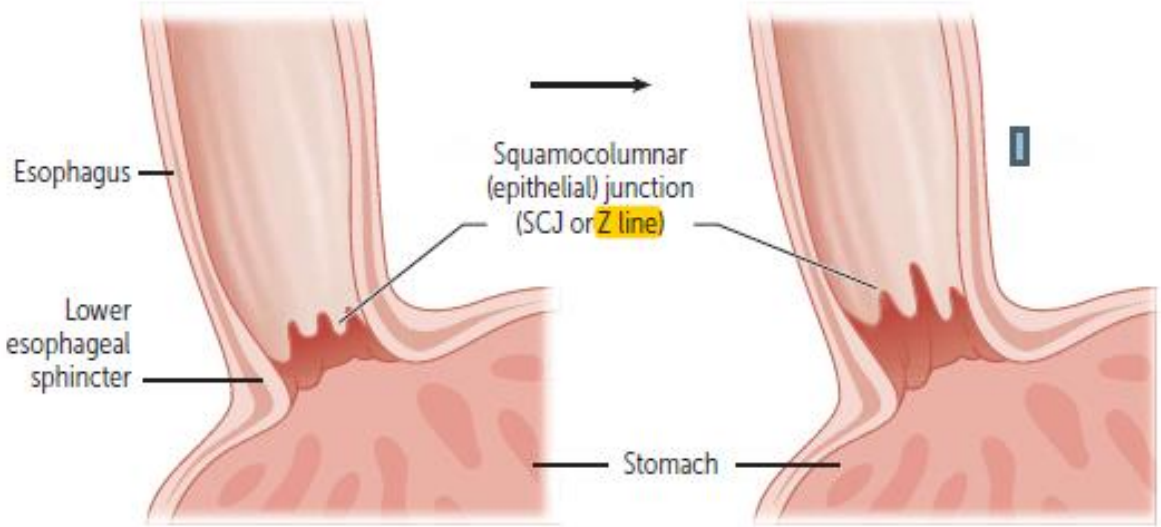
General	**Causes of this condition?** Long standing GERD. **Metaplastic transformation of esophageal (SSE) epithelium to columnar (Intestinal/ gastric).**
Clinical presentation	**1- Esophageal:** Dysphagia, Chest pain, Water brash, Nausea and vomiting, Belching Hiccup. **2- Extraesophageal:** Recurrent pneumonitis, Nocturnal choking, Hoarseness of voice Sore throat, Dental disease, Globus sensation. (**NO symptoms**)
Diagnosis	**Esophagogastroduodenoscopy**.
Treatment	**1- Lifestyle modifications.** **2- Pharmacology** (Antacids/ H2-blockers /PPIs). **3- Endoscopy therapy** (Ablation). 4- Anti-reflux surgery/ resection.
Others	**Complications? Predispose patients to have adenocarcinoma** (0.1-0.4%). **Screening guidelines are controversial:** - In general, those at high risk for Barret's/ cancer should be screened with endoscopy. - Risk factor includes: age >50, long-term GERD, smoking, obesity.

Barrett esophagus

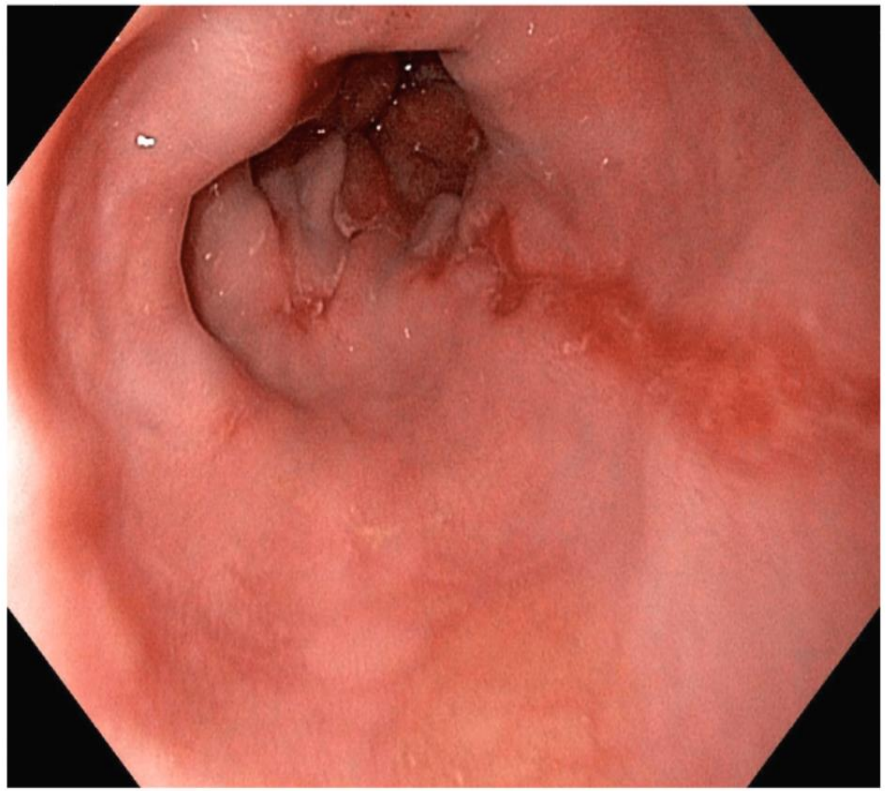




Specialized intestinal metaplasia A—replacement of nonkeratinized stratified squamous epithelium with intestinal epithelium (nonciliated columnar with goblet cells [stained blue in B]) in distal esophagus. Due to chronic gastroesophageal reflux (GERD). Associated with ↑ risk of esophageal adenocarcinoma.

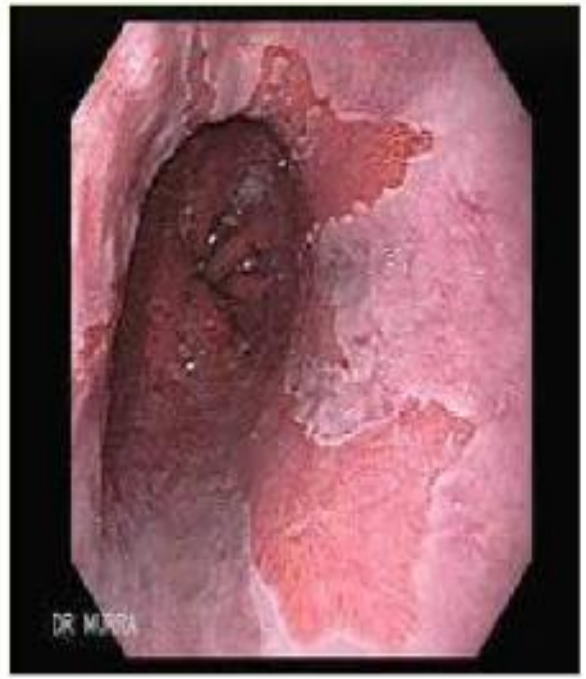


2. This patient came with regurgitation and heart burn, what is your diagnosis and treatment?



Q2:

This patient had **GERD for 10 years**, what's your diagnosis?



Stomach diseases

Peptic ulcer (GU/PU)

Peptic ulcer

General	Break in the superficial epithelial cells (Mucosa) penetrating down to the muscularis mucosa. (Erosion??). **Types:** 1. **Gastric ulcer** (Most common in **lesser curvature**). 2. **Duodenal ulcer** (**AD**). **Causes of PUD:** 1- **H.pylori :** most common cause of PUD (spiral Gram-negative flagellate urease-producing bacterium). 2- **NSAIDs** (can cause DU or gastric ulcer but mainly gastric ulcer). 3- High acid state . Eg. **ZES**. 4- **Crohn's disease** in stomach and duodenum.
Clinical presentation	1- Epigastric pain burning in nature?? **DU : pain increase when patient is hungry.** **GU : pain increase while patient eating** 2- Anorexia and weight loss may occur especially with GU. 3- Nausea 4 – vomiting : less frequent , but when occur it relieve pain. 5- UGI bleeding or perforation : may occur without preceding any symptom. 6- **Weight gain with DU and weight loss with GU.**
Diagnosis	- **Esophagogastroduodenoscopy** (with **biopsy of ulcer margin**?). - Barium esophagram. – Asses etiology: NSAID HX, H.pylori work-up.
Treatment	**1- Treat underlying cause.** **2- Pharmacology** (PPIs). **3- Endoscopy follow-up.**
Others	**Complications?** 1. **Perforation**: Acute abdomen/ pnemoperitonium. 2. **Bleeding**. 3. **Outlet-obstruction**.

Alarm symptoms to do EGD:

- **Dysphagia or odynophagia**
- **Protracted vomiting**
- **Anorexia and weight loss**
- **Hematemesis or melena**
- **Persistent symptoms despite of treatment**
- **Abnormal barium swallow or CT**
- **Family history of PUD or gastric malignancy**
- **Older patient**
- **Early satiety**
- **IDA**

H.pylori

General	Gram negative gastric bacteria that is associated with gastric and PUD.
Clinical presentation	The same as PUD.
Diagnosis	- If upper endoscopy is indicated: **Biopsy with urease testing + culture**. - Noninvasive testing: **Stool antigen, urea breath test, serology is avoided.**
Treatment	- **Triple therapy (First line): Amoxicillin, Clarithromycin, PPI.** - **Quad therapy: Metronidazole, Tetracycline, PPI, Bismuth.** - After the treatment, **test for eradication breath or stool testing should be performed**. - Surgical treatment now only used for complications including: 1. Recurrent uncontrolled hemorrhage where the bleeding vessel is ligated. 2. Perforation.
Others	**Complications?** 1. PUD. 2. Chronic gastritis. 3. Gastric adenocarcinoma. 4. Gastric maltoma. 5. Diarrhea. 6. Nutritional deficiency.

H.pylori

Diagnosis of H.pylori infection

*non-invasive test:

1- **13C-urea breath test** :most sensetive non invasive test is **suitable for testing for eradication** of the organism False –ve if patient on PPI.

2- **Fecal antigen test** : patient should be off PPI(2-4 weeks) but can be continue on H2 blockers.

3- **Serological test** : detect **IgG antibodies** , Non suitable for testing for eradication or presence of current infection because it still be positive after one year of eradication.

*** if you suspected ZES do fasting serum gastrin level.**

***Invasive tests (endoscopic):**

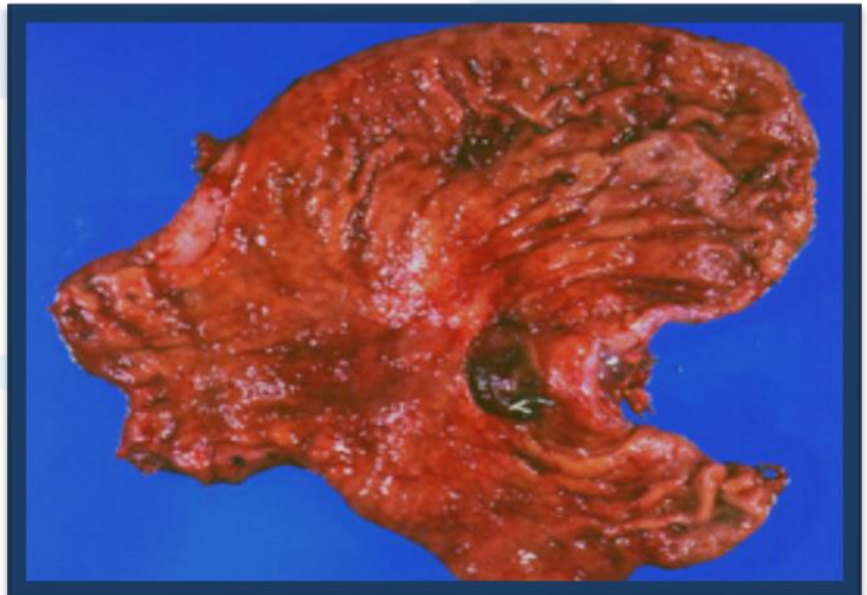
1- Biopsy urease test : false –ve if patient on PPI or antibiotics.

2- Culture.

3- Histology: from mucosa of antrum and fundic body.

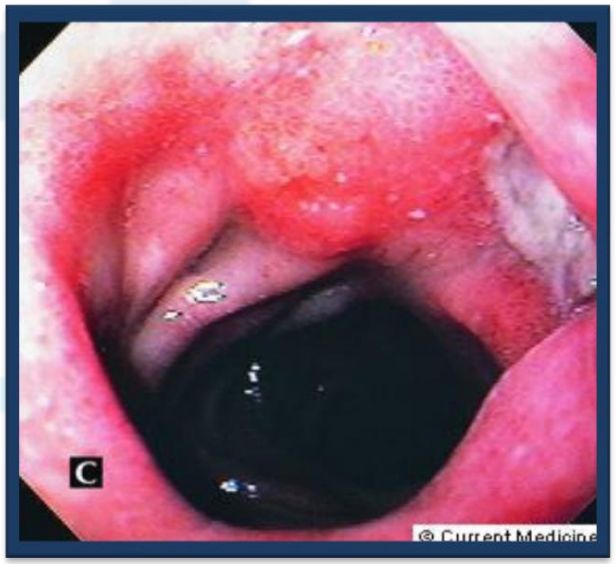
Q: A 40 years old male patient complaint of **epigastric pain and vomiting for 3 weeks duration**. The pain never relieved, aggravated by taking a meal. He noticed that **his is weight slightly decrease**. After done the proper investigation, the result shows below.

- What is this condition from this picture?
- Name the most common site to found this condition for this organ?
- What are the most important signs and symptoms for this condition?
- Give 2 ways to diagnose this condition?
- Name 2 maneuvers to diagnose the microorganism cause this disease?
- What are the complications of this disease?
- What are the treatment for this condition?

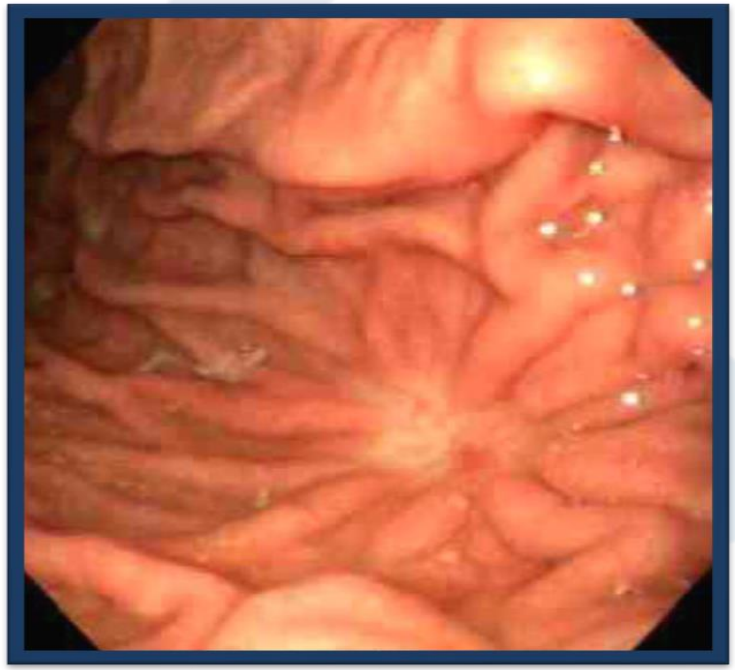


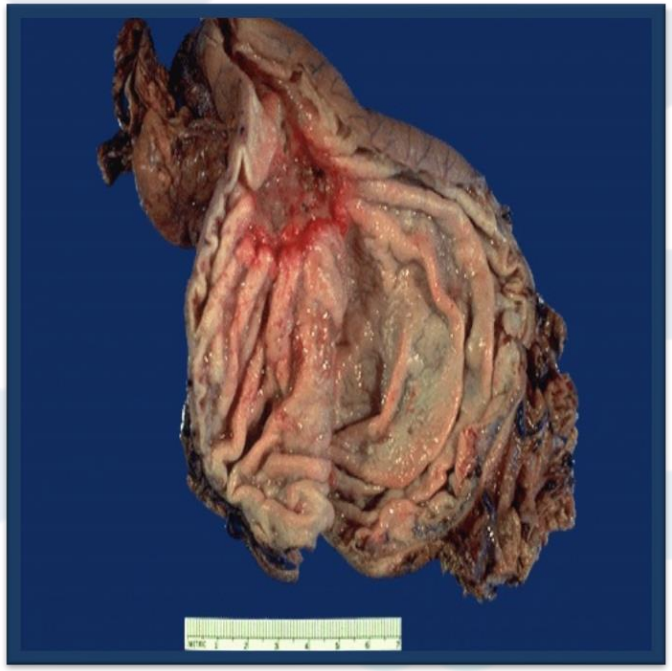
Q: A 35 years old male patient complaint of **epigastric pain for 3 weeks duration**. The **pain relieved by food and antacids, aggravated while the patient is hungry**. He noticed that his **weight increase**, recently. After done some investigations, one of the results showed below.

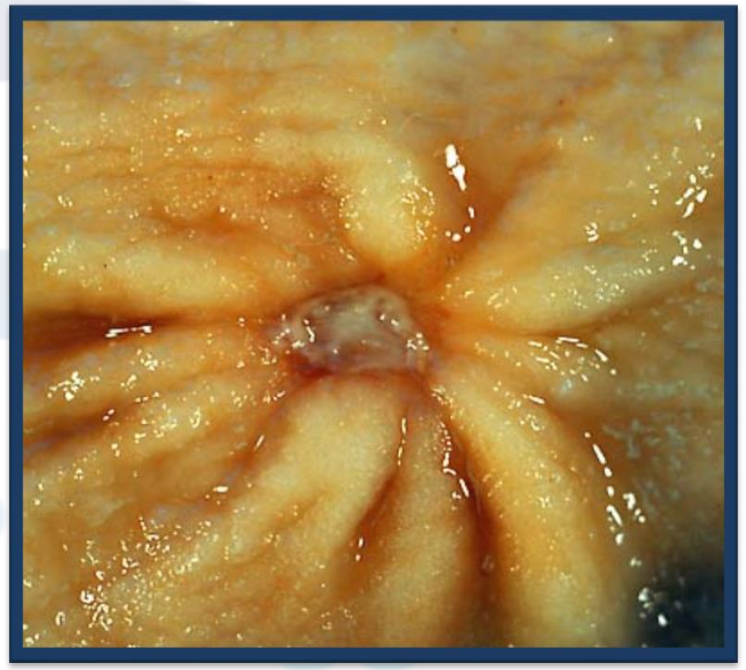
- What is the disease from this picture?
- Name the most common site to found this condition in this organ?
- What are the risk factors for this condition?
- What are signs and symptoms of this condition?
- Give 2 ways to diagnose this condition?
- What are the complications of this disease?
- What are the treatment for this condition?



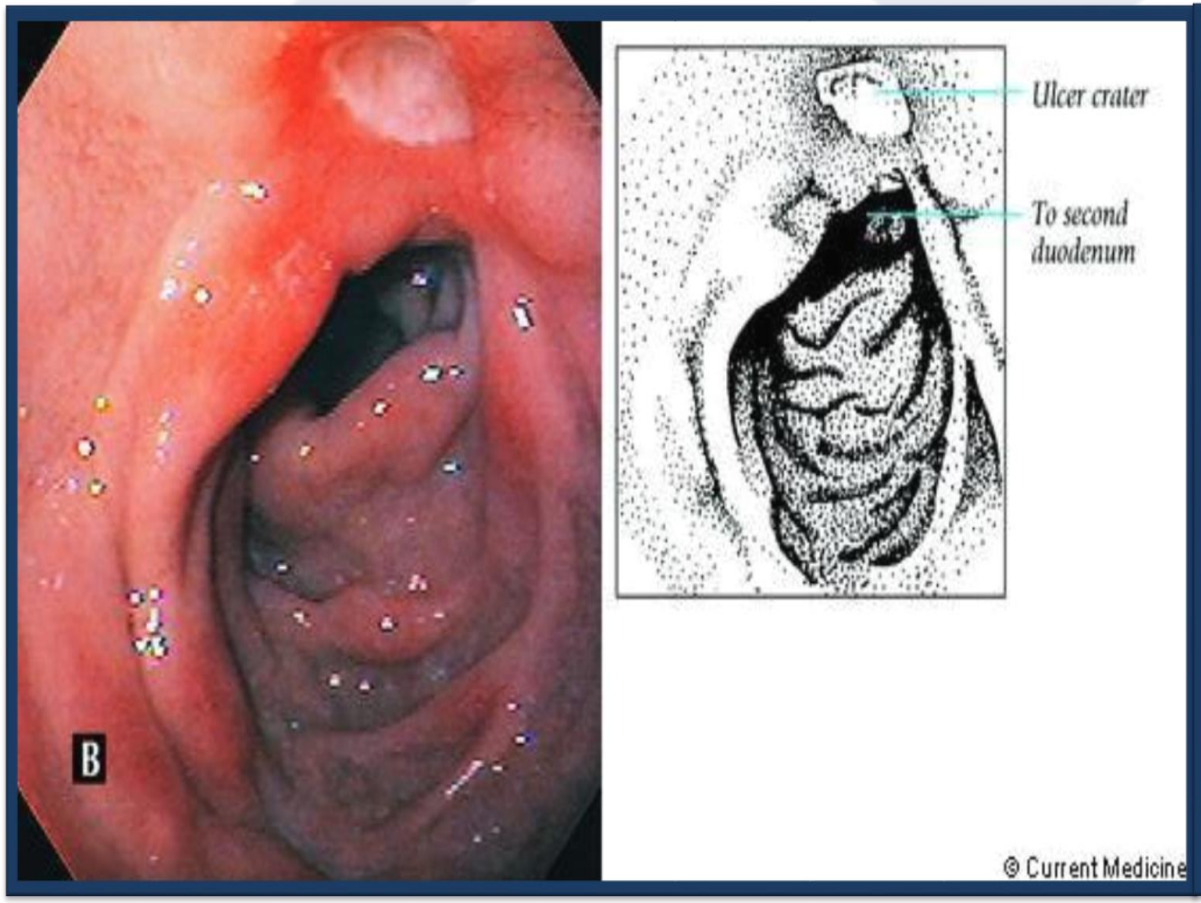
GU

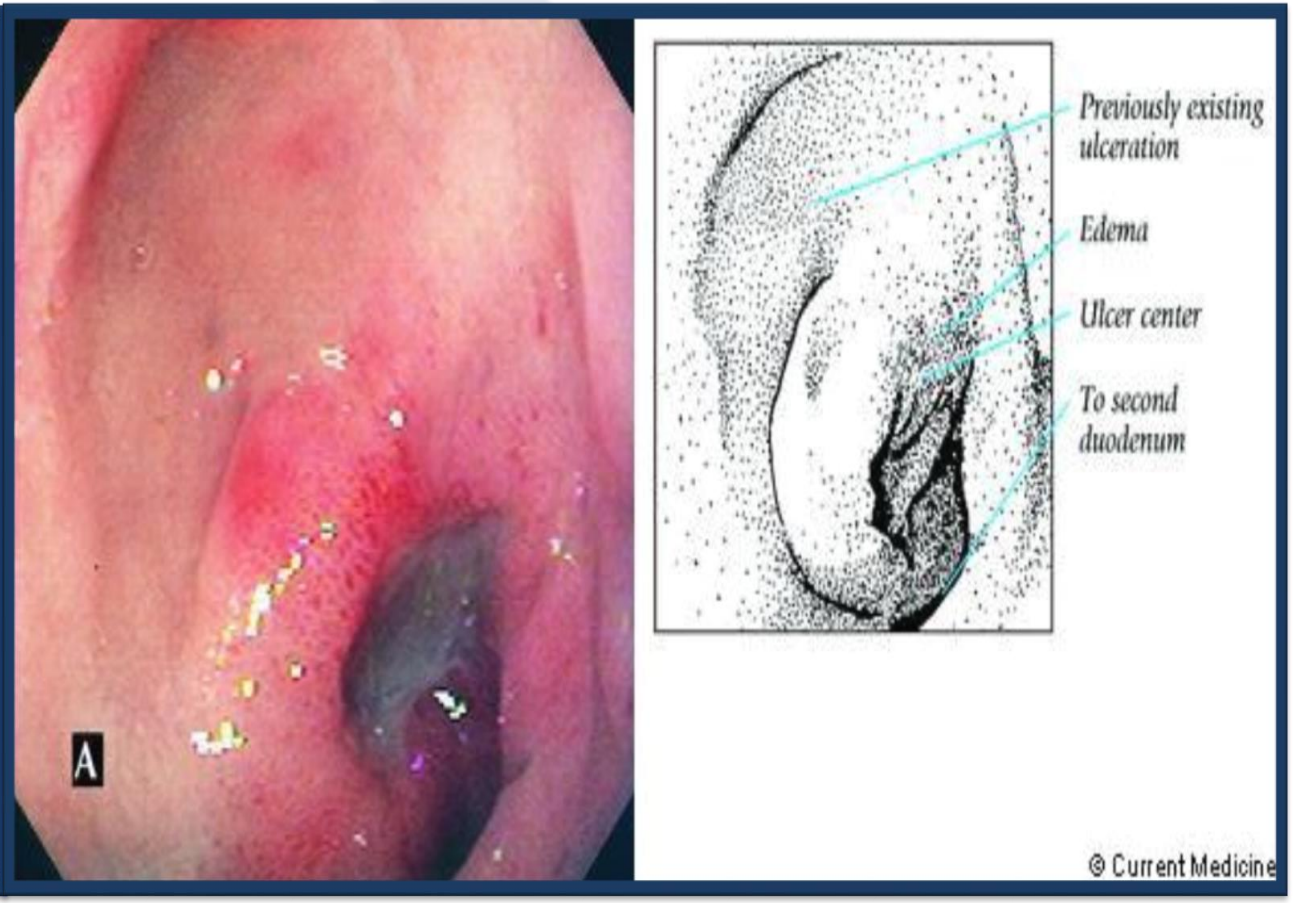




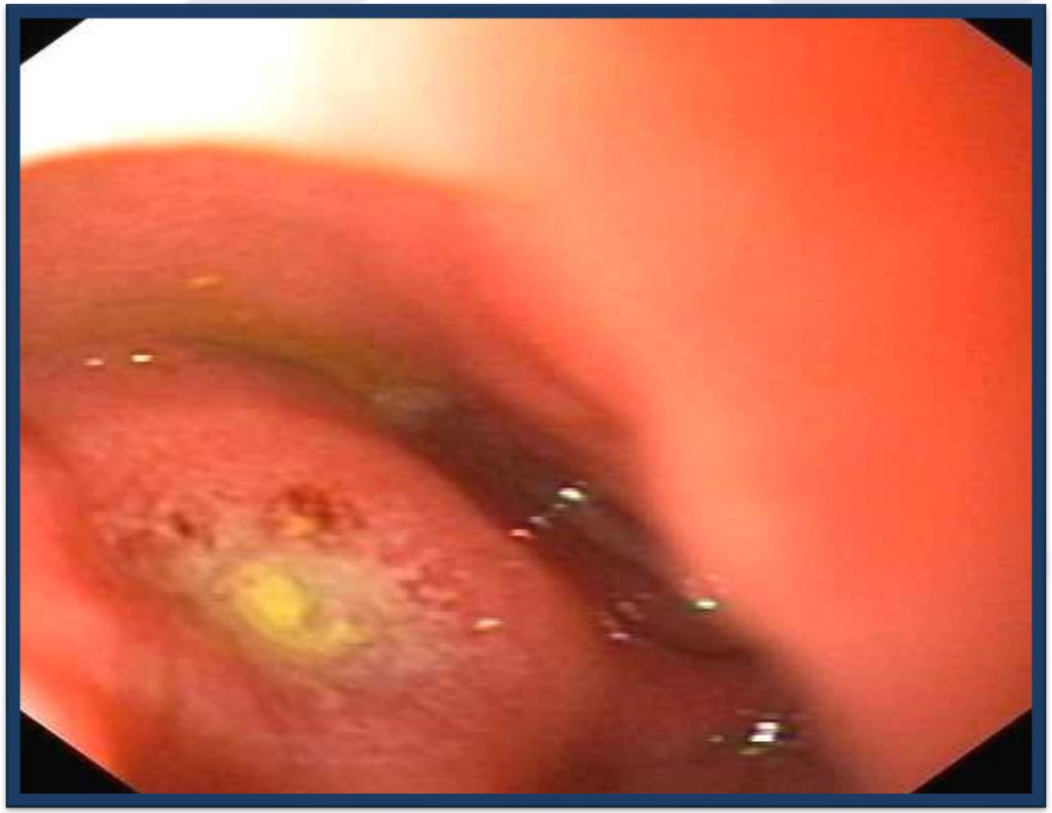


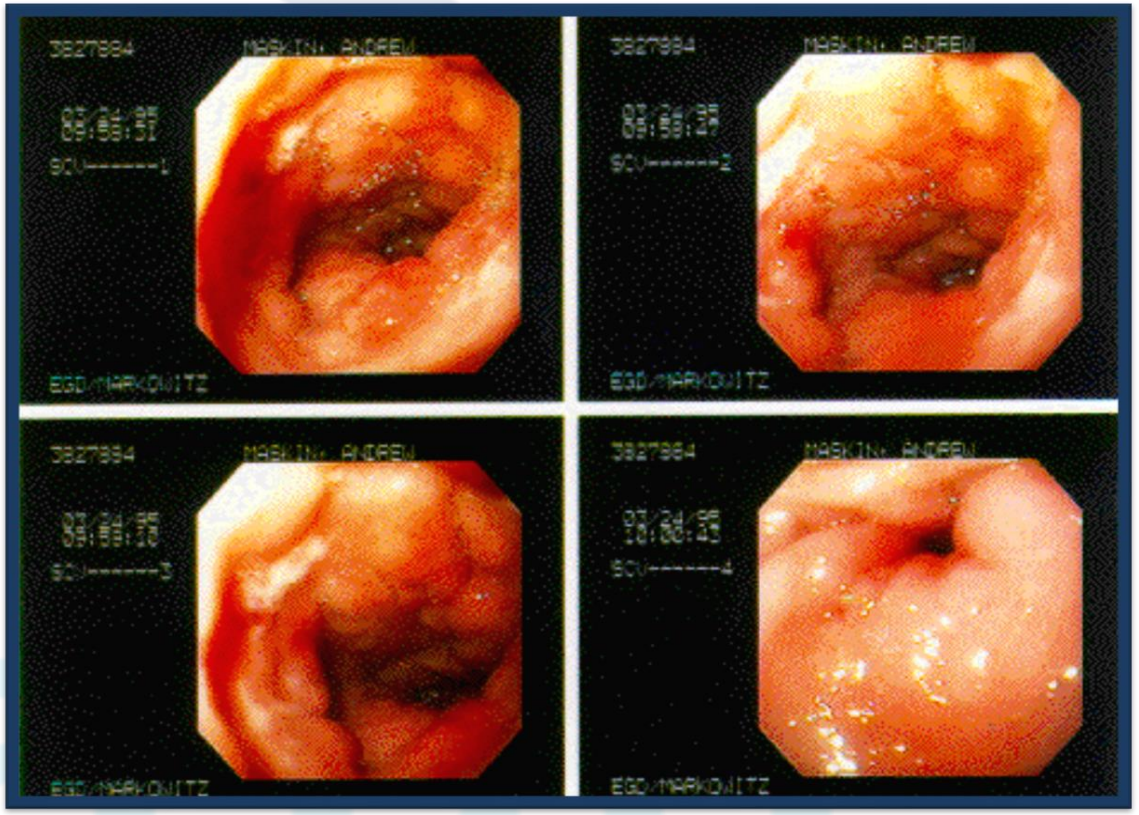
DU


B
Ulcer crater
To second duodenum
© Current Medicine

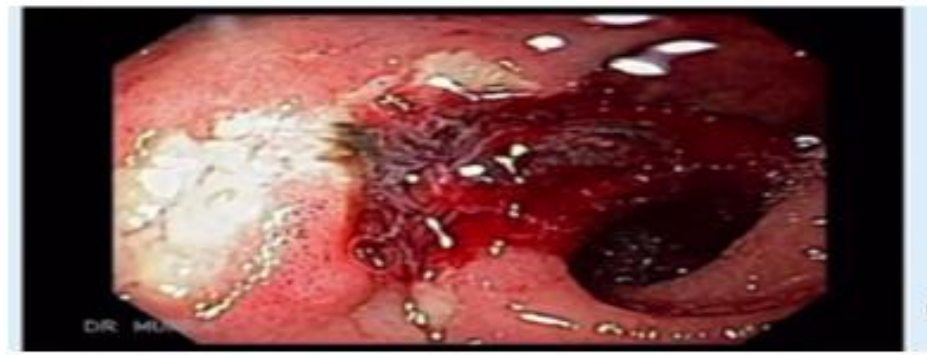

A
Previously existing ulceration
Edema
Ulcer center
To second duodenum
© Current Medicine

DU





7-A 34 year old male is admitted through the emergency department because Of melena . Upon upper GI endoscopy , this finding is seen in the first part of the duodenum . What is the best treatment to be applied at this moment ?



a. IV PPI,s infusion

b. Blood transfusion

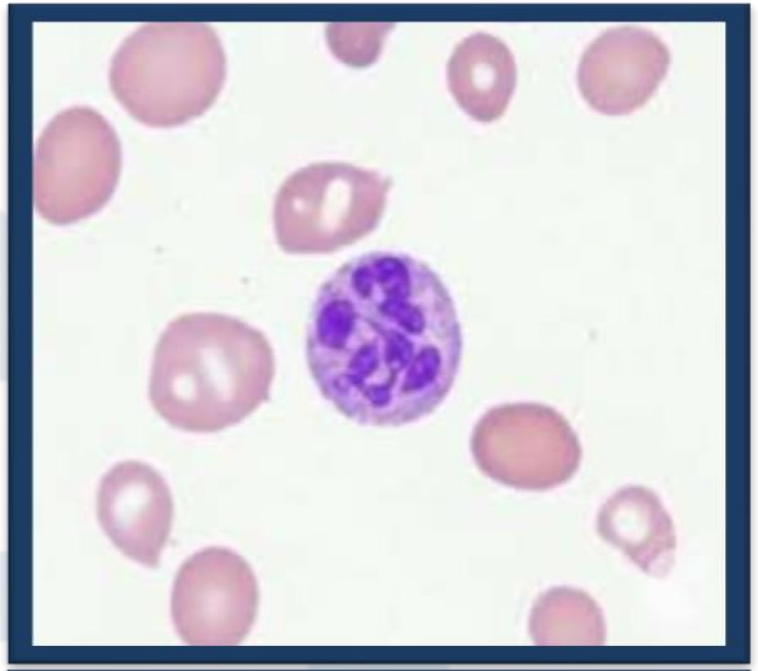
c. Endoscopic injection with epinephrine followed by metallic clip application

d. Endoscopic band ligation

e. Endoscopic sclerotherapy with tetracycline

Gastric atrophy

Q: What is the finding in upper GI endoscopy?
gastric atrophy.
What are the findings in these pics?
Vitiligo.
Hyper-segmented neutrophils.
What is your Diagnosis?
Pernicious anemia (Autoimmune Disease).



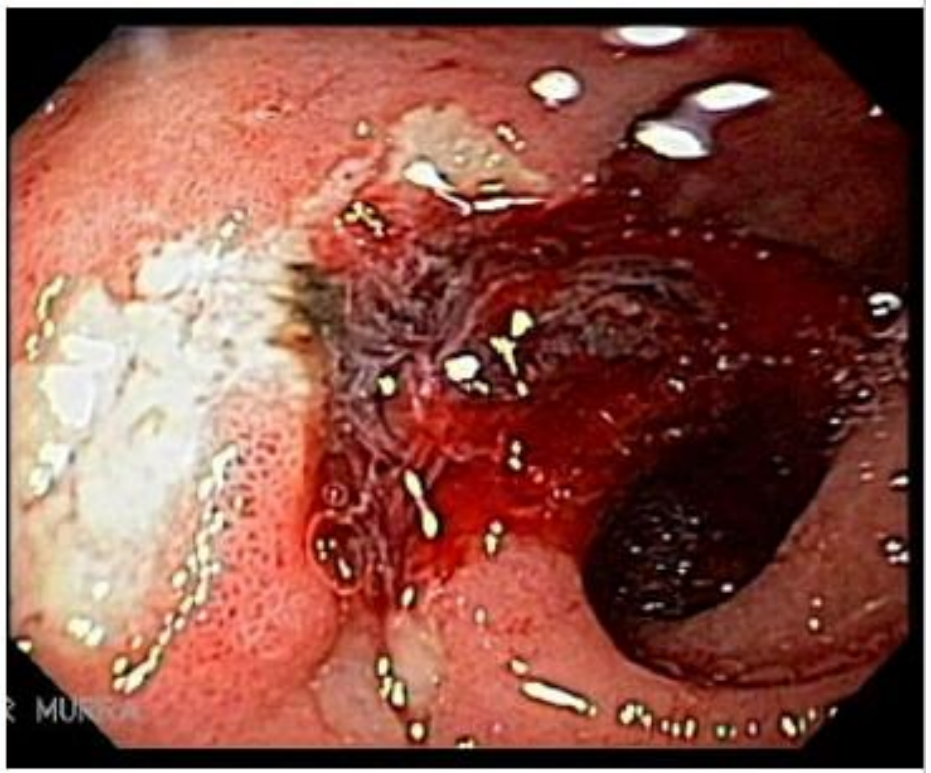
Q 9 , 10 , 11

A male come to you complaining of recurrent epigastric pain .

•What is the diagnosis ?
Gastritis
•What treatment would you give him ?
PPI

If he didn't improve on the previous medication ,
•What might be the diagnosis ?
Peptic ulcer (H.pylori)
•And what is the treatment ?
Triple therapy (PPI + 2 Ab)

The same patient came after a while and on endoscopy you find this pic in duodenum
•What do you see ?
Bleeding duodenal ulcer
•Mention 4 laproscopic methods of treatment ?
Epinephrine injection , clipping , thermal coagulation

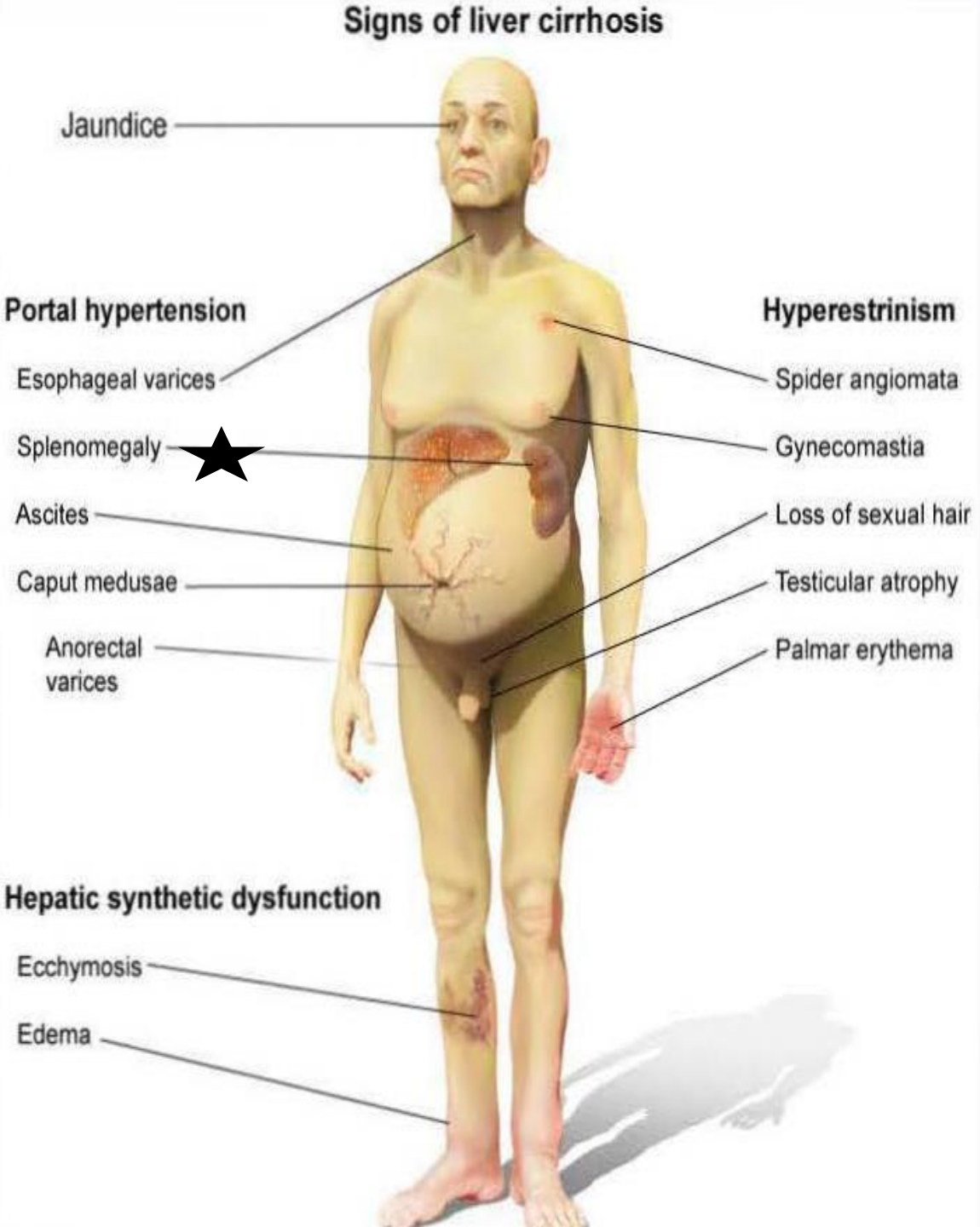


Liver diseases

Cirrhosis/ Wilson/ Hepatitis/ Ascites/ Spontaneous bacterial peritonitis

Cirrhosis

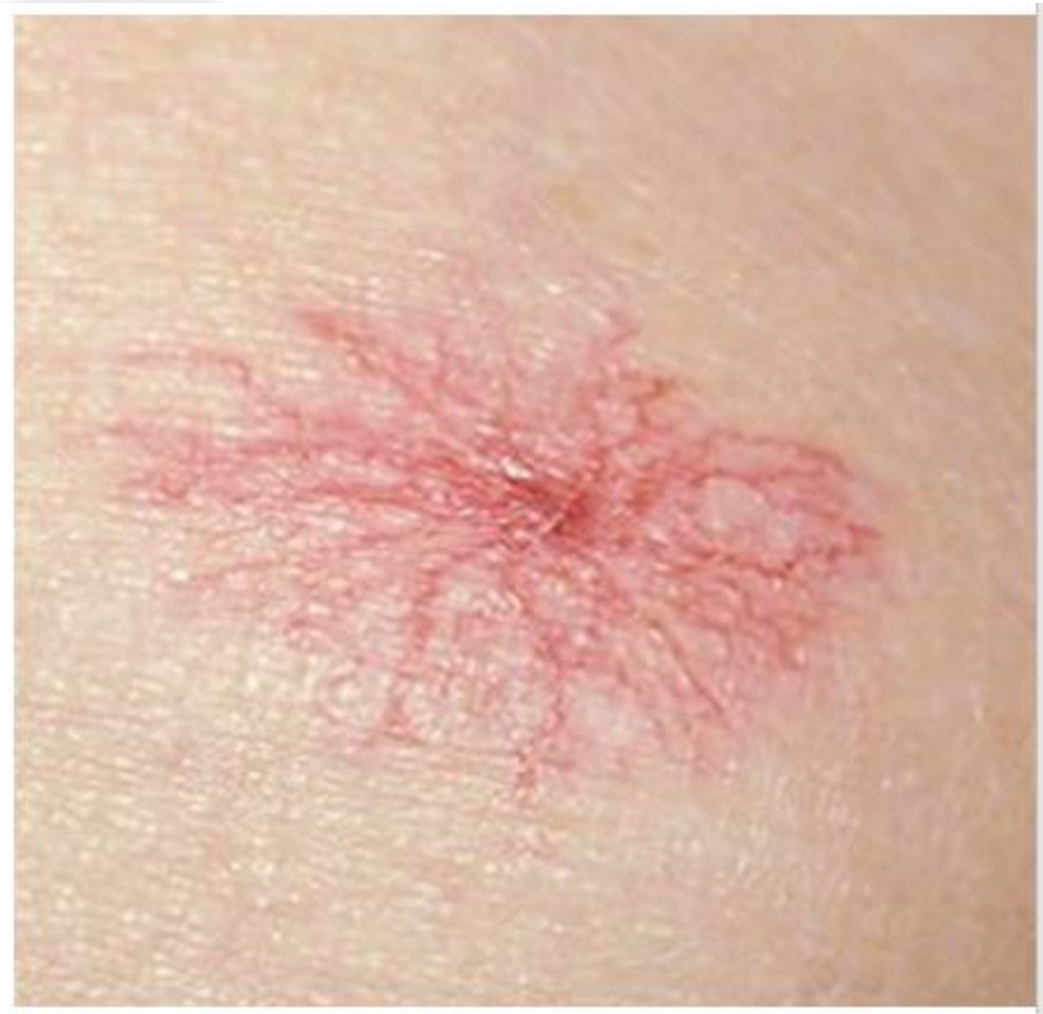
General	Chronic liver diseases lead to fibrosis, distortion of architecture and formation of nodule. **Causes 1. ETOH (MC). 2. Hepatitis c. 3. NAFLD. 4. Wilson/ hemochromatosis/ … .**
Clinical presentation	- Nonspecific: Anorexia, weight loss, fatigue. - **Portal HTN: Ascites, Hemorrhoid, Variceal bleeding.** - Neurological: Hepatic encephalopathy, asterixis. - Skin: Jaundice, palmar erythema, spider angioma, terry nails. - Heme: Thrombocytopenia, anemia, coagulopathy. - Reproductive: Testicular atrophy, gynecomastia. - **POOR SYNTHETIC FUNX: Decrease albumin, Increased INR/ Bilirubin.**
Diagnosis	- Combination of clinical and diagnostic images: **1. RUQ-US : To evaluate liver/ extrahepatic manifestation.** **2. Biopsy (Definitive).**
Treatment	- Slow the progression (treat underlying causes). - Protect liver: Vaccine, avoid hepatotoxic drugs. - Manage the complications. - Consider liver transplant.
Others	**Complications?** We should monitor for risk of **HCCa** by (AFP+ US q6 months).



Hepatic encephalopathy	
Precipitating factors	• Drugs (eg, sedatives, narcotics) • Hypovolemia (eg, diarrhea) • Electrolyte changes (eg, hypokalemia) • ↑ nitrogen load (eg, GI bleeding) • Infection (eg, pneumonia, UTI, SBP) • Portosystemic shunting (eg, TIPS)
Clinical presentation	• Sleep pattern changes • Altered mental status • Ataxia • Asterixis
Treatment	• Correct precipitating causes (eg, fluids, antibiotics) • ↓ blood ammonia concentration (eg, lactulose, rifaximin)

GI = gastrointestinal; SBP = spontaneous bacterial peritonitis;

What is this :
spider nevi
One cause of it ?
Liver cirrhosis



11-This 60 year old male has a long history of alcoholism .
Other signs suspected To be seen in this patient include
all the followings except ?

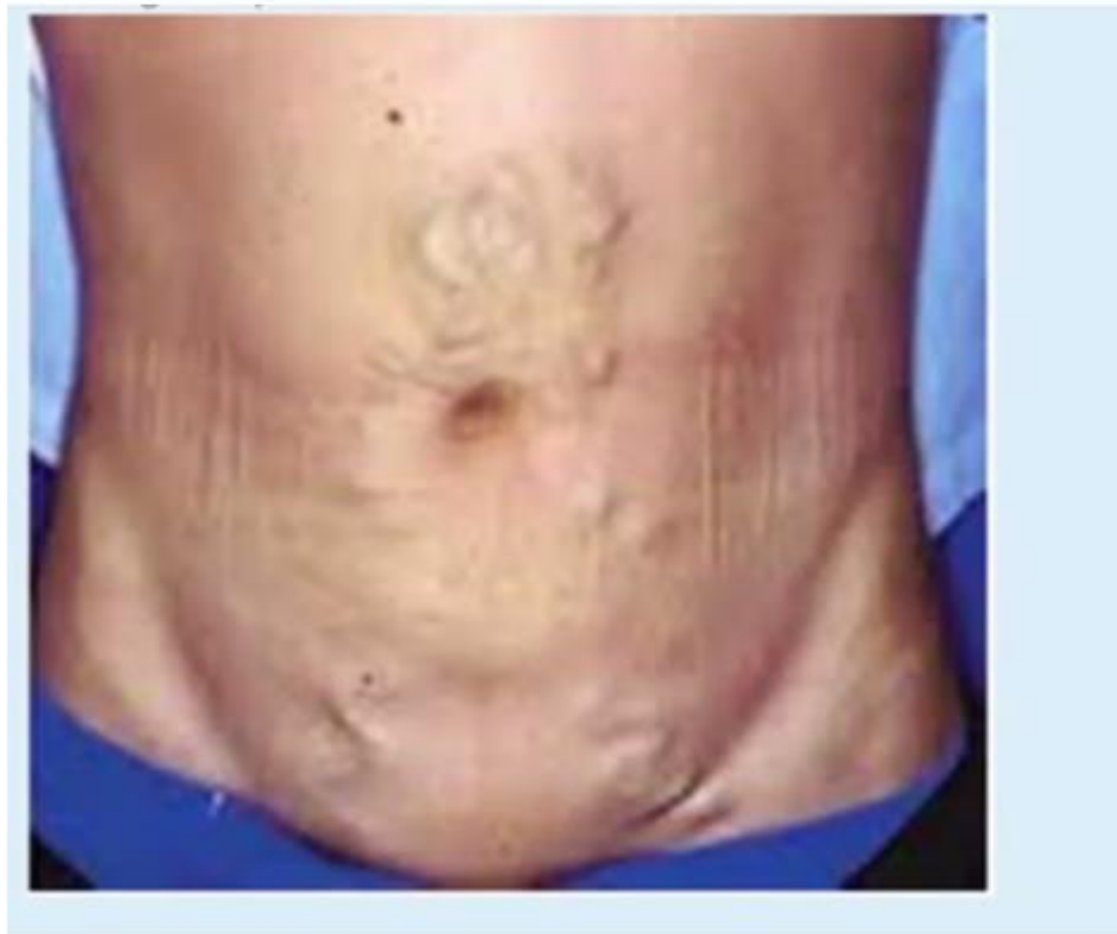
a. Palmer erythema

b. Ascites

c. Gynecomastia

d. Hirsutism

e. Dupuytren's contracture



2 Minute Medicine®	**Child-Pugh Score**		2minutemedicine.com
Factor	**1 point**	**2 points**	**3 points**
Total bilirubin (μmol/L)	<34	34-50	>50
Serum albumin (g/L)	>35	28-35	<28
PT INR	<1.7	1.71-2.30	>2.30
Ascites	None	Mild	Moderate to Severe
Hepatic encephalopathy	None	Grade I-II (or suppressed with medication)	Grade III-IV (or refractory)

	Class A	**Class B**	**Class C**
Total points	5-6	7-9	10-15
1-year survival	100%	80%	45%

Table I. Child-Pugh score.

Q1 - This 60 year old male has a long history of alcoholism. All of the following are important factors in assessing his mortality rate except?

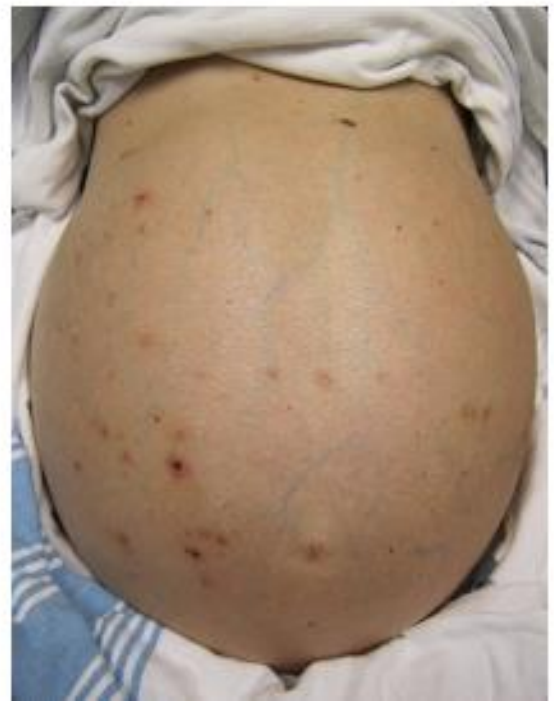
a. Very high ALT and AST (>1000)

b. Albumin level

c. Presence of encephalopathy

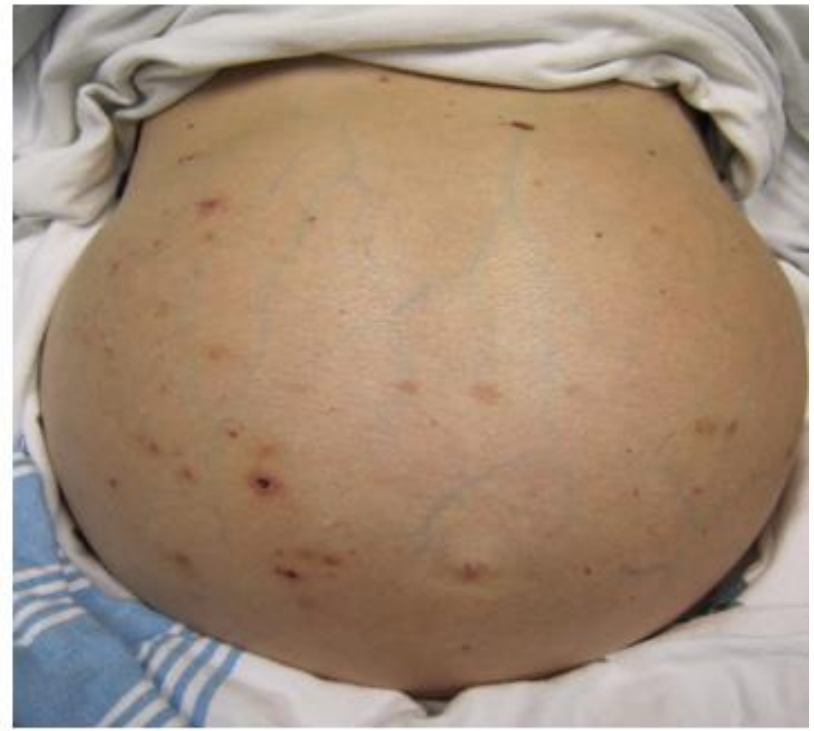
d. Prolonged PT

e. Bilirubin level



Q 10 : patient with this picture , which one we don't depend on in the prognosis of case ?

- Encephalopathy
- Degree of ascites
- Albumin
- **Platelet**
- Bilirubin



1. Give the cause of this condition?

Portal hypertension

2. name this pathology?

Caput medusa.

Causes of PHT

SUPRAhepatic

cardic disease

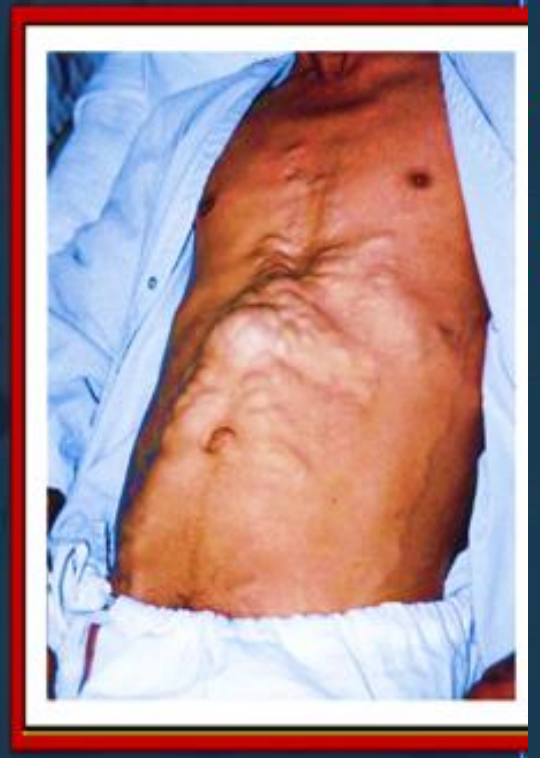
Hepatic vein thrombosis

Inferior venacava thrombosis

Hepatic cause

Liver cherosis

Posthepatic portal vein thrombosis



Name this physical finding in a patient with portal hypertension and spider Naevi.

Palmer Erythema,

Signs of chronic liver disease

1scites

2 Varices

3 GynecomastIA

4 Palmer Erythema ,

5 Hemorrhoids

6 Caput medusa

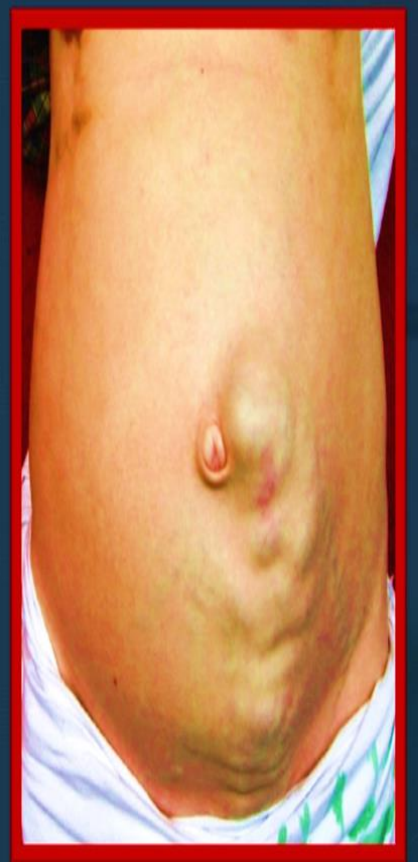
Pt with cirrhosis .

- What the most imp. Organomegaly you look for in examination ?

Splenomegly .

- What is the technique you do if you can't feel it?

abdominal ultrasound(my answer)/some answered it: tapping on the lower left ribs .



This patient has chronic liver disease.

Name 2 visible abnormal findings on his abdominal inspection.

Ascites
Dilated veins
Inverted umbilicus0

Complication of this disease

portal HTN

Varices

Ascites

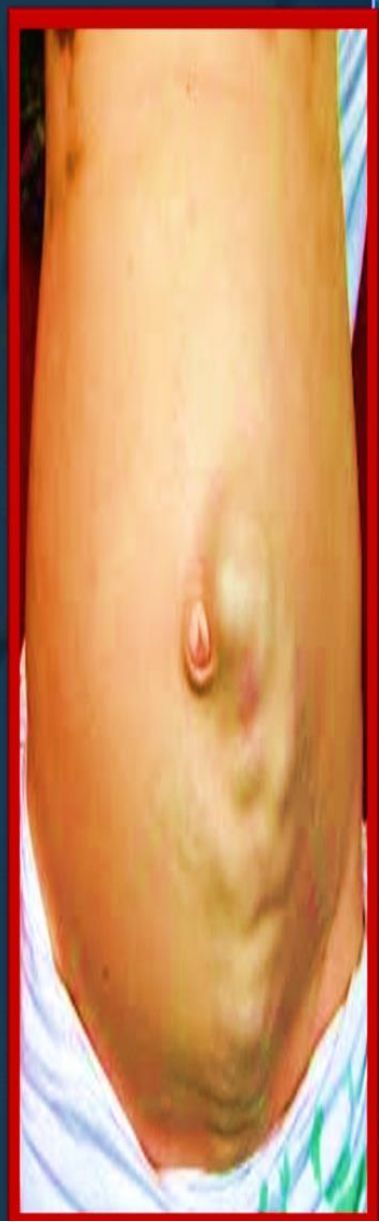
Hepatic encepbalopathy

Hepatorenal syndrome

Infectedascitic fluid

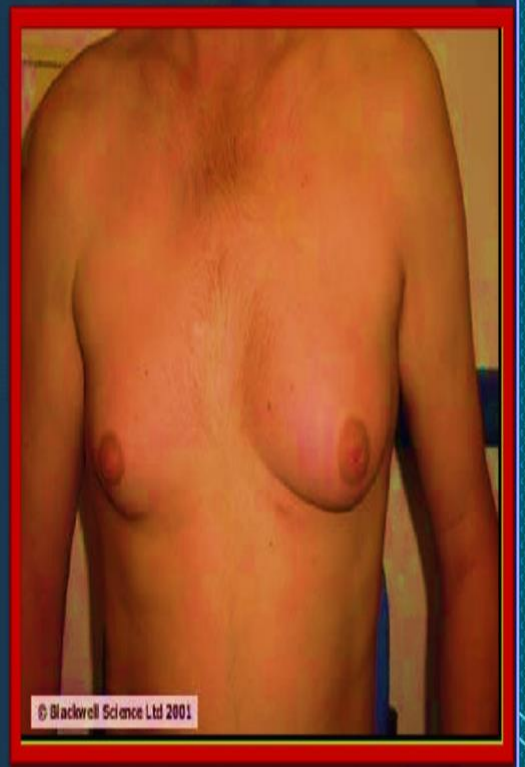
Hyperestrinism

Coagulopathy



Pt with CHRONIC hepatitis B. what is the cause of this picture?

liver cirrhosis



An endoscopy was done for a patient withliver cirrhosis and showed the following.

A-What is the diagnosis?

Esophageal varices

B-Mention a line of management

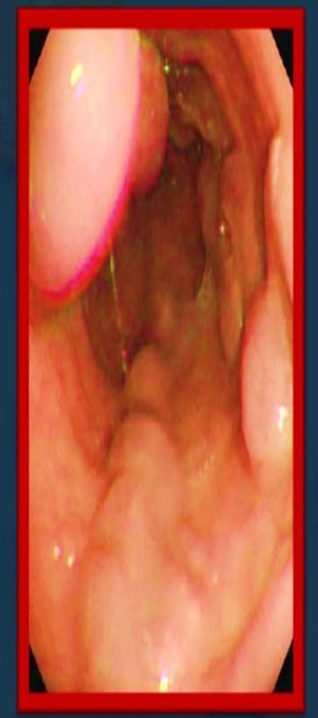
Esophageal band ligation

Endoscopic sclerotherapy .

Iv vasopressin

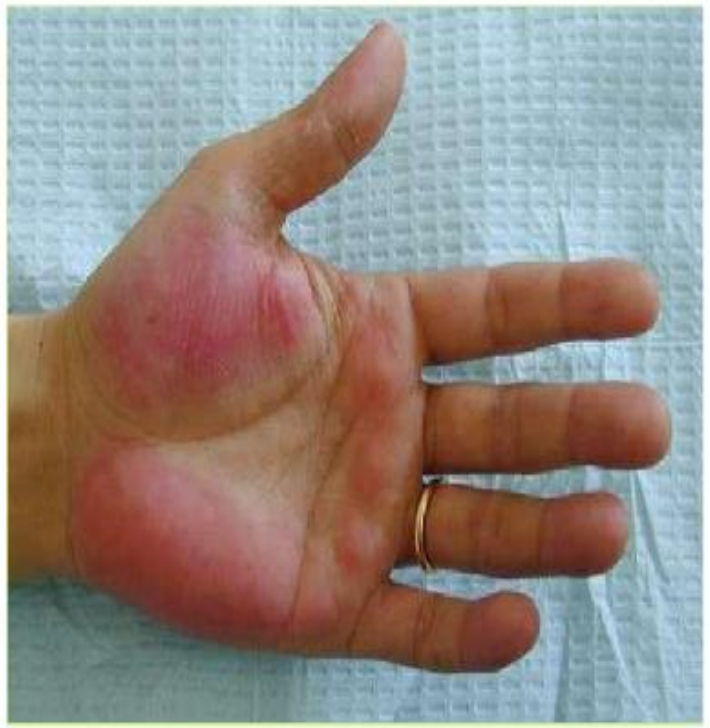
IV octreotide

TIPS



Q1: A-What is the finding?

B-Mention two causes.



A. Palmar Erythema.

B. Thyrotoxicosis, Liver Cirrhosis, Pregnancy .

Patient pfeaturesd with agitation & confusion, now he comes complaining of Hematemesis, on endoscopy he has bleeding varices .

What is the cause of his confusion?

Hepatic encephalopathy.

Precipitants (alkalosis, hypokalemia, GI bleeding, hypovolemia) .

Clinic al feature

dcreased mental function

asterixis.

Rgidity, hyperreflexia.

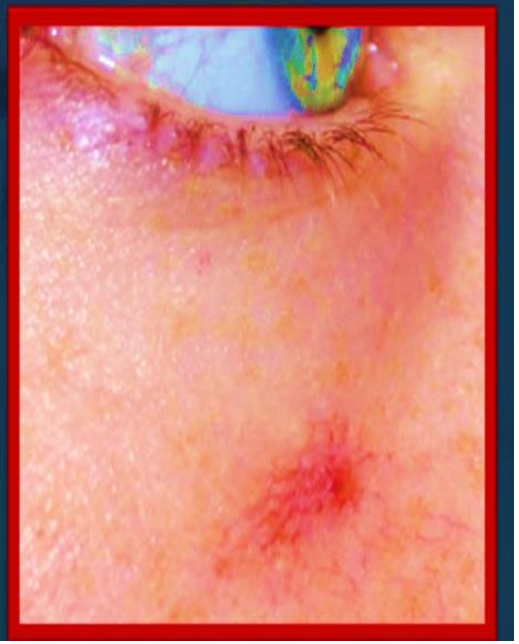
Fetor Hepaticus

Tretmant.

Lactulose

rifaximin.

Dite limit protine to 30g/day.



This patient presented with massive hematemesis. This is the picture of his endoscopy. What's your diagnosis?

Esophageal varices

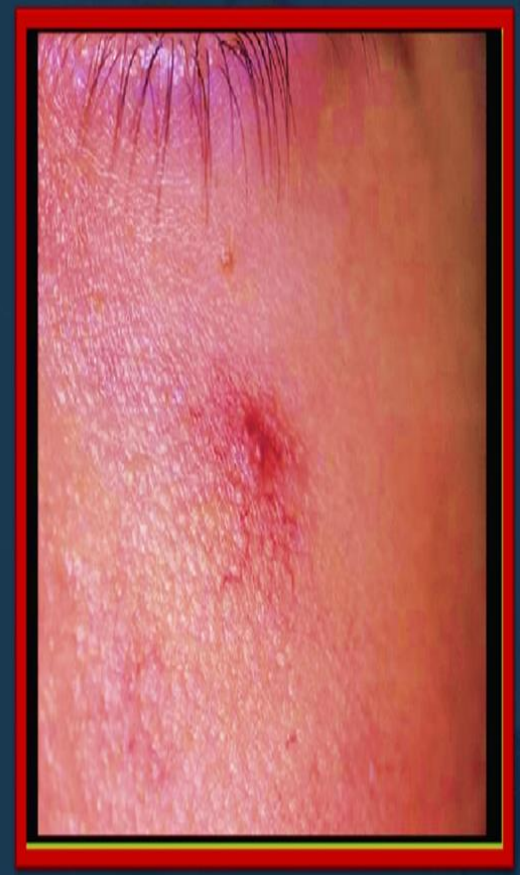
They are graded according to their size, as follows: Grade 1 – Small, straight esophageal varices. Grade 2 – Enlarged, tortuous esophageal varices occupying less than one third of the lumen. Grade 3 – Large, coil-shaped esophageal varices occupying more than one third of the

Mention the endoscopic finding for this patient?

Esophageal varices.

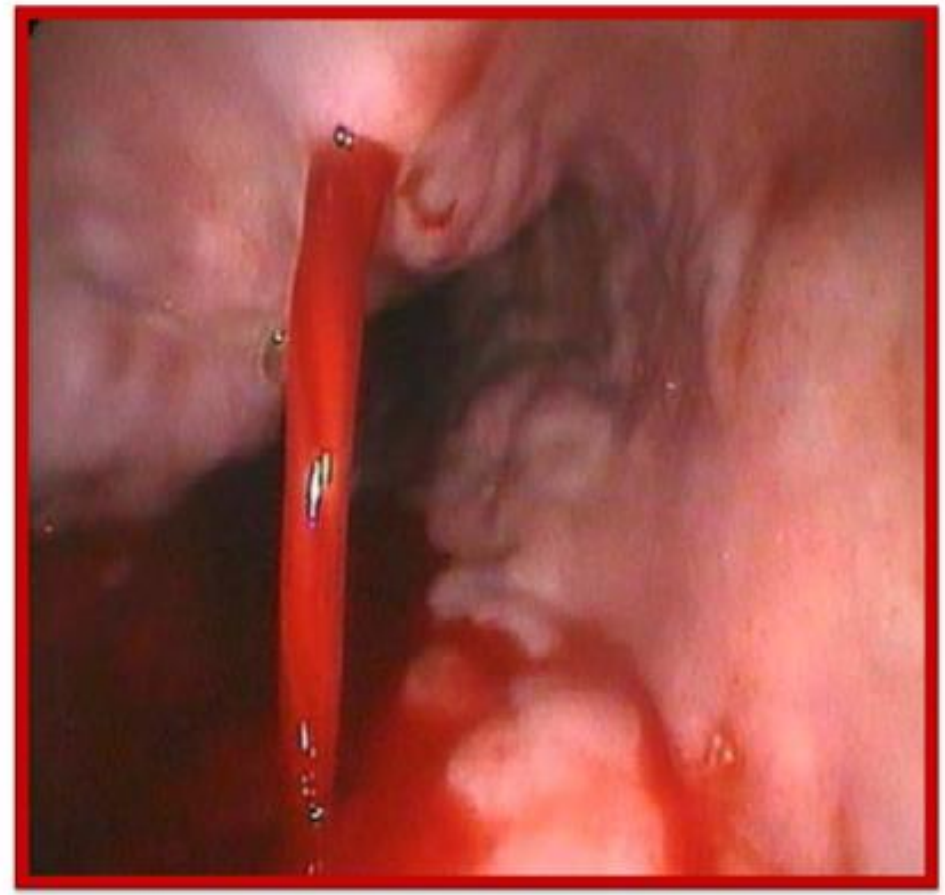
2 Minute Medicine®	Child-Pugh Score		2minutemedicine.com
Factor	1 point	2 points	3 points
Total bilirubin (μmol/L)	<34	34-50	>50
Serum albumin (g/L)	>35	28-35	<28
PT INR	<1.7	1.71-2.30	>2.30
Ascites	None	Mild	Moderate to Severe
Hepatic encephalopathy	None	Grade I-II (or suppressed with medication)	Grade III-IV (or refractory)
	Class A	Class B	Class C
Total points	5-6	7-9	10-15
1-year survival	100%	80%	45%

Table 1. Child-Pugh score.



Q14 : hepatic patient suffer from massive hematemesis , the picture below by endoscopy , what's the most relevant cause ?

- Gastric ulcer
- Mallory weiss tear
- **Esophageal varices**
- Gastritis

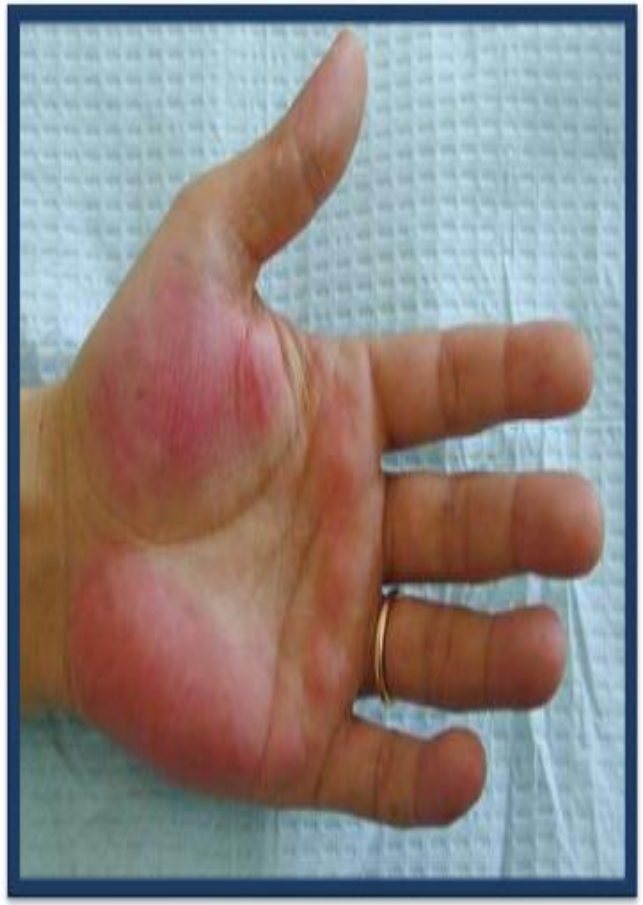


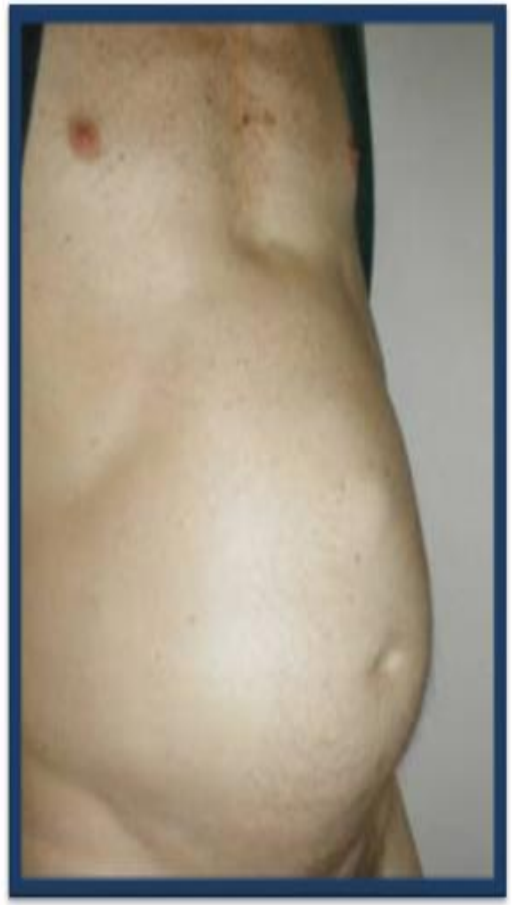
Q: A- what do you expect to see by gastroscope?

Esophageal varices.

B- what's the cause of distended abdomen

Due to PORTAL HTN (increased hydrostatic pr.) and HYPOALBUMINEMIA (decreased oncotic pr.)



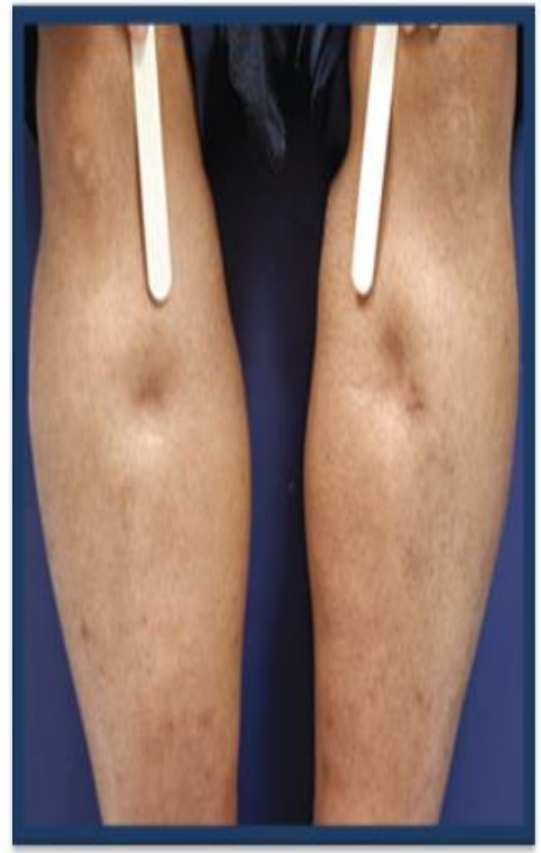


Q: 1.What is your spot dx?

Bilateral lower limb pitting edema

2. Name two conditions associated with this.

Nephrotic syndrome, liver cirrhosis, right heart failure



Q: Mention 4 causes of this condition.

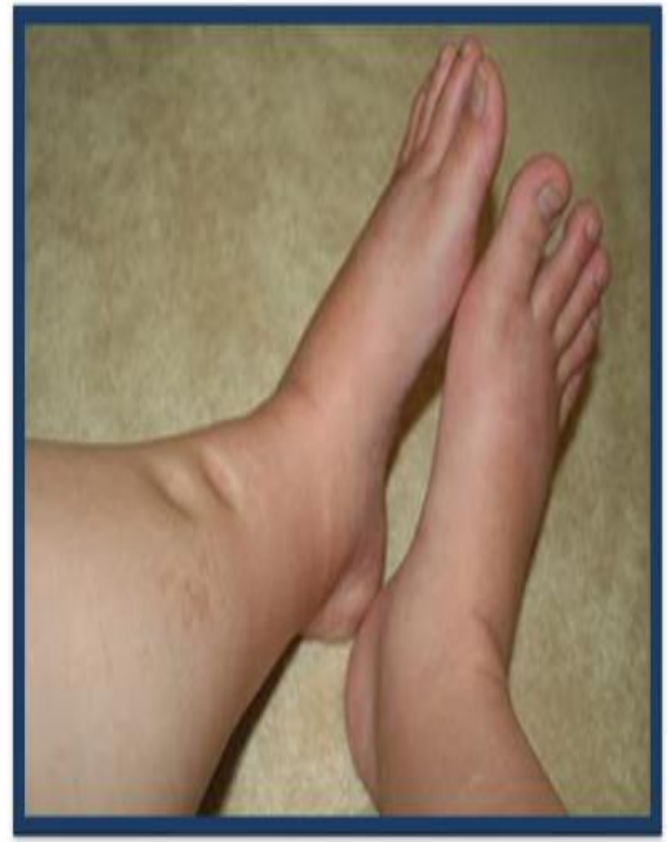
Heart failure

Renal failure, Nephrotic syndrome

Liver cirrhosis

Hypo-albuminemia

Fluid overload

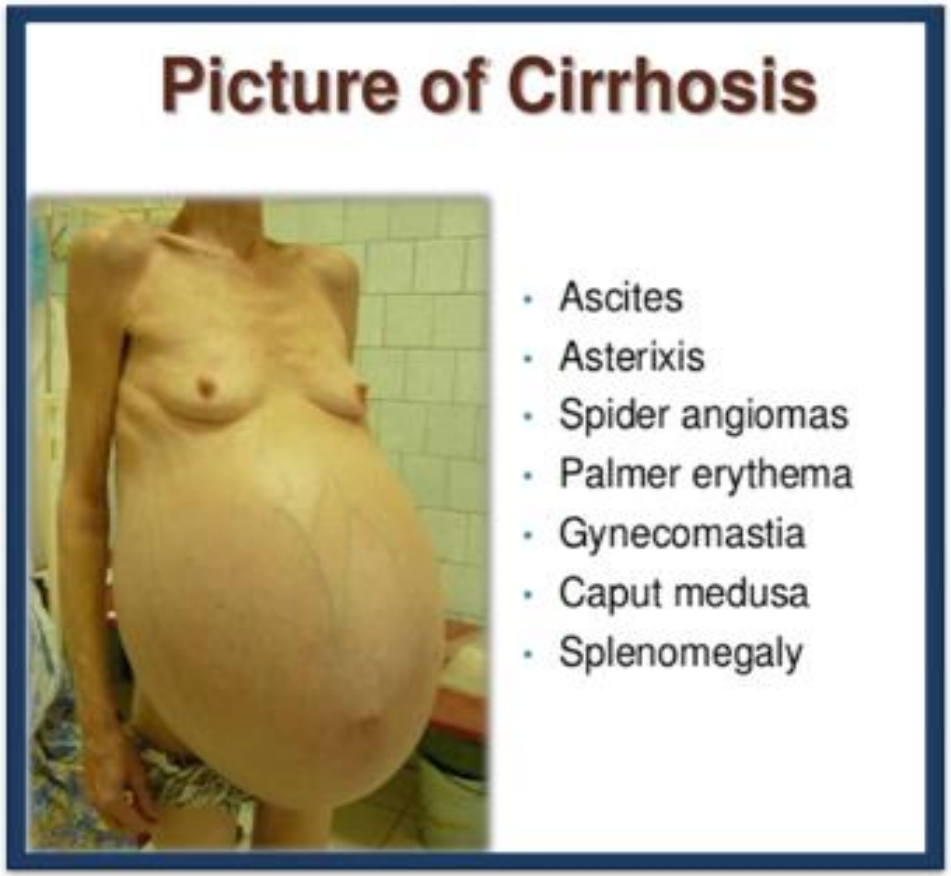


Q: Name three sign seen in this picture.

Ascites, dilated veins, gynecomastia

What is your spot dx?

Liver cirrhosis

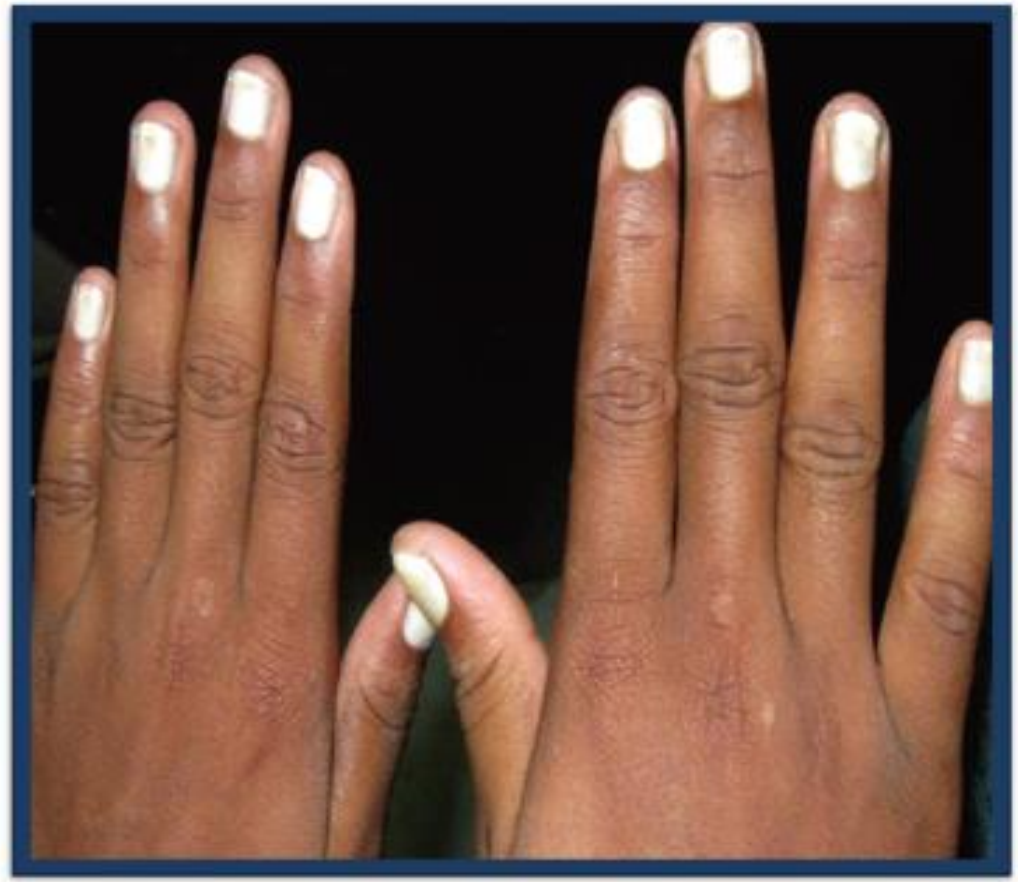


Q:What is your finding?

Leukonychia

What blood test would you order?

Serum albumin level



Q:Mention 3 causes of this condition.

CLUBBING

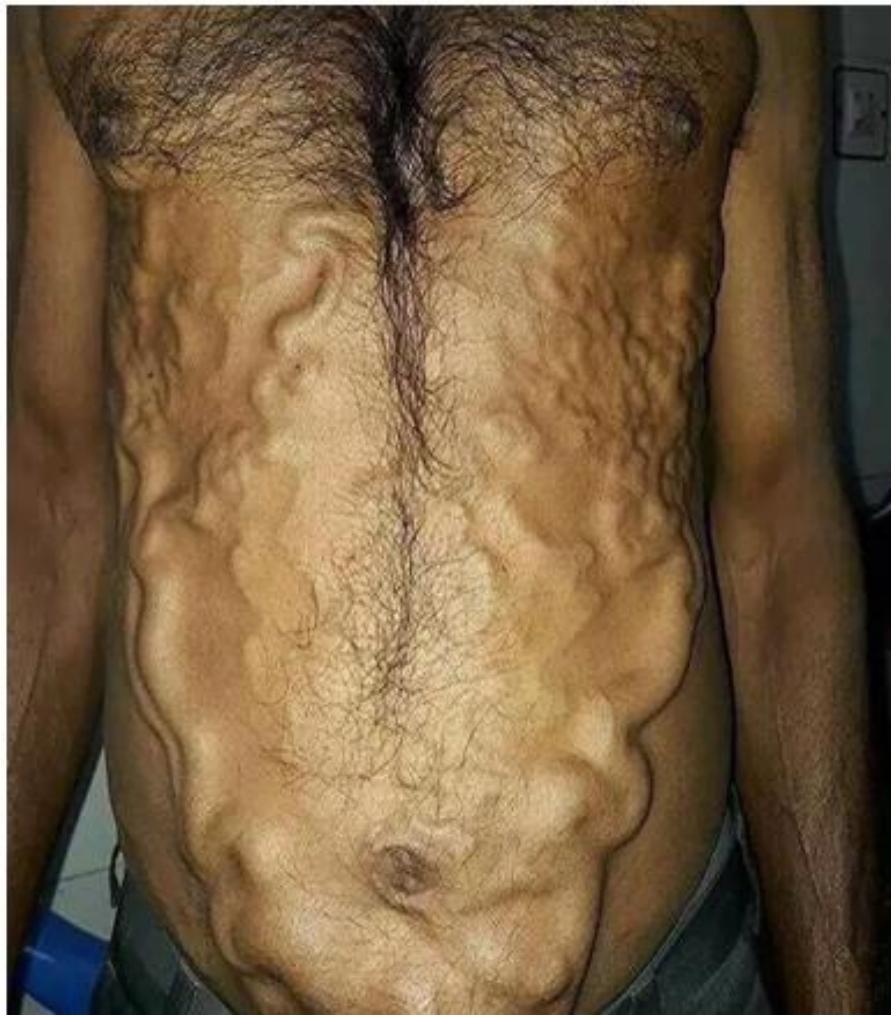
- G: GI malabsorption $ (Celiac disease)
- N: Neoplasm (Lung Ca)
- I: Infective endocarditis
- B: Biliary cirrhosis
- B: Birth defects
- U: Ulcerative colitis (IBD)
- L: Lung disease
  - A: Abscess
  - B: Bronchiactasis
  - C: Cystic Fibrosis
  - D: Dont say COPD
  - E: Emphysema
  - F: Fibrosis / Fibroma
- C: Cyanotic Conginital Heart disease

Q8

caput medusae

Q: DDx:

- IVC Obstruction.
- liver cirrhosis.



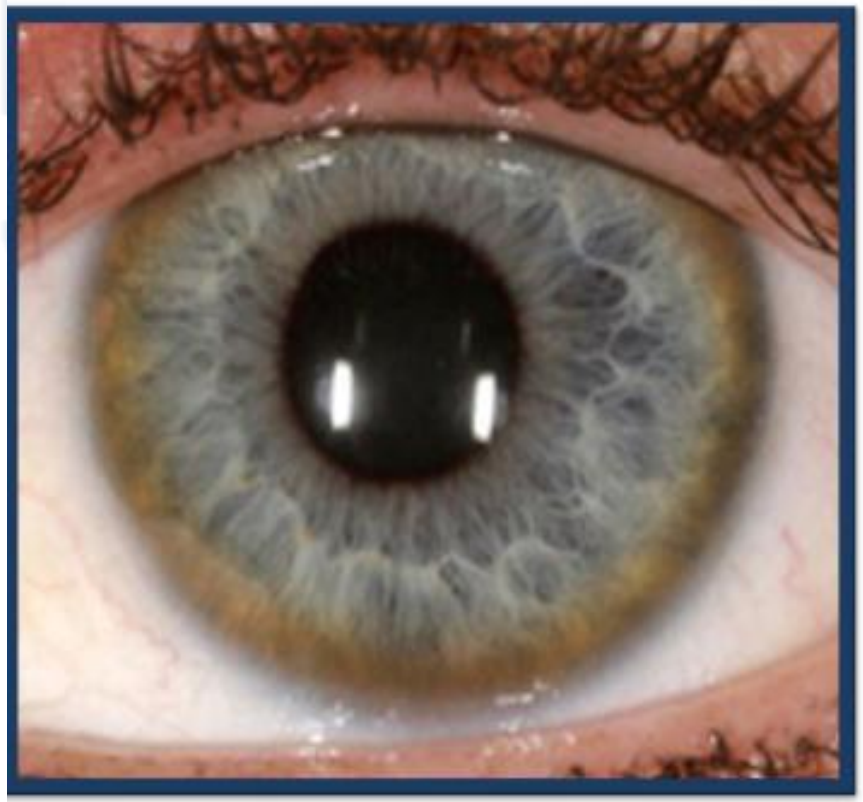
Wilson disease

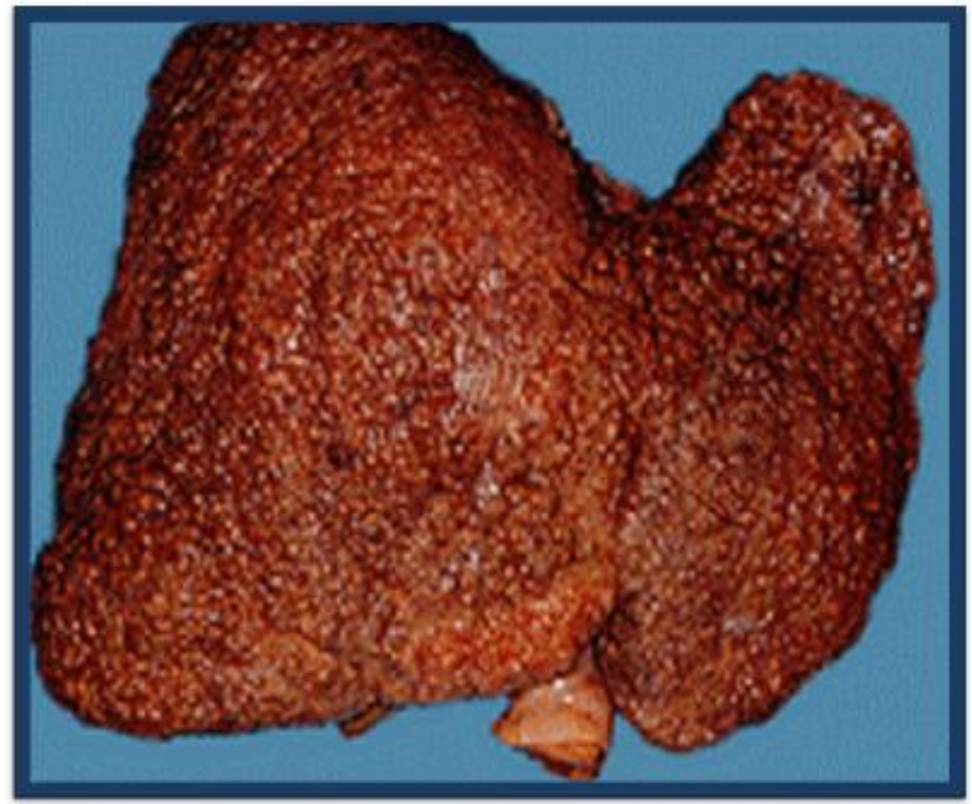
General	**Impaired copper excretion into the bile (AR mutation in ATP7B gene).** Mean age onset 12-23 years.
Clinical presentation	- Acute or chronic hepatitis. - Yellow corneal rings (**Kayser-Fleischer**). - Renal injury (nephrocalciniosis). - CNS (psychiatric changes, Parkinsonism, chorea). - Hemolysis.
Diagnosis	- **Decrease serum ceuloplasmin, Increase urinary copper.** - Slit lamp exam. - **Biopsy/ genetics if above are equivocal.** If diagnosed, first-degree relatives must be screened as well.
Treatment	- **Decrease copper intake (Chocolate, Pepsi .. Etc.).** - **D-penicillamine or trientine.** - **Zinc.** - **Liver transplantation.**
Others	**Complications?** Psychiatric diseases, parkinsonism, liver cirrhosis, anemia.

Q: Patient die due to liver failure.

A- what's your diagnosis?

B- What's the eye finding?





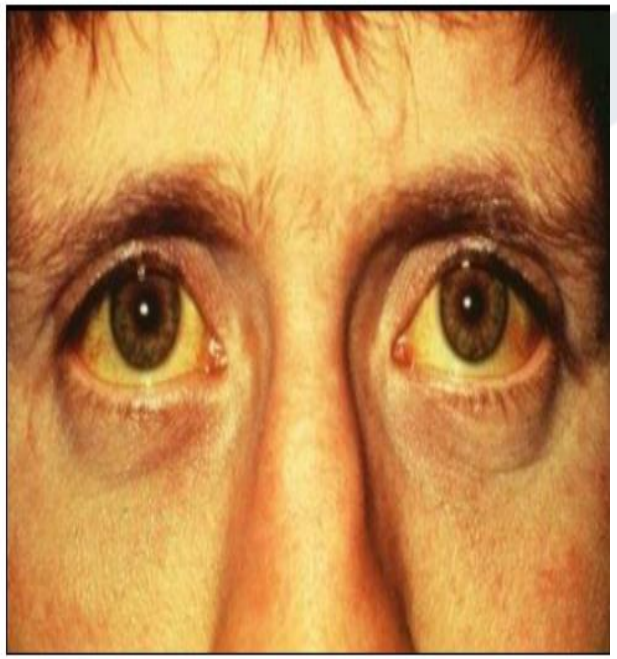
Hepatitis

Hepatitis

	General	Clinical	Diagnosis	Treatment
Hepatitis A	- Picornavirus (ss-RNA) - Fecal-oral spread - Risk: Travel to endemic areas, MSM, drug use	Acute Hepatitis - Initial signs of RUQ pain, fever, anorexia, nausea - Hepatosplenomegaly, jaundice (~1 month, self-limiting) - Never chronic, fulminant disease is rare	- LFT elevation (can be > 1000) - Bilirubin elevation - Confirmed via serology (Hep A IgM)	- Supportive care - PPX: Hep A Vax (use prior to travel, high risk individuals, post-exposure)
Hepatitis B	- Hepadnavirus (ds-DNA) - Sexual spread, blood, body fluids	See next page		
Hepatitis C	- Flavivirus ssRNA - Transmitted by blood (IVDU, transfusions prior to 1992) - Rarely sexual transmission	Acute - Either asymptomatic or symptoms of acute hepatitis Chronic (> 50% develop) - Generally asymptomatic or vague findings	- HCV RNA - Anti-HCV Ab (ELISA)	- Antivirals (see next page)
Hepatitis D	- Incomplete ssRNA - Requires hepatitis B infection - Often spread with Hep B (ie via sex/blood)	- Acute hepatitis (more likely to be severe/result in liver failure compared to hep B alone)	- Serum HDAg and/or HDV RNA	- Peg-interferon
Hepatitis E	- Hepevirus (ss-RNA) - Enteric transmission	- Acute Hepatitis [See: Hep A] - Acute liver failure more likely in pregnant woman	- HEV IgM/ HEV RNA	- Supportive care

Q13.This pt presented with RUQ pain, diarrhea, anorexia, & nausea. His sister has similar condition.what is your diagnosis?

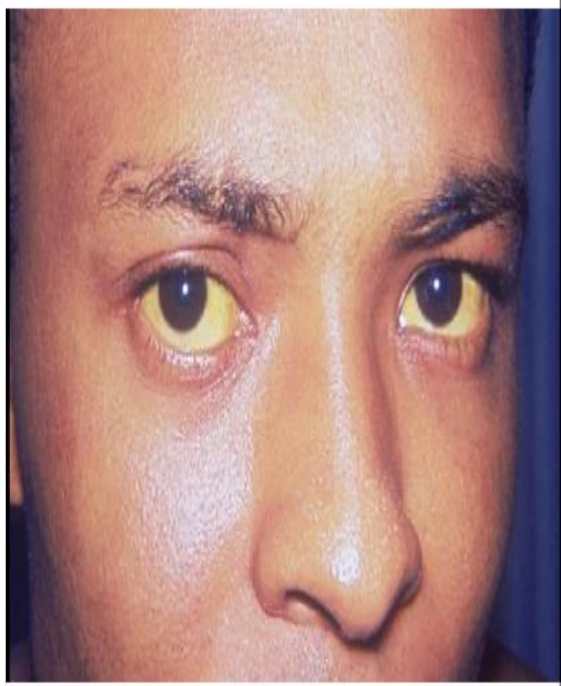
#Acute Hepatitis A



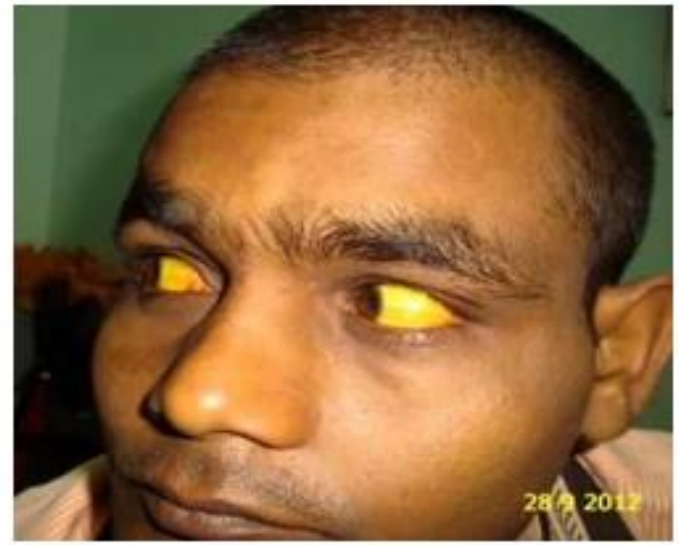
Note:-Acute hepatitis A is usually come with RUQ pain(but chronic not come with pain),diarrhea and Hep A is can transmitted by contaminated food(his sister has same finding)

Q18.A pt presented with fever, abdominal pain, dark urine & nausea. Three of his classmates had similar condition.What is your Dx?

#Acute Hepatitis A



The patient complaining from hepatitis A and his INR >2.1 what is the best management to do?



A. ICU

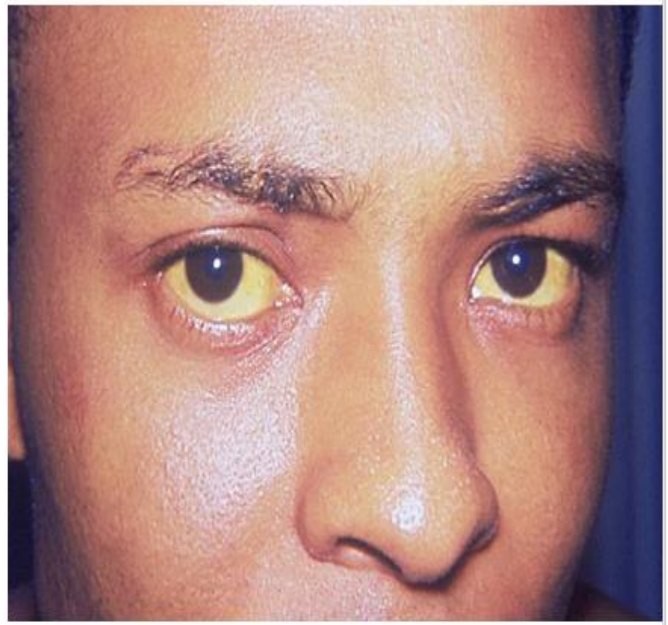
B. SUPPORATIVE

C. Anticoagulant

D. Antibiotic

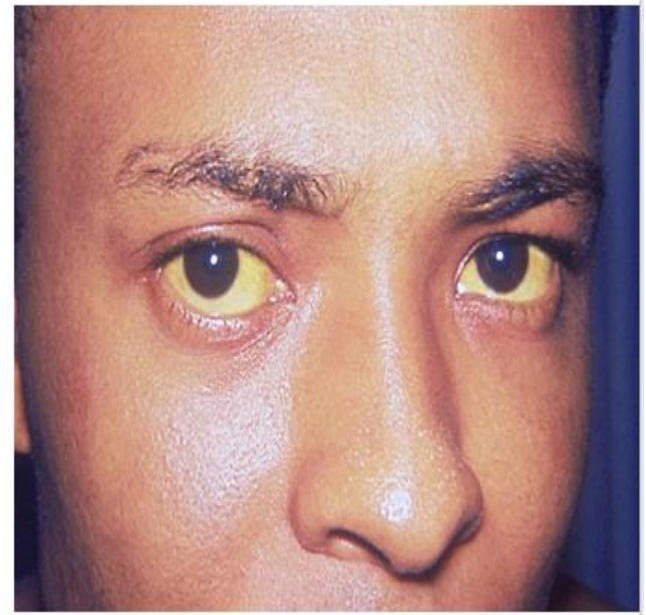
Q11 : 20 Year old male , came with fever followed by this picture , what is the best Lab to reveal the diagnosis ?

- HbsAg
- Liver Function Test
- CT
- ALP

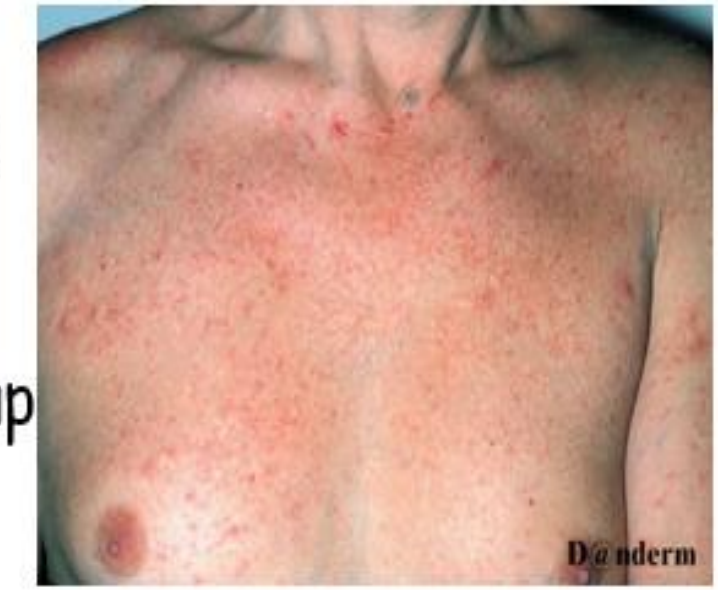


Q12 : patient came with this picture , and the urine dipstick reveal the presence of bilirubin , what's the cause ?

- Autoimmune hemolysis
- Sickle cell anemia
- Cholestasis
- Thalassemia
- Gilbert syndrome



- This patient has positive anti-HBs antibody
- What's the most important test?
  - HBV DNA
- Other markers that'll show liver status?
  - PT\INR
  - Albumin levele
- After 6 months, most important follow up
  - US
  - LFT
- Mention clinical tests for liver function?
  - Ascites
  - Hepatic encephalopathy

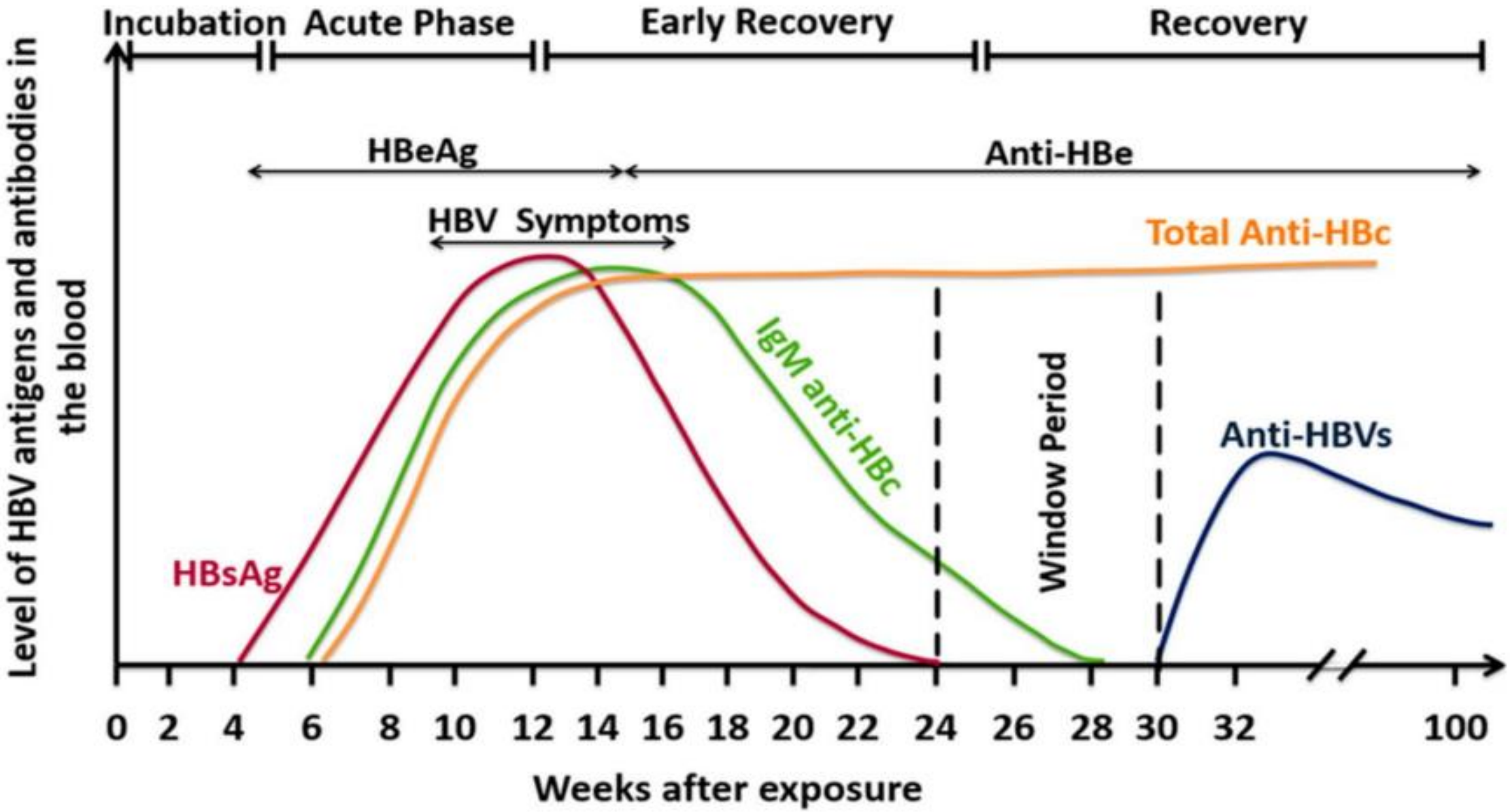


Hepatitis B serology

Seromarkers	
HBsAg	Hallmark of **active HBV infxn**. Recovery→ disappearance f/b appearance of anti-HBs (persists)
anti-HBs	Indicates recovery and immunity
HBeAg	Indicates HBV replication/infectivity (~↑ HBV DNA), though pre-core mutants (HBeAg-) still replicate
anti-HBe	Correlates w/lower level of HBV DNA, infectivity
anti-HBc	anti-HBc IgM indicates acute infxn, anti-HBc IgG persists in recovery and chronic HBV.
HBV DNA	Measures disease activity, used for monitoring

Dz State	sAg	sAb	cIgM$^{\Psi}$	cIgG	eAg	DNA
Acute	+/-	-	+	-	+/-	+
Chronic Active	+	-	-	+	+/-	+
Inactive Carrier	+	-	-	+	-	+/-
Recovery	-	+	-	+	-	-
Vaccine	-	+	-	-	-	-

$^{\Psi}$Can be + in reactivated HBV; lower AST/ALT in this


Incubation
Acute Phase
Early Recovery
Recovery
HBeAg
Anti-HBe
HBV Symptoms
Total Anti-HBc
IgM anti-HBc
Window Period
Anti-HBVs
HBsAg
Level of HBV antigens and antibodies in the blood
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 100
Weeks after exposure

Interpretation of Tests for Acute Hepatitis B

Anti-HBc IgM	Anti-HBc IgG	HBsAg	Anti-HBs	Interpretation
Positive	Negative	Positive	Negative	Acute HBV infection
Negative	Negative	Positive	Negative	Early acute HBV infection
Negative	Positive	Negative	Positive	Resolved acute HBV infection
Negative	Negative	Negative	Positive	Not infected Prior vaccination for HBV
Negative	Negative	Negative	Negative	Not infected
Negative	Positive	Positive	Negative	Chronic HBV infection

Q: What's is your diagnosis for the following cases?

	Hbs Ag	Hbs Ab	Hbc Ab	IgM
1	Neg	Pos	Neg	Neg
2	Pos	Neg	Pos	Pos

1. Immunity to hepatitis B 2ry to hepatitis B vaccination
2. Acute hepatitis B Infection

Station 7

patient known to have Hepatitis B

Q1 : what is the name of the hand deformity ?

Duputyren's contracture

Q2 : two serological tests to confirm the presence of the disease?

HBsAg ,HBeAg

Ascites

Ascites

Ascites: ① do paracentesis (abdominal tapping)

② Then calculate SAAG (serum Ascites Albumin gradient)

* if ≥ 1.1 ⇒ (Portal hypertension) ⇒ (S. Albumin − Ascities Albumin)

  Then do serum protein:

  * if low ⇒ Liver cirrhosis

  * if normal or high ⇒ CHF

* if < 1.1 ⇒ (normal portal pressure)

  Then do serum protein:

  * if low ⇒ nephrotic syndrome
    (S. Albumin (low) − A. Albumin)

  * if high, normal ⇒ Biliary leak, TB, Pancreatitis
    (S. Albumin − A. Albumin ↑)
    ↳ due to disruption and leak of protein

Ascities Albumin ↓ low

لإنه الارتشاح صار نتيجة زيادة الـ hydrostatic pressure بدون ما يصير في leak للـ Albumin

③ Analysis of fluid + culture

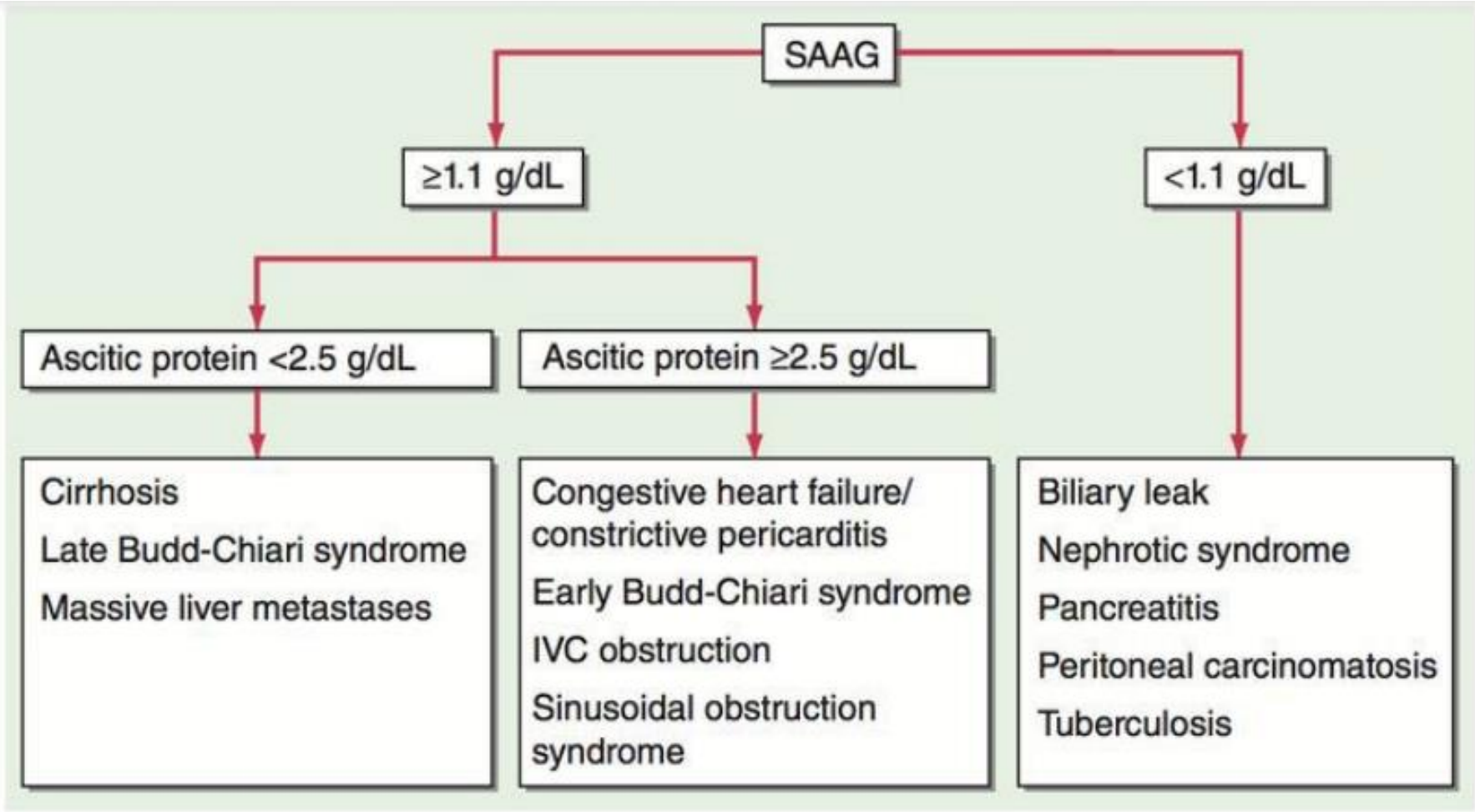
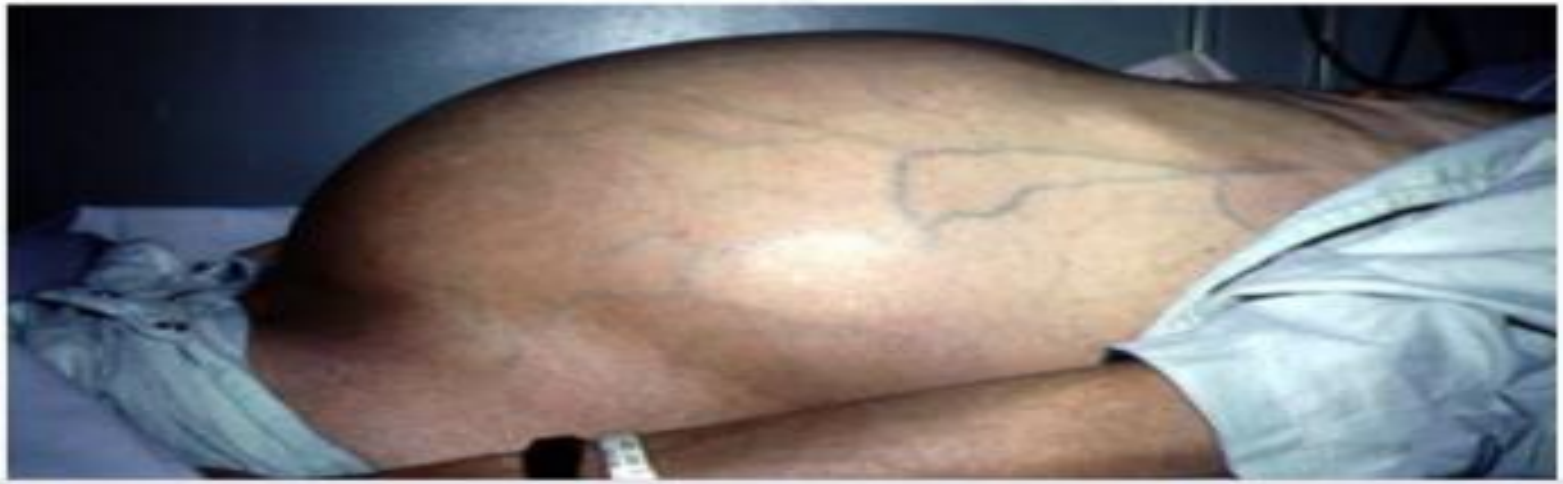


FIGURE 43-1 Algorithm for the diagnosis of ascites according to the serum-ascites albumin gradient (SAAG).

Q10: Pt with Ascites, Serum albumin of 2.8 & an ascites albumin of 1, total protein is 4:
A: Calculate SAAG?
B: Mention 2 causes?



A: 2.8 – 1 = 1.8 (>1.1)

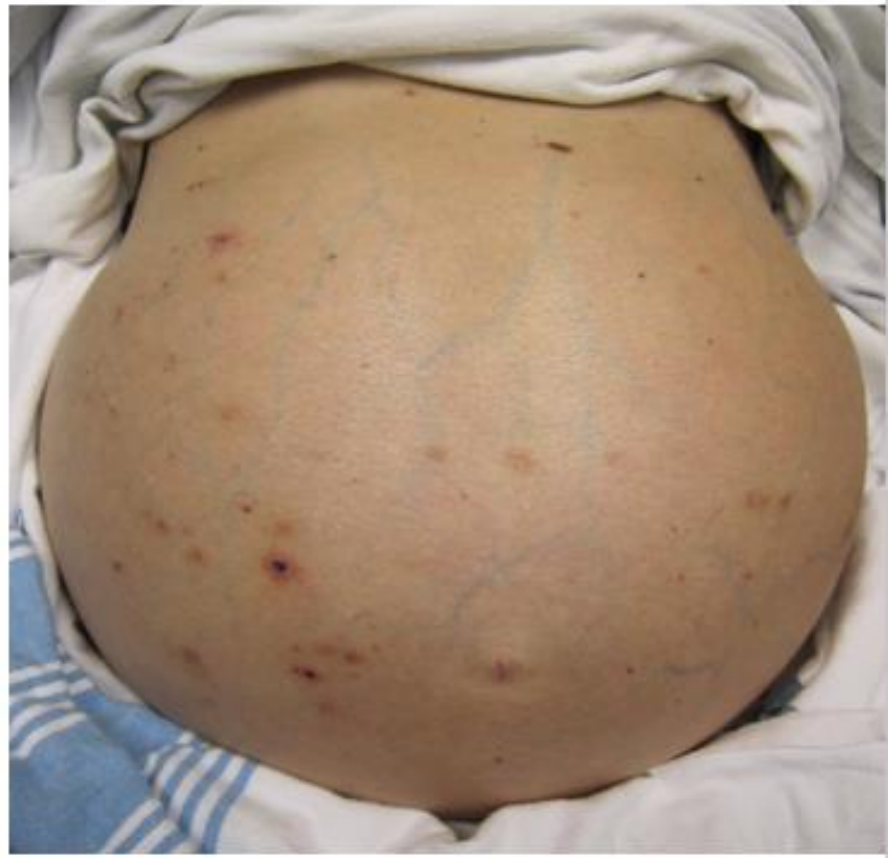
B:

- **Right sided heart failure**
- **IVC Obstruction**

Q13 : serum protein = 53 serum albumin = 3.8 ascites fluid protein = 50 ascites albumin = 2.3 , calculate the SAAG ?

- 0.5
- 1.5
- 2.5
- 3
- 6

NOTE :
(you calculate from **albumin** values not protein one !)



1- A 30 year old male patient , prolonged PT , presented with abdominal discomfort and shortness Of breath . On ultrasound was found to have extensive ascites . The likely cause of this Presentation is ?

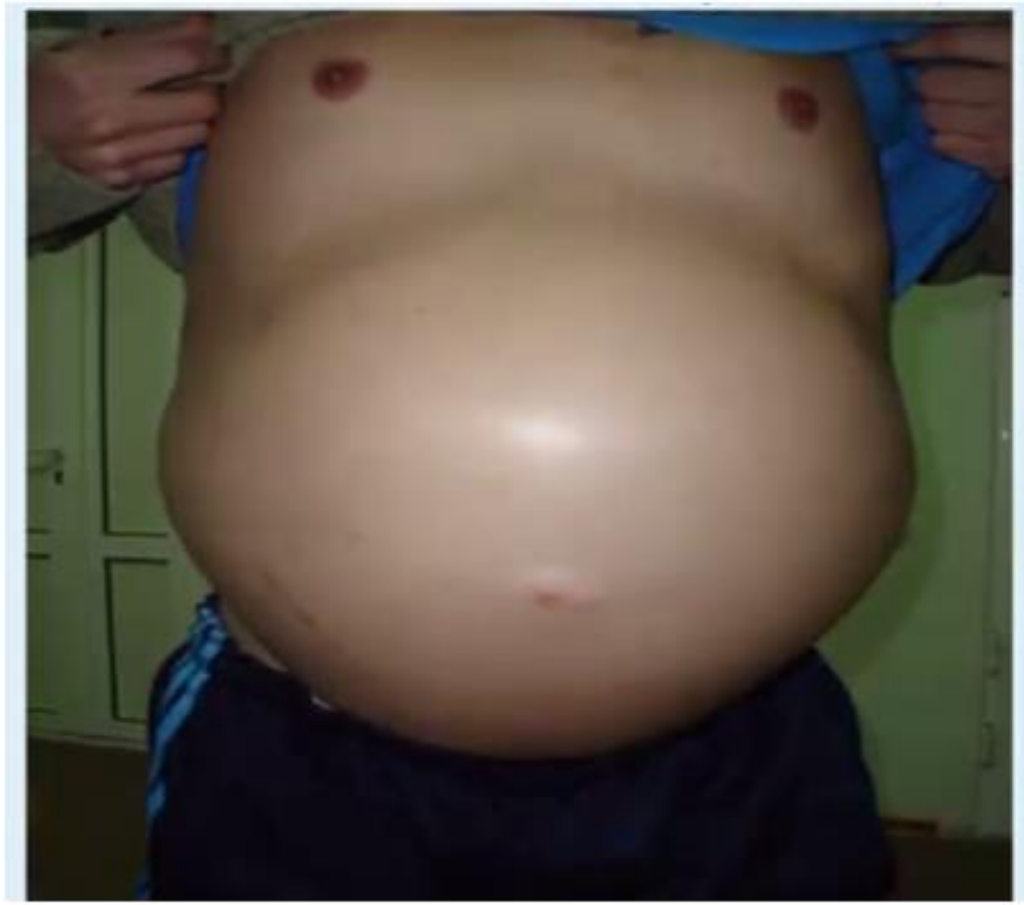
a. Liver cirrhosis

b. Heart failure

c. Renal failure

d. Pulmonary hypertension

e. Acute peritonitis



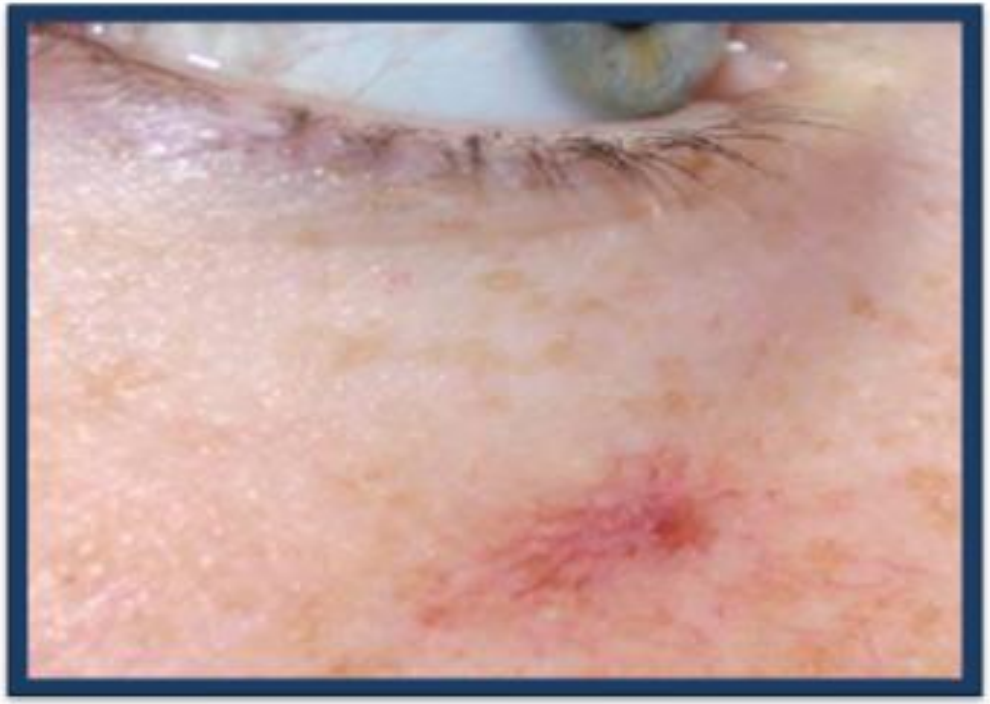
Spontaneous Bacterial Peritonitis

Spontaneous bacterial peritonitis

General	Ascitic fluid **infection** without surgical causes. Thought to be due to **bowel translocation**, **MO: E.Coli, Klebsilla, Strep, Staph.**
Clinical presentation	- Abdominal pain in ascitic patient. - Fever. - Altered mental status.
Diagnosis	- **Paracentesis**. - (**PMN> 250/mm3** .. Positive ascites culture/ gram stain).
Treatment	- **Third generation cephalosporin (ceftriaxone/ cefotaxim) or fluoroquinolone.** - Albumin. - **Prophylaxis**: TMP-SMX (Indicated if high-risk (History of SBP/ Current GI-bleeding)).
Others	**Complications?** We should monitor for **renal failure**.

Q: Patient presented with agitation & confusion, now he comes complaining of Hematemesis, on endoscopy he has bleeding varices . What is the cause of his confusion?

Hepatic encephalopathy.

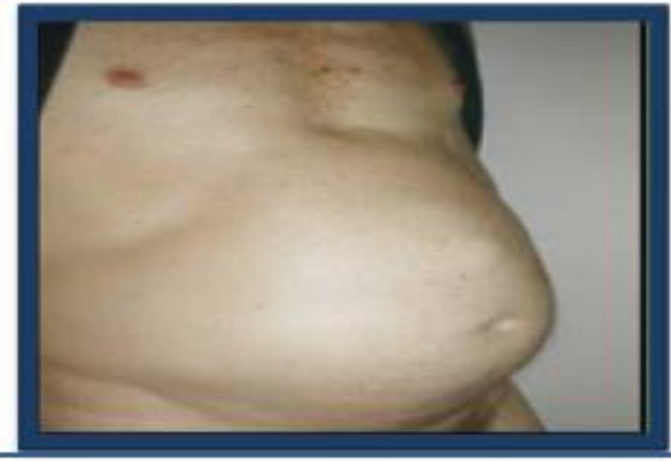


Q: Pt with liver cirrhosis & ascites , presented with fever & abdominal pain , P/E shows rigid abdomen, what is the most likely Dx?

Spontaneous bacterial peritonitis (SBP) .

How to confirm?

Diagnostic paracentesis .



*SBP occur in 20% of pts hospitalized for ascites
M.C organism is E.COLI
*High mortality rate (20-30%)
*High recurrence rate (up to 70% in the first year)

Q3 : patient with hepatitis B , the result of ascetic fluid culture is :

Neutrophils > 500/mm3

So what is your diagnosis ? And the treatment ?

-spontaneous bacterial peritonitis

- Cefotaxime

Q1: calculate *SAAG*

2.8-2.2 = 0.6

Q2 : what is your Dx ?

spontaneous bacterial peritonitis

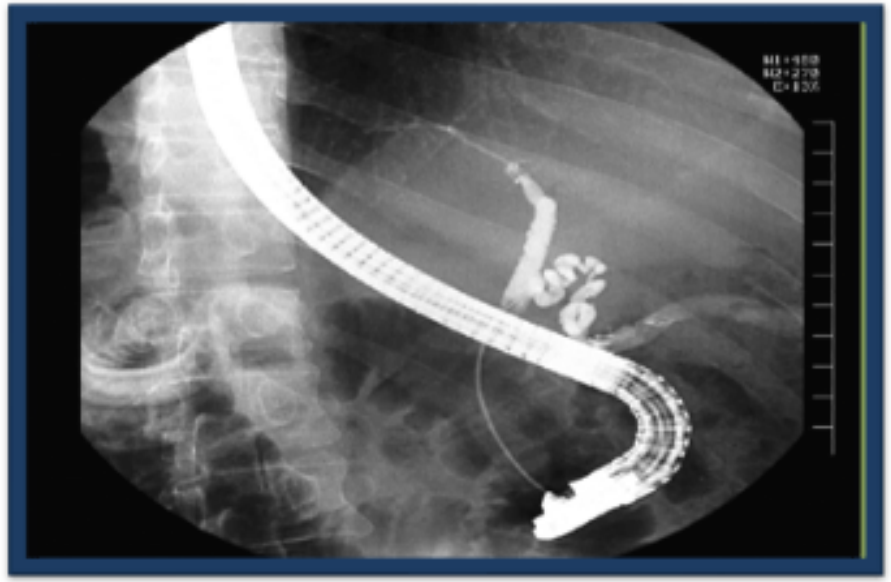
Ascitic fluid analysis :

- serum protein : 2.8
- ascitic protien : 2.2
- WBC : 501
- PMN : 90%

Pancreatic diseases

ERCP

ERCP: It's diagnostic and theraputic procedure



Diagnostic uses :

1- obstructive jaundice
2- bile duct tumors
3- bancreatic tumors

Theraputic uses:

1- endoscopic sphincterotomy
2- removal of stones
3- insertion of a stent
4-dilatation of a stricture as in primary sclerosing cholangitis

Containdication of ERCP

1-acute pancreatits
2- previous pancreatoduodenectomy
3- coagulation disorder if sphincterotomy planned
4- recent MI
5- hx of contrast dye anaphylaxis

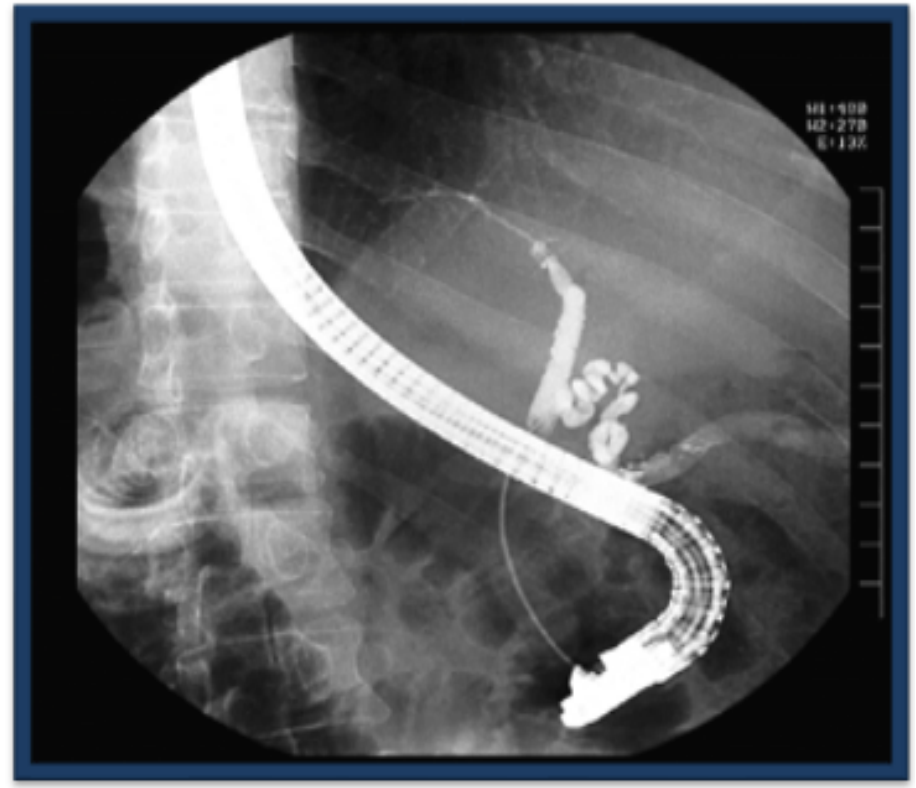
Preparation for ERCP:

1 - Npo >> for six to eight hours

2 - Prophylactic AB

3 - Iv fluids

4 - Vit. k IM 10mg



Complications of ERCP:

1 - Duodenal perforation

2 - Haemorrhage after insertion or sphincterotomy

3 - Pancreatitis (there is some evidence for the use of periprocedural nitroglycerin or rectal NSAIDs after high risk procedure to prevent this complication)

4 - sepsis

Thank You

GIT-MiniOSCE

QMA Team

Small and large intestine

IBD/ Celiac disease/ Diverticulosis & Diverticulitis/ intestinal obstruction/ Perforated Viscus / Diaphragmatic hernia.

IBD

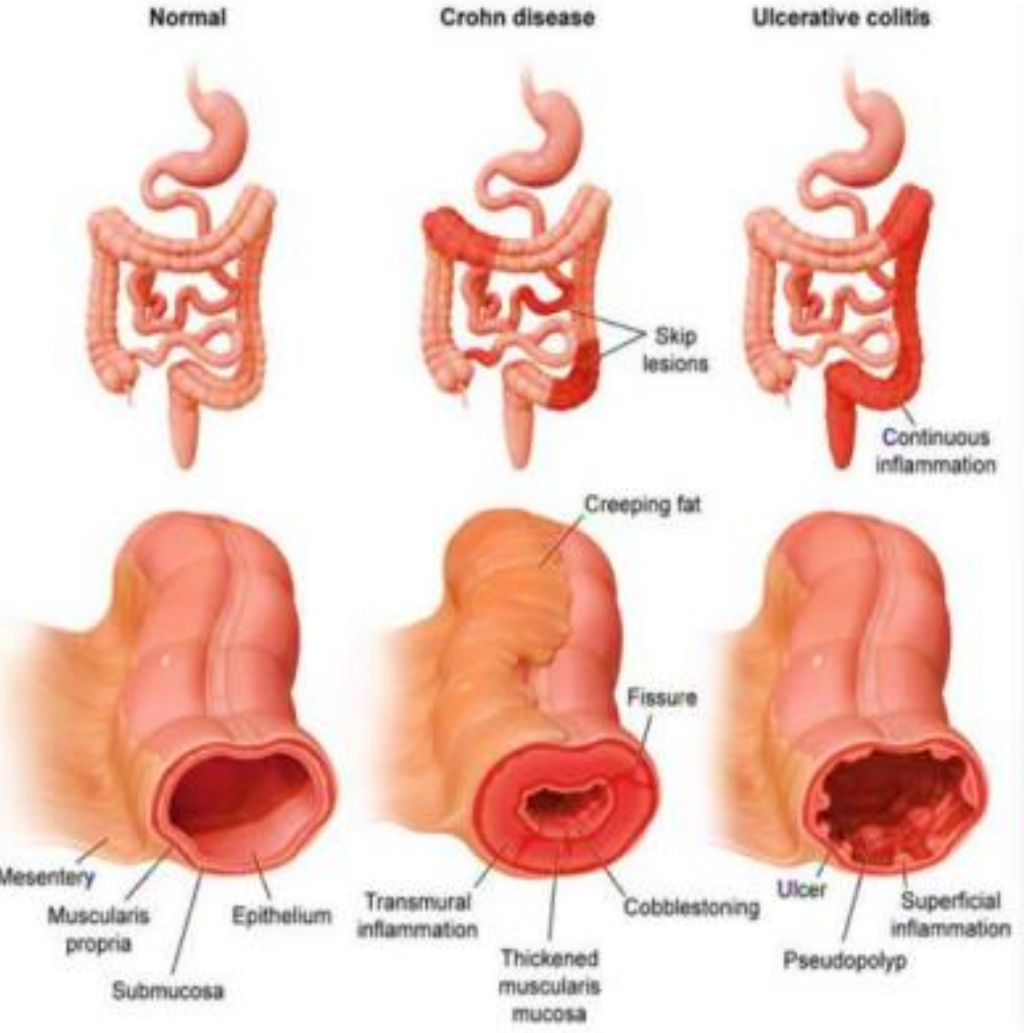
Inflammatory bowel disease (IBD)

Crohn's disease and ulcerative colitis are often collectively referred to as inflammatory bowel disease (IBD).

- They may have similar clinical manifestations and similar extra-intestinal complications.

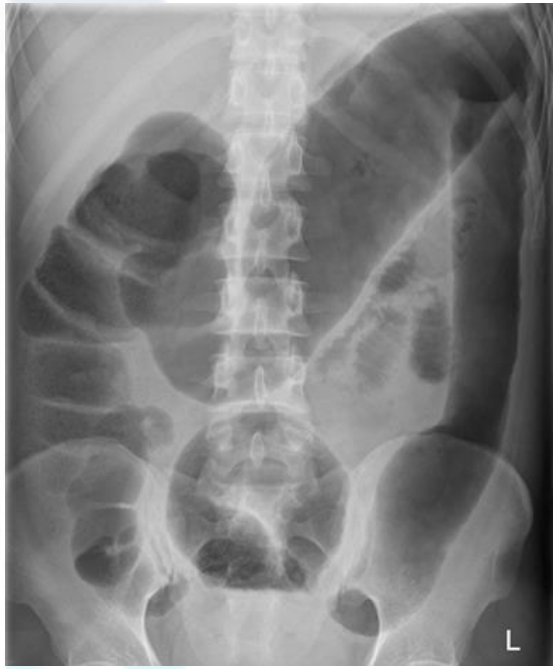
	Crohn disease	Ulcerative colitis
Involvement	• Anywhere mouth to anus (mostly ileum & colon) • Perianal disease with rectal sparing • Skip lesions	• Rectum (always) & colon • Continuous lesions
Microscopy	• Noncaseating granulomas	• No granulomas
Gross findings	• Transmural inflammation • Linear mucosal ulcerations • Cobblestoning, creeping fat	• Mucosal & submucosal inflammation • Pseudopolyps
Clinical manifestations	• Abdominal pain (often RLQ) • Watery diarrhea (bloody if colitis)	• Abdominal pain (varying locations) • Bloody diarrhea
Intestinal complications	• Fistulas, abscesses • Strictures (bowel obstruction)	• Toxic megacolon

IBD



Toxic megacolon	
Risk factors	• IBD • *Clostridium difficile* infection
Diagnosis	• Systemic toxicity (eg, fever, tachycardia, hypotension) • Bloody diarrhea • Abdominal distension/peritonitis • Marked colonic distension on imaging
Management	• Bowel rest, NG suction, antibiotics • +/− Corticosteroids if IBD-associated • Surgery if unresponsive to medical management

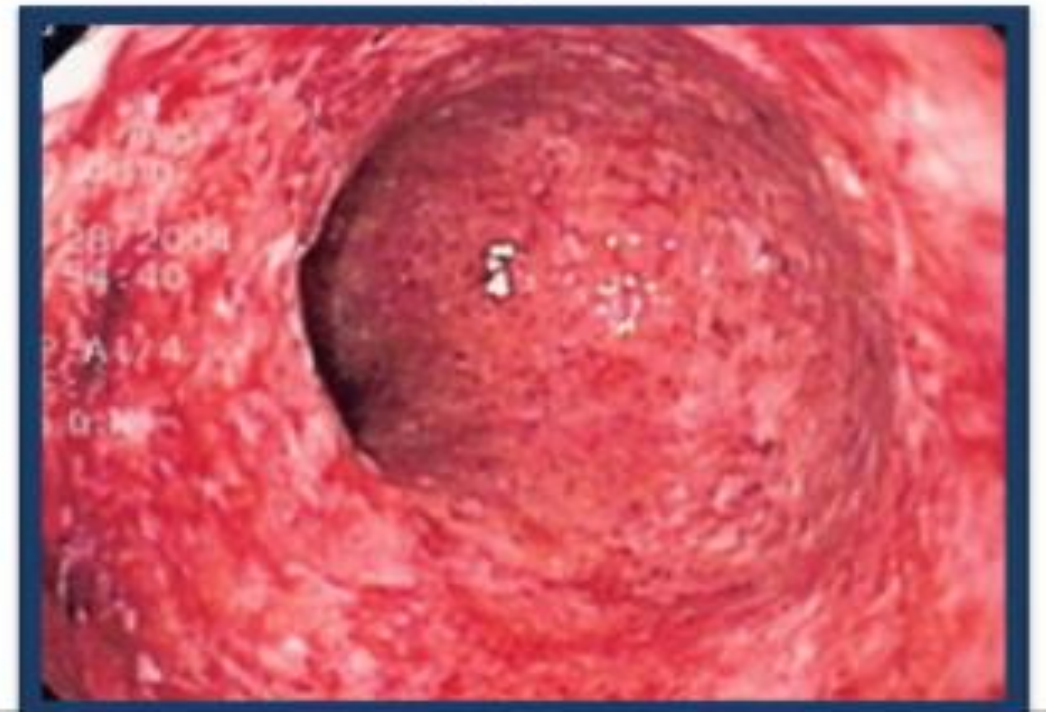
IBD = inflammatory bowel disease; NG = nasogastric.



Q: A 25 y.o. non-smoker female presented to the ER with bloody diarrhea, mixed with mucus and tenesmus…after performing colonoscopy this how her colon looked like…What's her condition?

This is typical endoscopic picture for Ulcerative Colitis

Note the diffuse involvement and the SAND PAPER appearance



Mention 2 serological test for diagnosis:

1- Saccharomyces cerevisiae antibody (Negative)
2- P-ANCA (positive)

If this pt came with jaundice what is your ddx?

1-Sclerosing cholangitis
2-Cholangiocarcinoma

Leading cause of death in this disease?

Toxic Megacolon

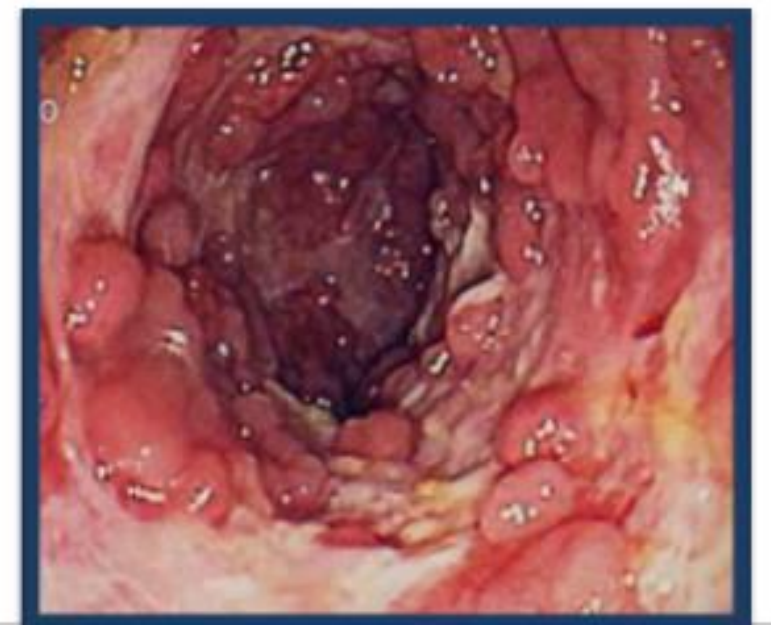
Major endoscopic features for CD

1. Asymmetric patchy *inflammation
2. Skip lesions
3. Rectal sparing
4. Ulcerations-deep/serpiginous
5. Cobblestoning-common
6. Pseudopolyps-rare

Q:A 30 y.o. smoker male presented at the clinic with watery diarrhea ,abdominal pain and weight loss...these are the pictures of his colonoscopy...What is his condition?

Crohn's Disease

Note the patchy involvement and the COBBLE STONE appearance



Q:This ileum appearance is in a young patient with weight loss, chronic diarrhea and right lower abdominal pain.

Name the underlying autoimmune disorder.

Crohns disease

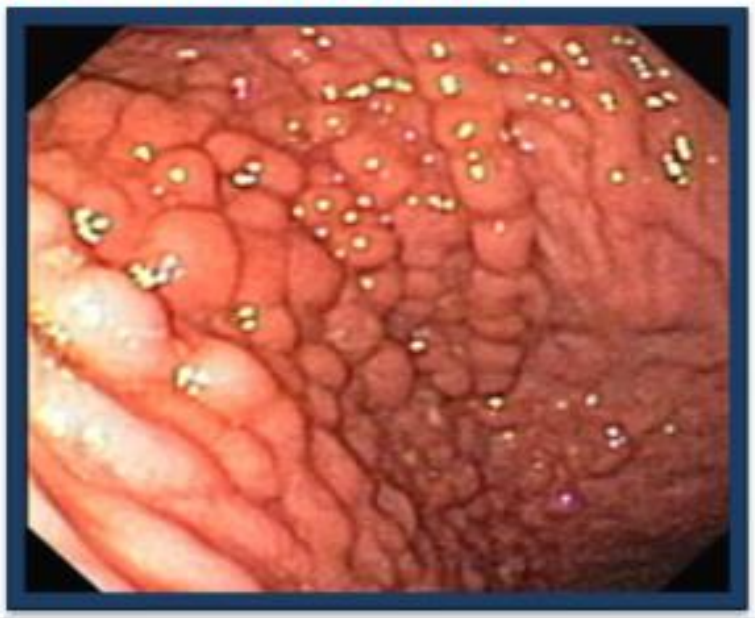
Mention 2 serological test for diagnosis:

1- Saccharomyces cerevisiae antibody (positive)

2- P-ANCA (Negative)

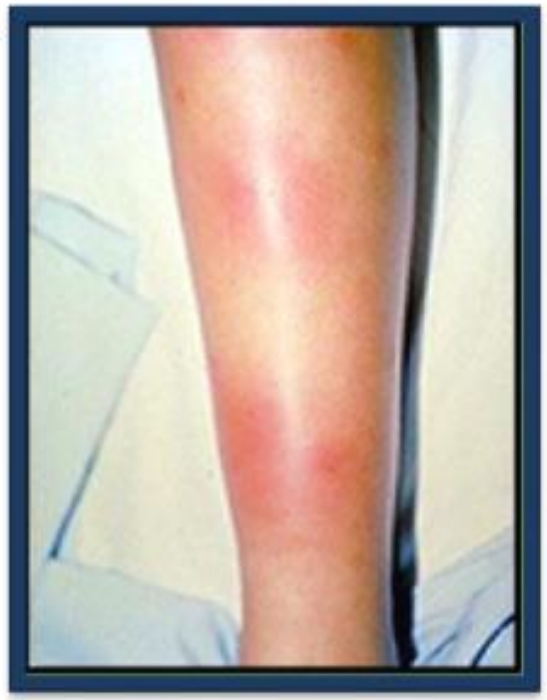
Most Common indication for surgery in this disease?

- Small bowel obstruction



Q: A Patient has bloody diarrhea & this skin lesion, What is your Dx.?

Inflammatory Bowel Disease: (Mostly Ulcerative colitis).



DDX:

1-IBD

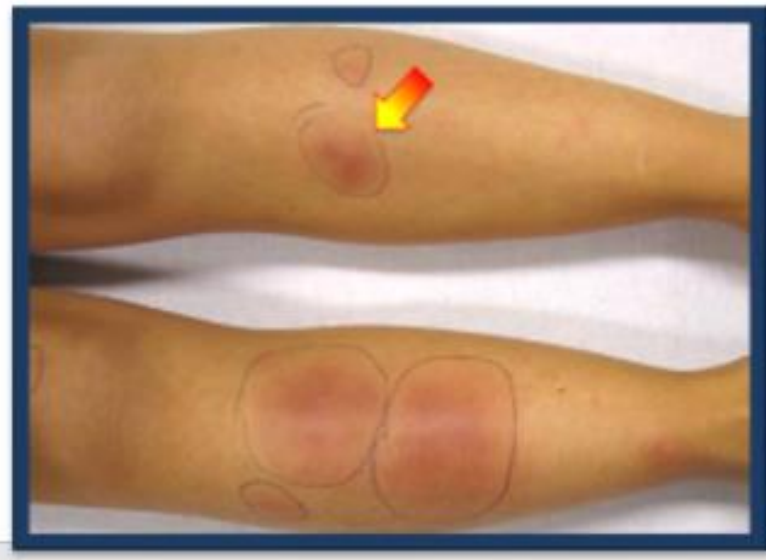
2-Sarcoidosis

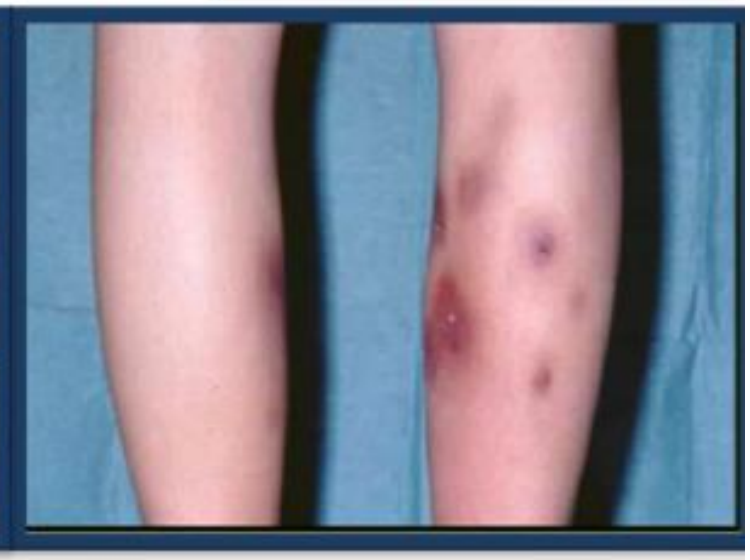
What is the name of this lesion?

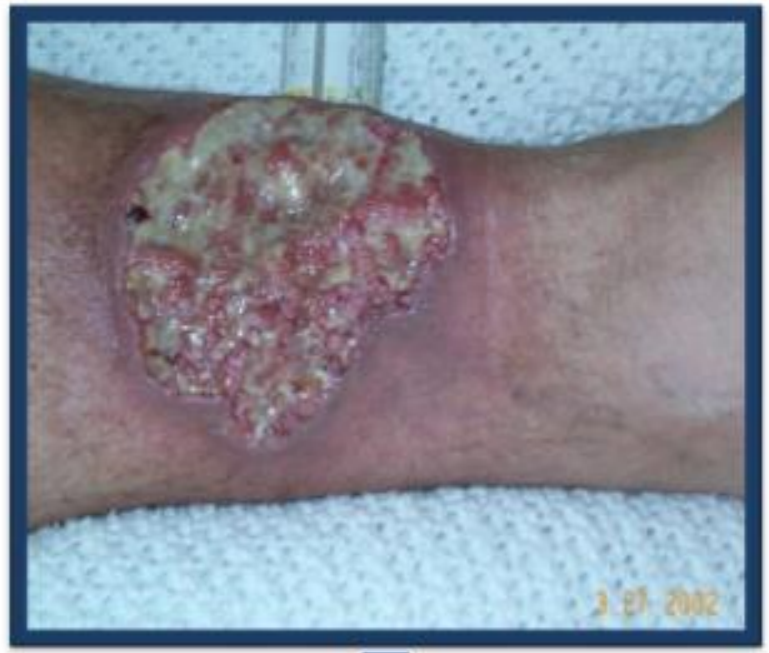
Erythema nodosum.

What is the best treatment for this condition?

Steroids



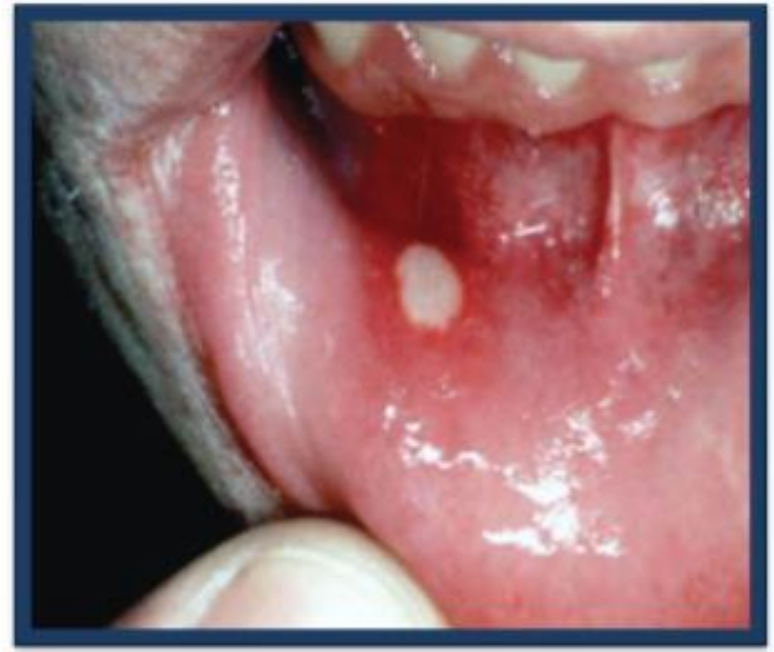


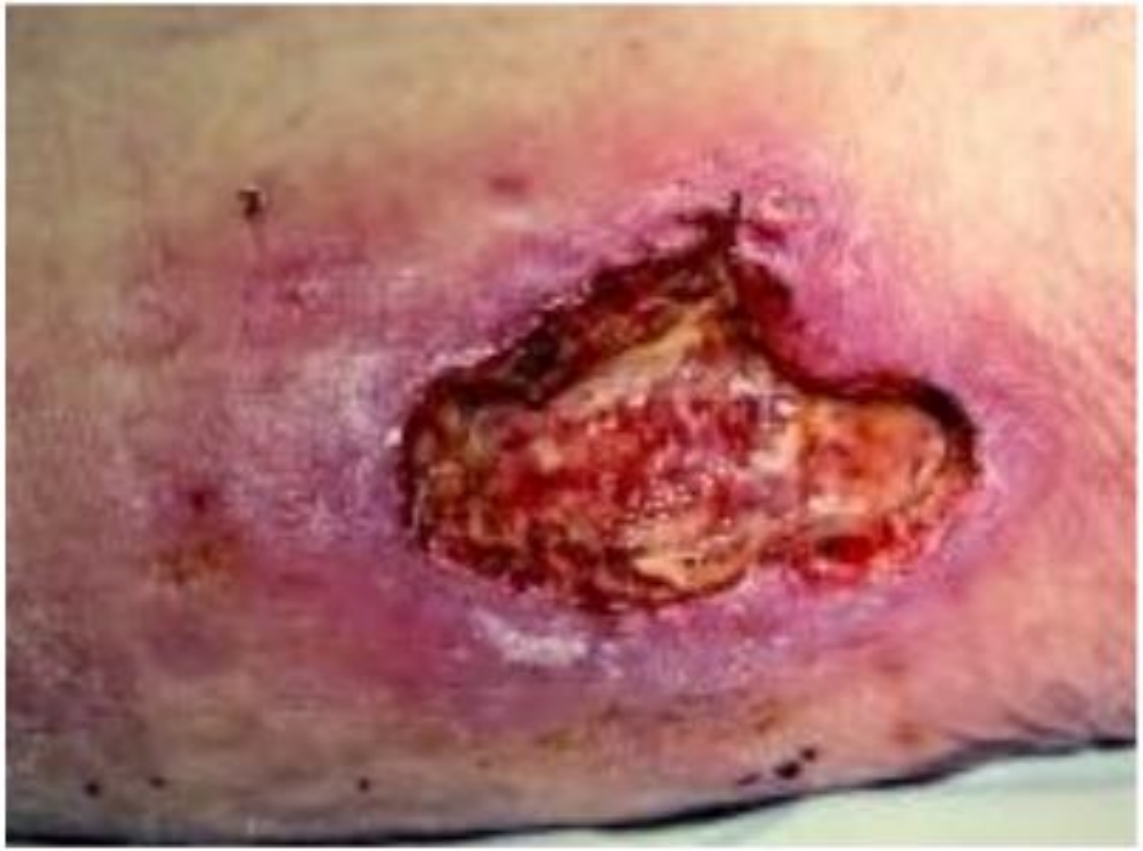


pyoderma gangrenosum in UC , parallels bowel disease activity in 50% of cases

This is Aphthous Stomatitis

Painful ulcer in the mouth that everyone of us had experienced





- Q5:Name this skin lesion that is found in a patient with inflammatory bowel disease

- Pyoderma Gangrenosum

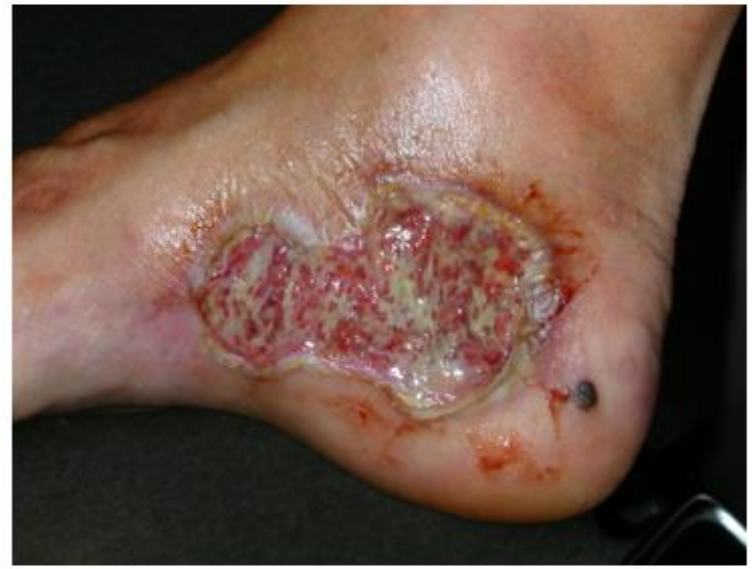
Pyoderma gangrenosum is a condition that causes tissue to become necrotic, causing deep ulcers that usually occur on the legs. When they occur, they can lead to chronic wounds. Ulcers usually initially look like small bug bites or papules, and they progress to larger ulcers.

Q 6

This Patient came with history of 4 week duration bloody diarrhea .

•What do you see ?
pyoderma gangrenosum

•What is the diagnosis ?
Ulcerative colitis



Q:

A- A known case of crohns disease came with this oral lesion identify this lesion?

aphthus ulcers

Note: some said it was candida infection (Pic was not that clear)

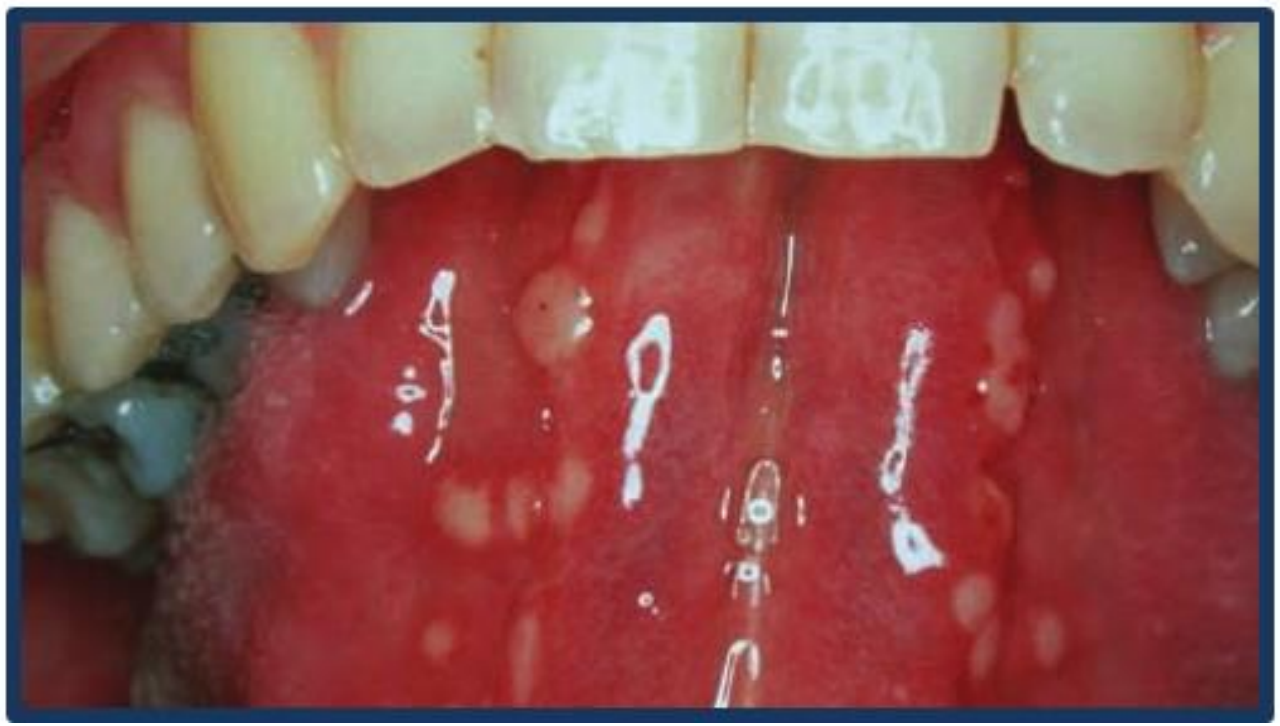
B- Do you think the anus will be affected??

Yes anus can be affected

c. Mention 2 DDx?

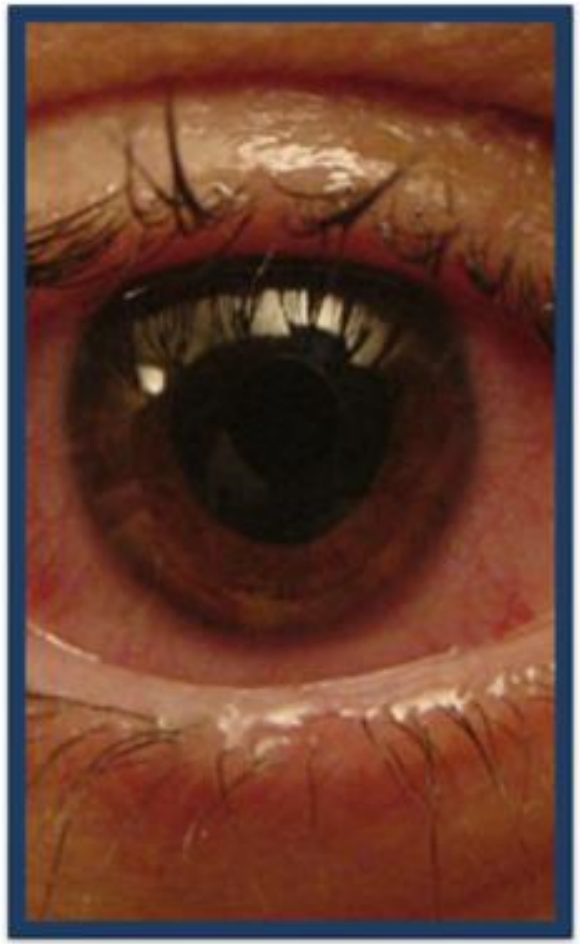
1- Behcet disease

2- IBD



Now we will move to the lesions of the eyes…

Uveitis : (Doesn't parallel bowel disease activity)

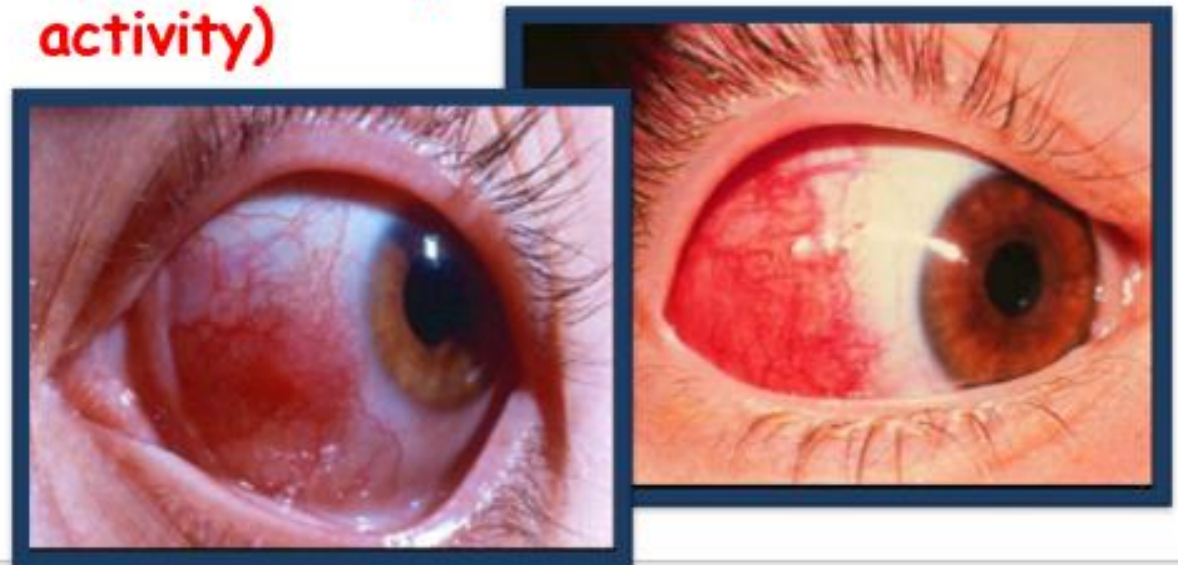


Q:A pt presented with bloody diarrhea & tenesmus as well as this painless eye lesion.
what is your diagnosis?

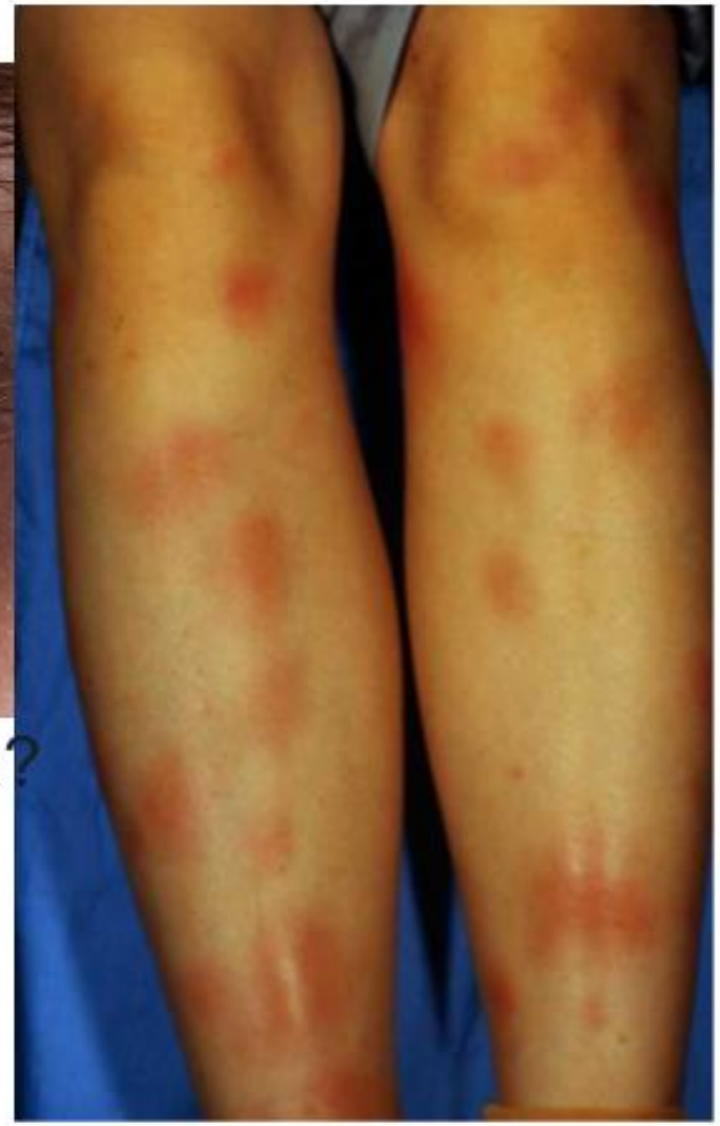
Ulcerative colitis.

what is this eye lesion

Episcleritis. (parallel bowel disease activity)



Station 8



Q1 : what is the name of the skin lesion?

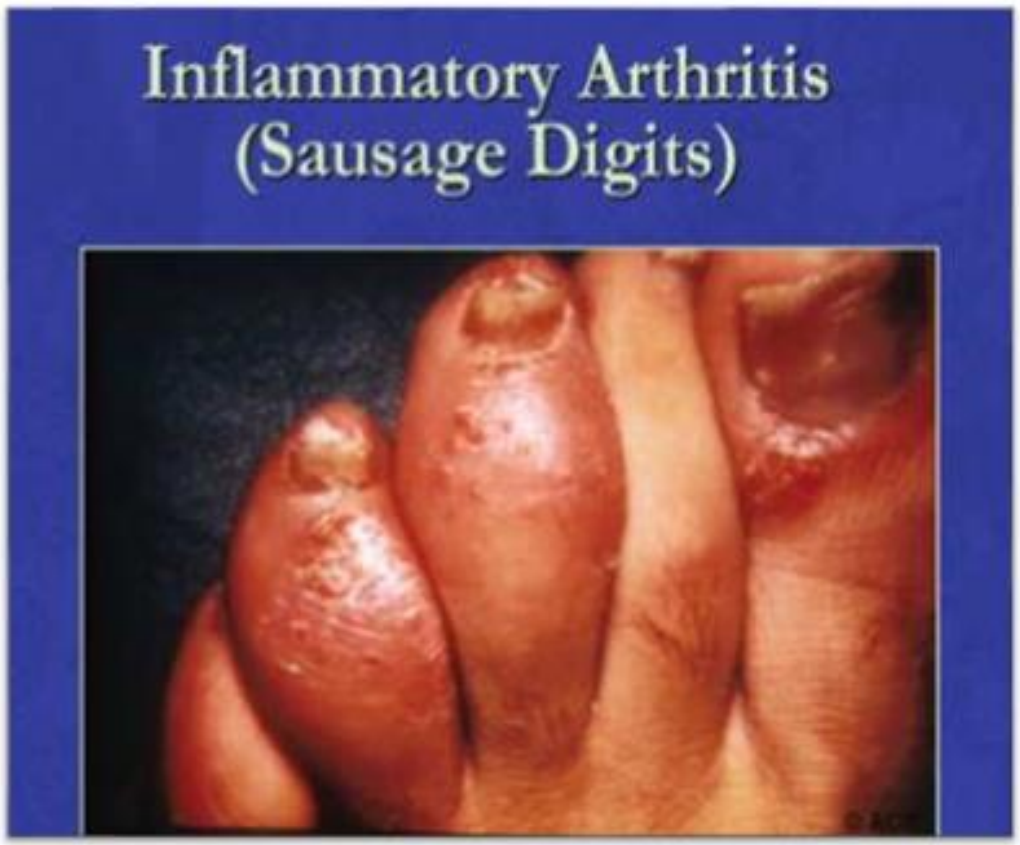
Erythema Nodosum

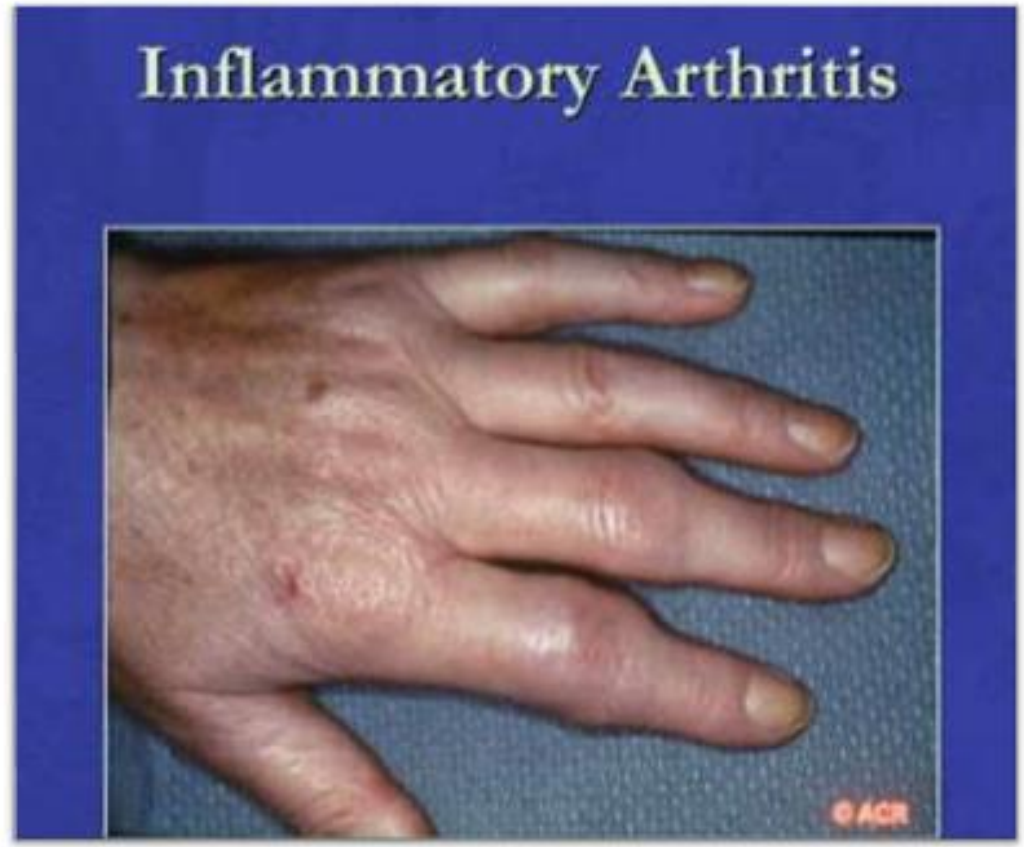
Q2 : two Possible diagnosis ?

Sarcoidosis

IBD

Now we move to the rheumatological lesions that accompany IBD…



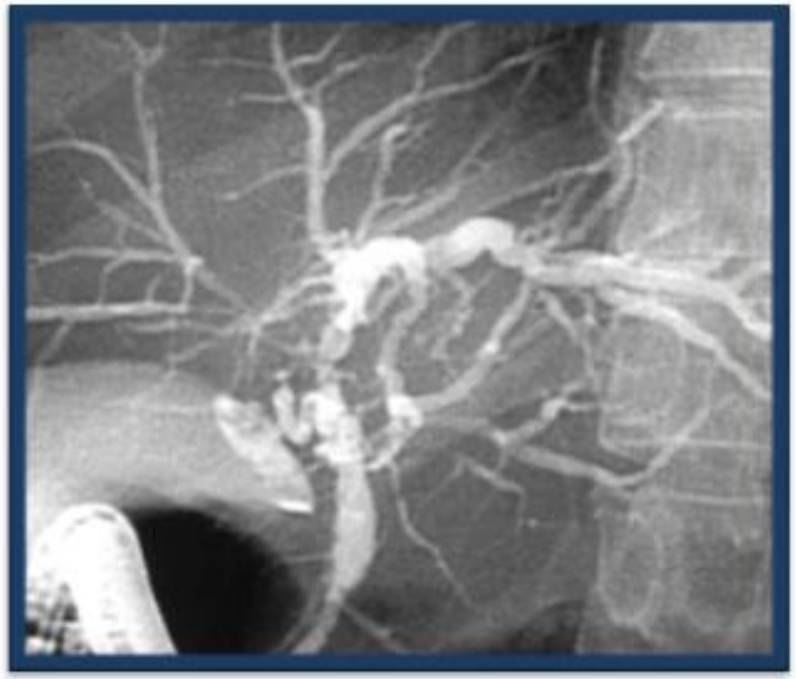


Q:This ERCP belongs to a patient who was presented with bloody diarrhea.

What is this condition?

Primary Sclerosing Cholangitis

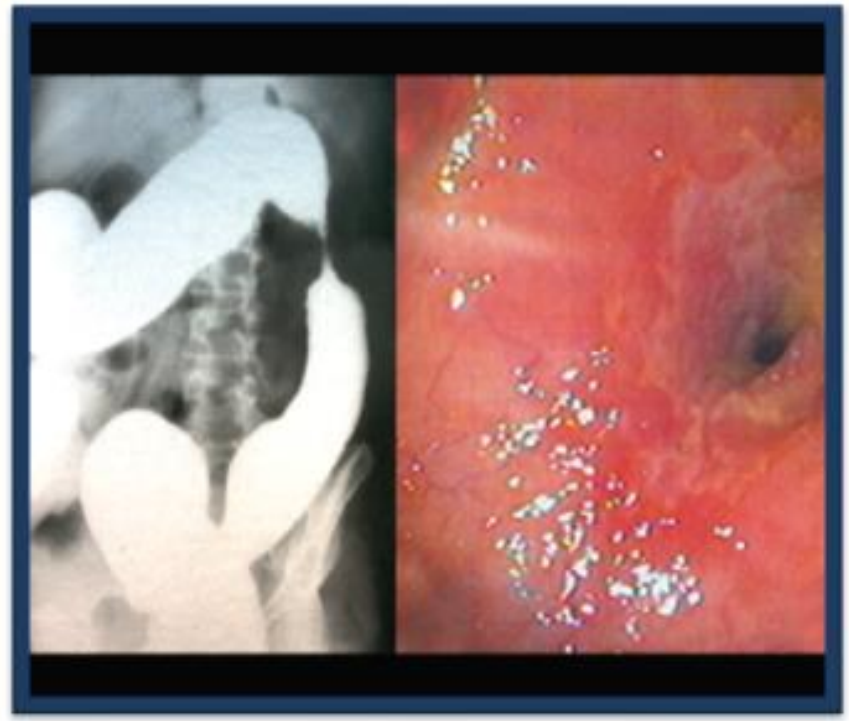
This is commonly a manifestation of UC and it is unrelated to the disease's activity…



These are an X-ray and an endoscope of a CD patient that now complains of constipation…

This is colonic stricture.

This is a complication of Crohn's disease (usually).

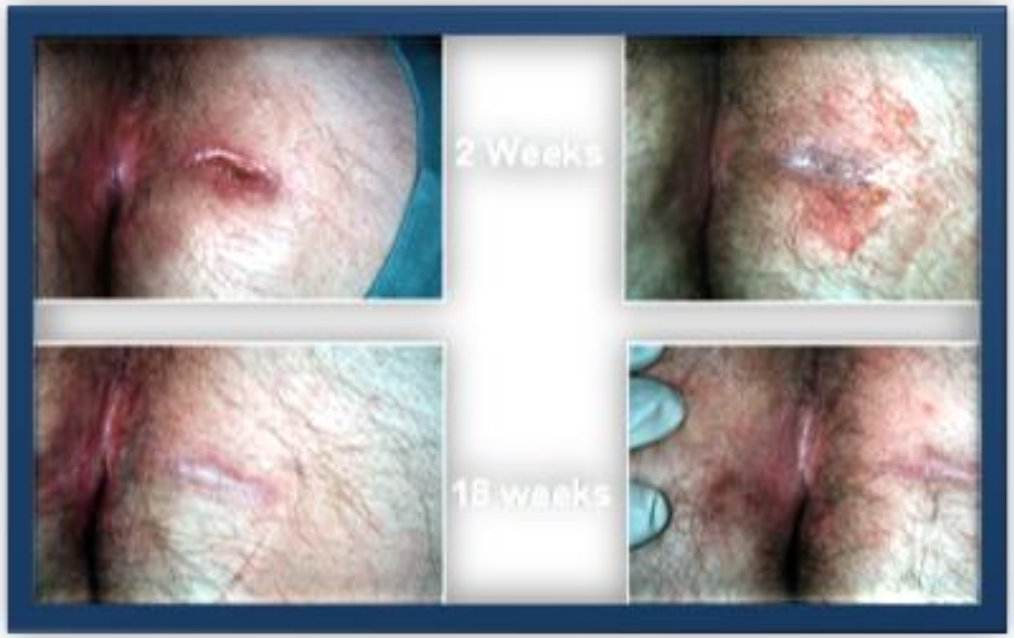


Q: This patient is presented with this condition.

What is the most likely underlying disease?

This is a perianal fistula

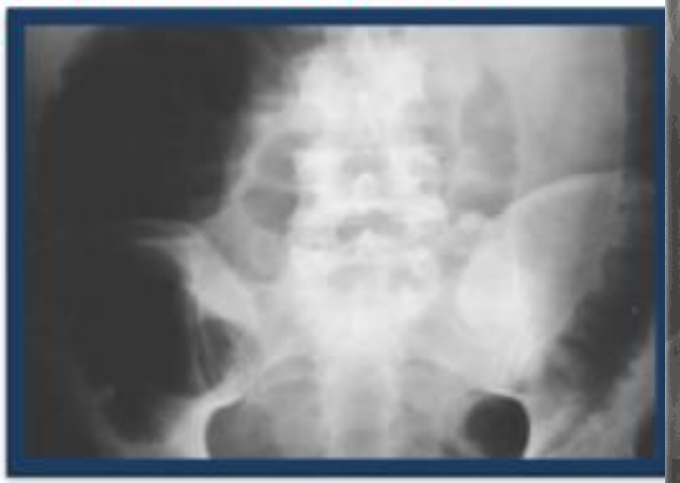
Fistulas such as perianal, enteroenteric, enterovesicular, enterovaginal are complications of Crohn's disease.

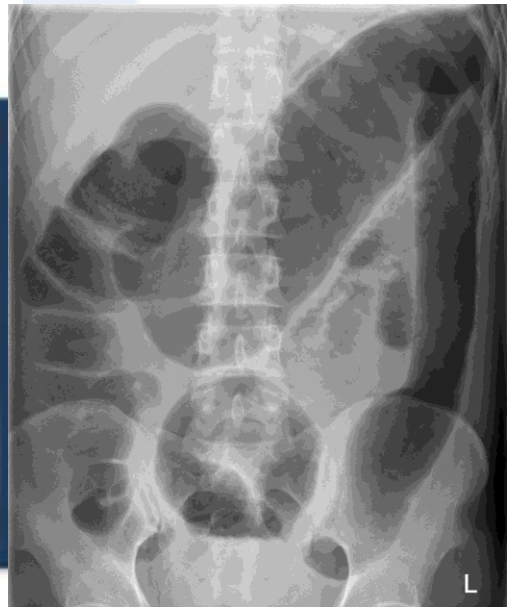


Q: A middle aged patient known to have UC and was brought to the ER looking shocked with distended abdomen. After performing an abdominal xray this was the result. What is this condition?

Toxic Megacolon (note the big black shadow on the left of the screen)

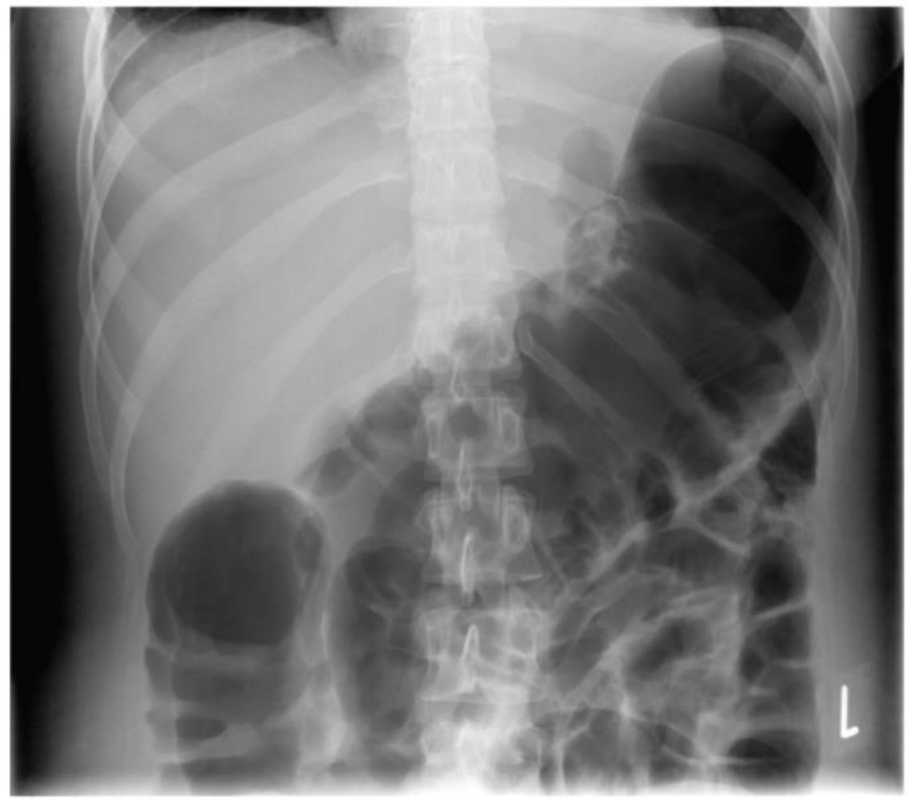
This is a known complication of UC as it the wall of the bowel thinner.





36 years old patient with IBD, present with abdominal pain & distension
- What complication is shown in this Abdomen X ray?

Toxic Megacolon



Q:A 65 y.o. patient known to have UC with remission and relapse. Now he complains of anorexia and weight loss with alternating bowel habits. What should we think about in our DDx?

Colon cancer.

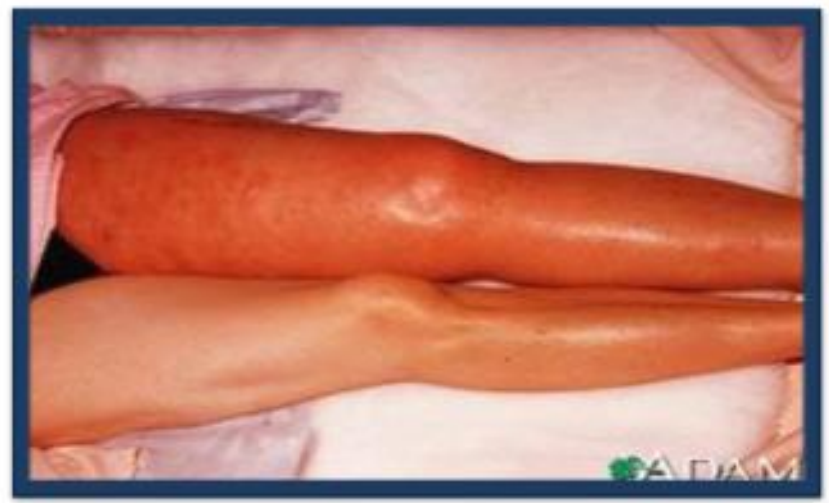
Colon cancer is one of UC complications

Q:Now, if a patient known to have IBD and he was presented to the ER with swollen erythematous tender unilateral lower limb what is your explanation?

Venous Thrombosis

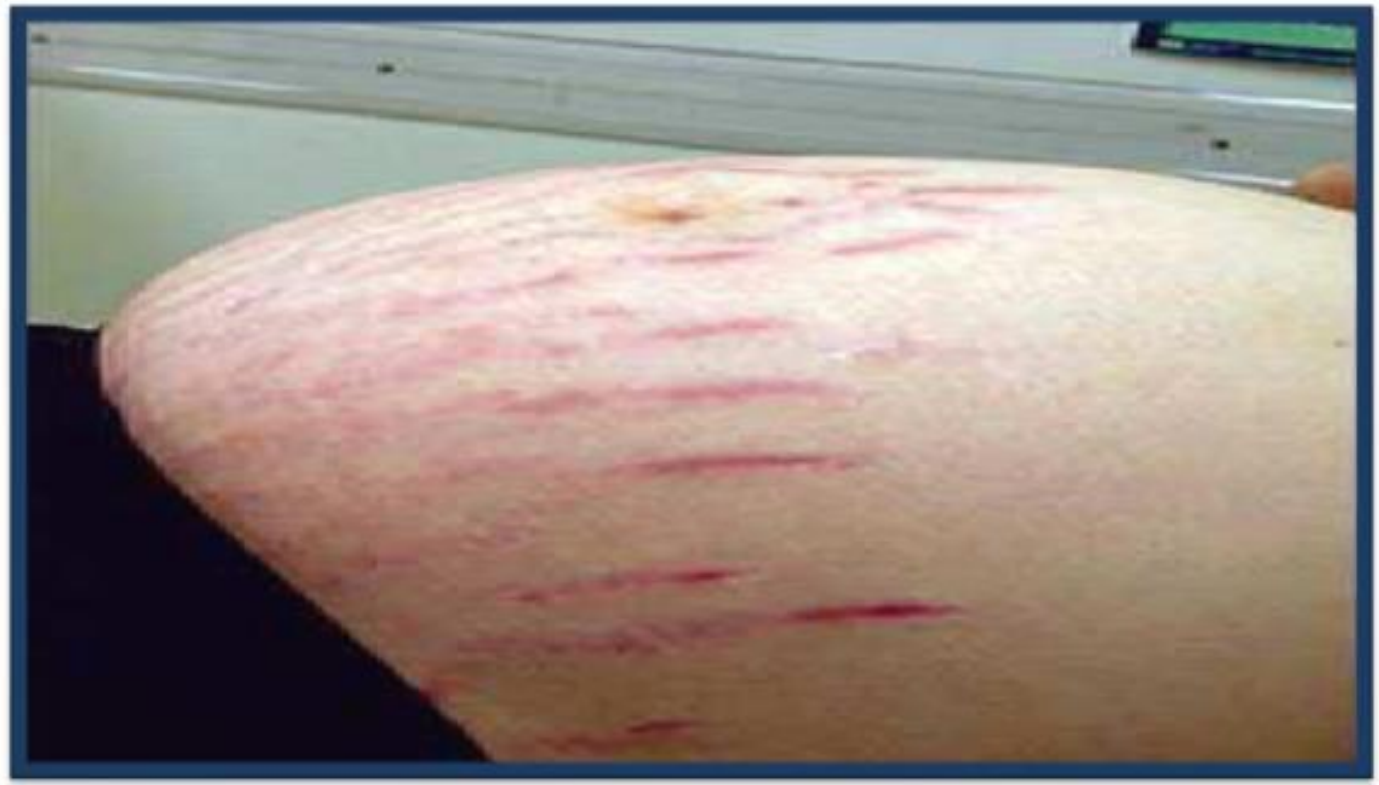
- can lead also to :

1-PE 2-CVA 3-ITP



Q: pt of Crohn's disease presented with these lesions on his abdomen. What's the name of these lesions & what is the cause?

Abdominal Stria due to Steroid Therapy in IBD.

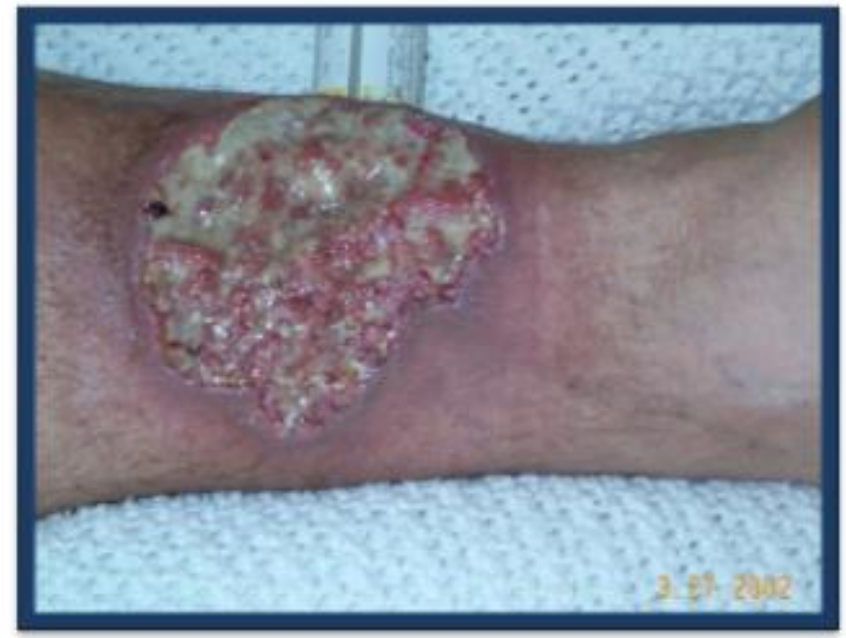


what is the name of theis lesion

pyoderma gangrenosum

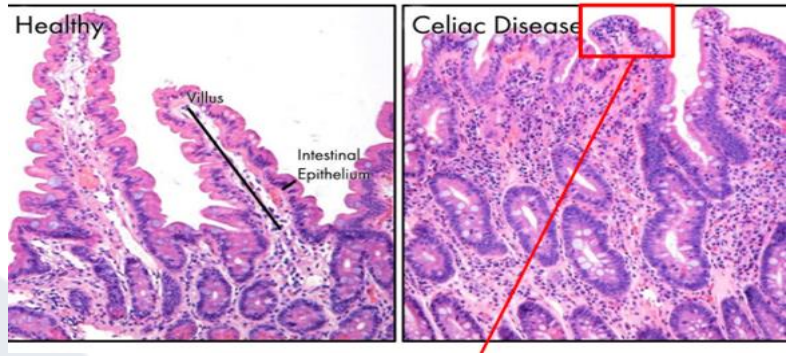
the patient complains from bloody diarrhea & abdominal pain , what is the first line treatment ?

1- 5 ASA
2- STEROIDS
3- IV antibiotics



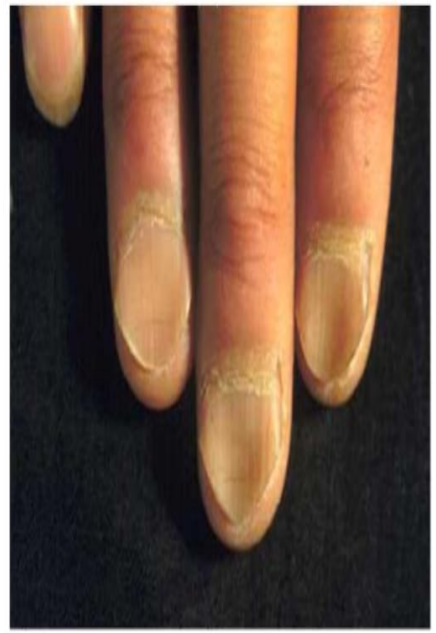
Celiac disease

Celiac disease



General	Hypersensitivity to **gluten**, a protein found in wheat, resulting in **small bowel** mucosal inflammation. Risk factors: Family history, **HLA-DQ2/DQ8.**
Clinical presentation	- Malabsorption (Diarrhea, weight loss, vitamin and **mineral deficiency (Fe)).** - Associated with: 1. **Dermatitis herpetiformis.** **Pruritic**, **blistering skin lesion** in 10% 2. Autoimmune disorders (Type 1 DM, Hashimoto Thyroiditis).
Diagnosis	- **Ttg-IgA levels** (Alternative test: Deamidated **gliadin** peptide (DPG) IgG or **anti-endomysial IgA**). - Endoscopy with duodenal biopsy: **Villous atrophy** (flattening of villi), **crypt hyperplasia** (Villous to crypt ratio less than 3:1), **intraepithelial lymphocytosis** ….. Best DX modality.
Treatment	- Gluten free diet. - Ensure proper vitamin and mineral levels (Fe).
Others	**Complications?** -Anemia(iron,b12,folate). – Rickets. - Peripheral neuropathy(b12,b6) . -Seizure (occipital calcification). -Dermatitis herpetiformis -Short stature.

- In patient with celiac disease you found this nail change, what is the main cause ?

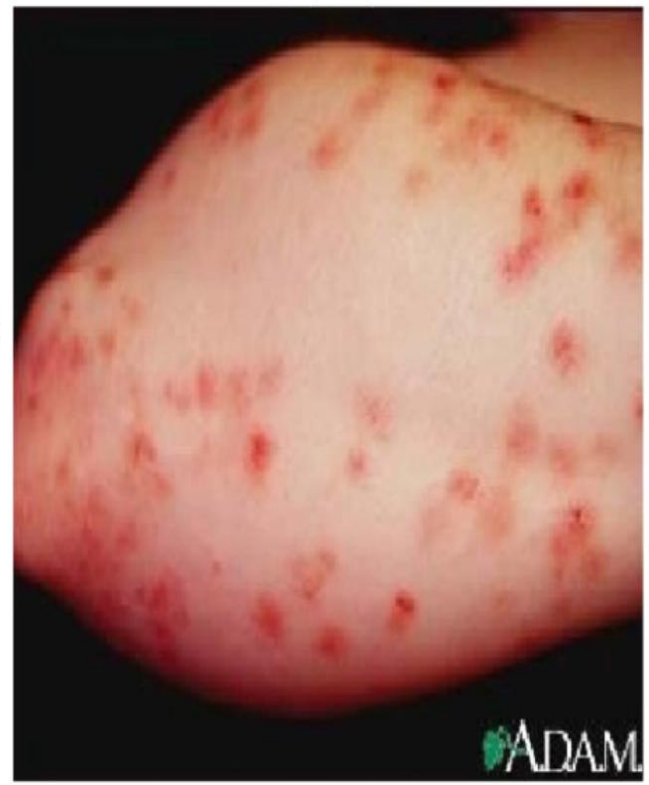


- **Koilonychia**
- **Most common cause is iron deficiency anaemia**

A 60 lady has symptoms of intermittent abdominal pain and loose stool which have occurred over 1 year, Iron & folate Deficiency anemia, TTG antibodies positive.

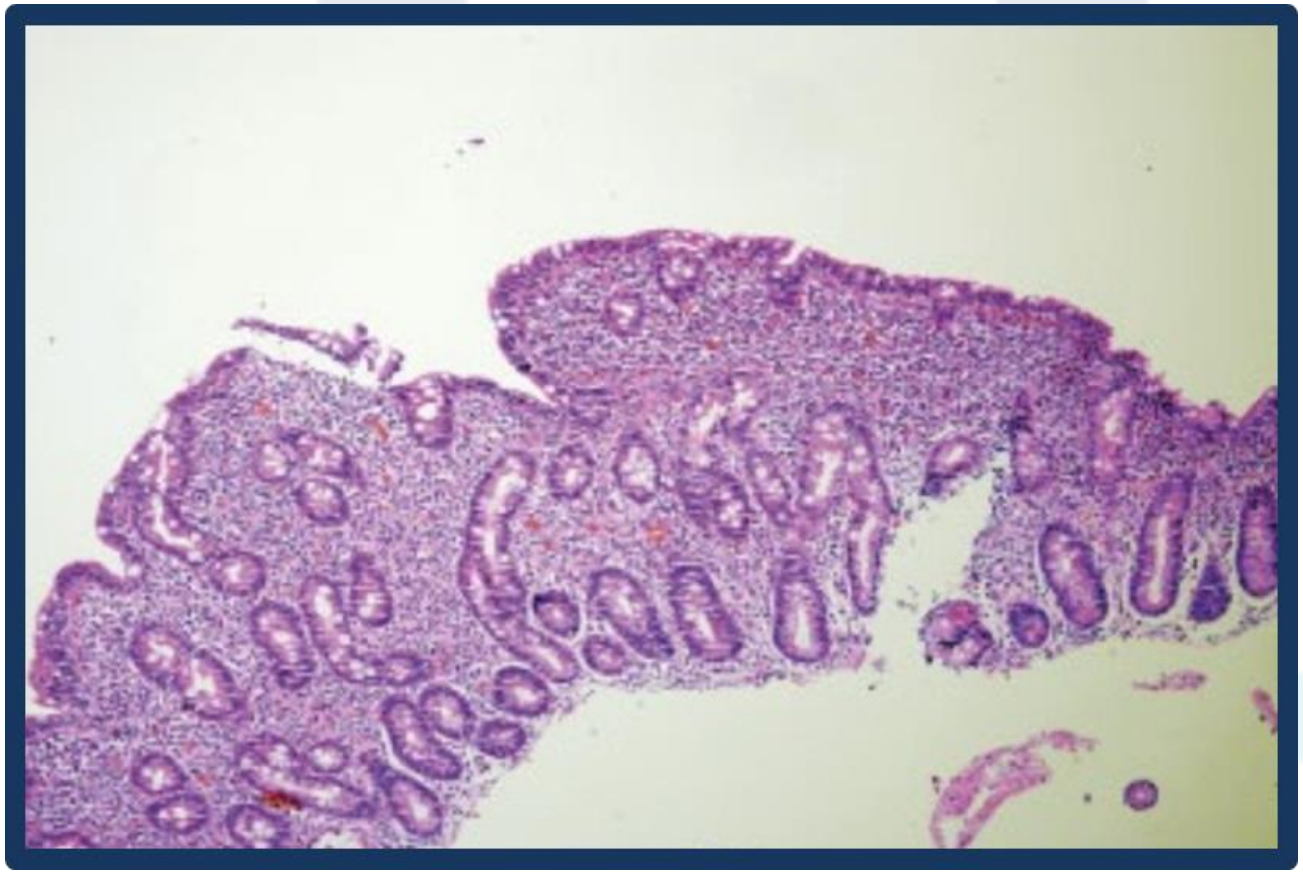
- What is this skin lesion ?

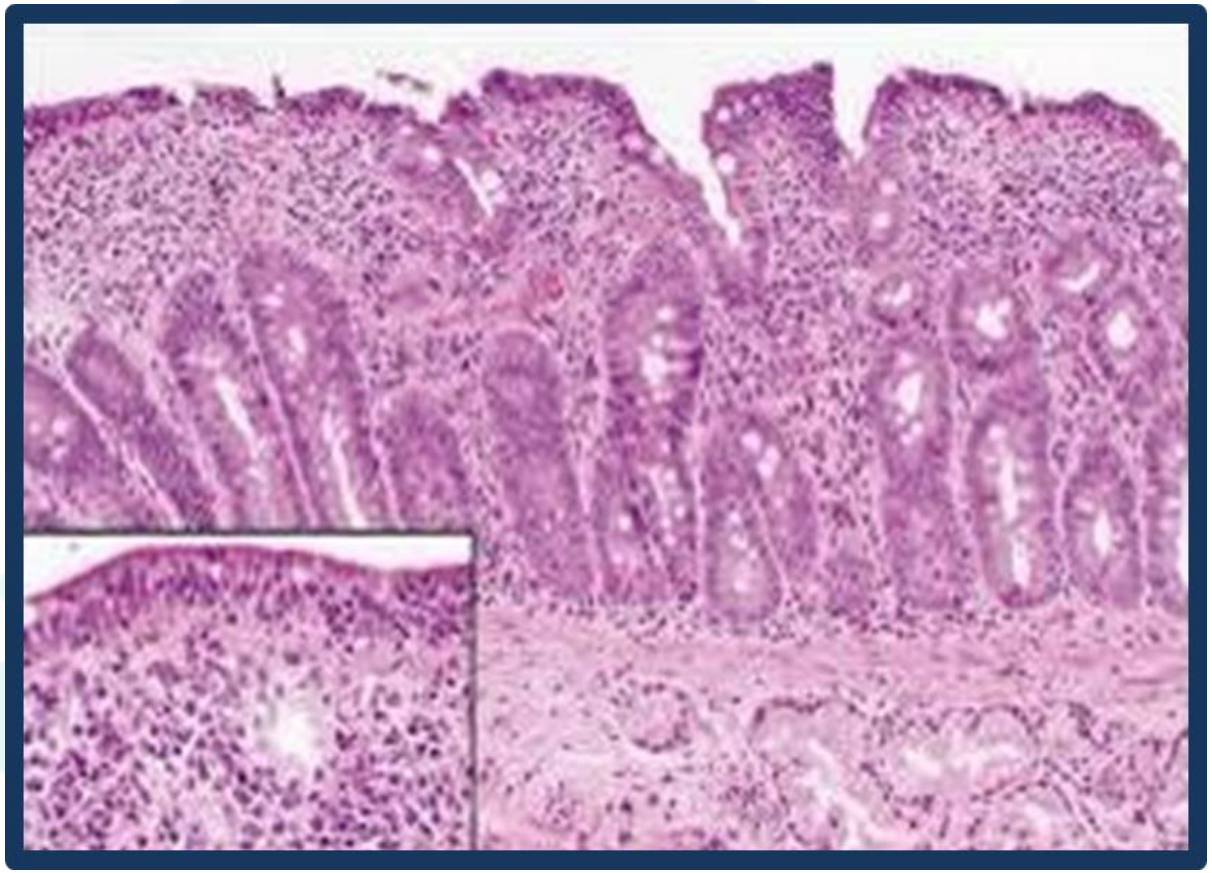
Dermatitis Herpetiformis In Celiac Disease



- Q: A 3 year old boy presented with diarrhea for one month,

- Name 3 histological findings ?
- Your Dx?
- Treatment?



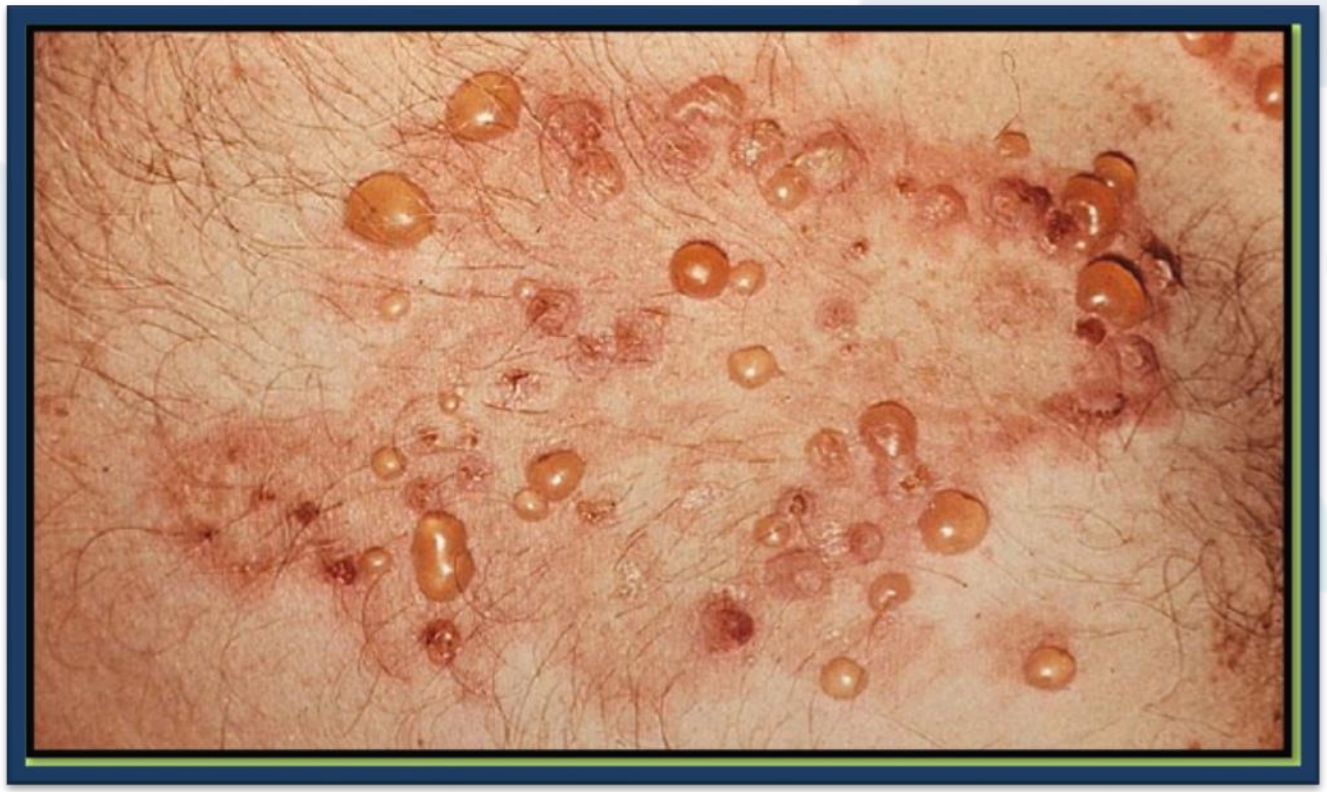


Patient with diarrhea, abdominal pain and other symptoms and lab findings, anti TTG +ve.

1- what's your diagnosis?
2- what's the most common cause of anemia?
3- what's the HLA type?
4- what's the best diagnostic investigation?
5- what's the treatment?

Q: Over a period of 6 weeks, the 18 YO pt began to develop abdominal bloating, pain, & Diarrhea. in CBC: she was anemic.

1) what is the pathology seen in the picture?
2) what is the most likely Dx?



Diverticulosis

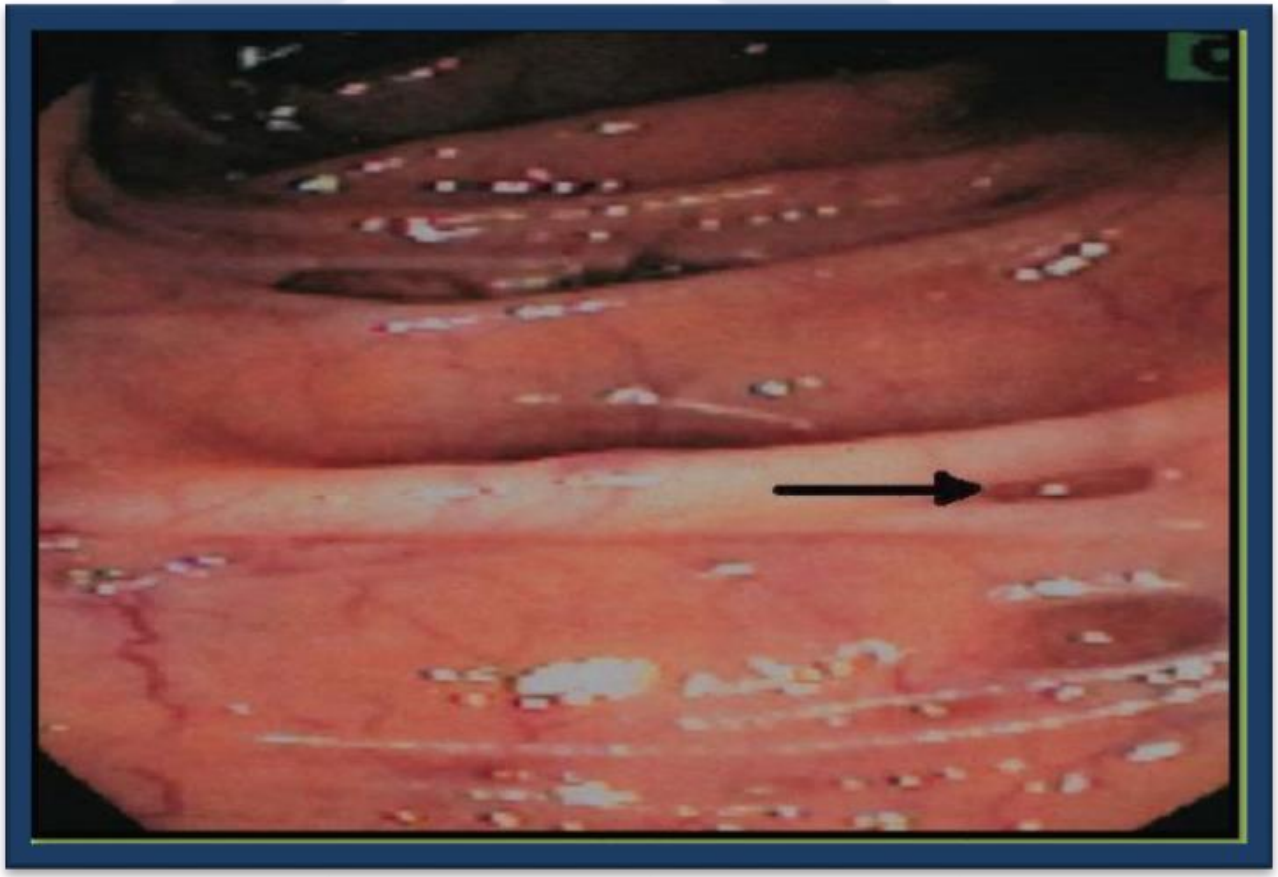
General	**- False outpouching** of the colonic mucosal layers, commonly occurring **where the vasa recta penetrate the colonic muscularis**. - Most commonly found in the **sigmoid colon.** **- Due to** Increased intramural pressure (eg. Constipation) predispose to this condition. - Risk factors: Obesity, diet (low fiber diet, high fat/ meat).
Clinical presentation	Asymptomatic, but very commonly to cause GI bleeding (Painless hematochezia).
Diagnosis	- Often picked-up incidentally with colonoscopy, CT, Barium enema study (test of choice).
Treatment	If asymptomatic: Just monitoring. Bleeds: Resuscitation, colonoscopy (with intervention on active bleeding).
Others	**Complications?** Diverticulitis, perforated viscus, Bleeding.

Diverticulitis

General	**Inflammation and/ or infection** of a **colonic diverticulum.** Risk: Same as diverticulosis.
Clinical presentation	**LLQ abdominal pain**, diarrhea/ constipation, fever.
Diagnosis	- CT (with oral/ IV contrast): Look for **bowel wall thickening, inflamed peri-coloic fat, phlegmons/ abscess.** Note: Colonoscopy/ enema are **contraindicated** during active inflammation.
Treatment	**If Not complicated**: 1. Low risk patient (Oral-Antibiotic= Cipro/ Metronidazole). 2. High risk patient such as **old age or septic patients** (IV ABX/ Pain control/ fluids/ NPO). If complicated: treat the complication
Others	**Complications?** Frank Perforation, Fistula, Abscess. **Folow-up:** Colonoscopy – **6 weeks** after episode resolve.

Q:A 79 YO, is admitted to the hospital with CC: intermittent rectal bleeding for 3 days.

- What is the diagnosis?
- Mention one complication of the diagnosis?
- The most common location?
- Diagnosis?
- Treatment?
- complications?



Intestinal obstruction

General	- Arrest of downward propulsion of the GIT contents. - May be Mechanical or Functional. - **Causes : Adhesion , Hernia , Volvulus , Tumor , metabolic causes : hypokalemia .**
Clinical presentation	Cardinal Sx of IO : Abdominal Pain, Constipation , Vomiting , Abdominal Distention .
Diagnosis	- AXR : **Multiple Air fluid level** - CT .
Treatment	If Mechanical or Complicated → Surgical Ttt.
Others	**Complications?** Perforation → Pertonitits

Causes of intestinal obstruction according to the site:

Duodenum	Small bowel	Colon
Stenosis	Adhesions	Carcinoma
Foreign body (bezoars)	Hernia	Fecal impaction
Stricture	Intussusception	Ulcerative colitis
Superior mesenteric artery syndrome	Limphoma	Volvulus
		Diverticulitis
		Intussusception
		Pseudo-obstruction

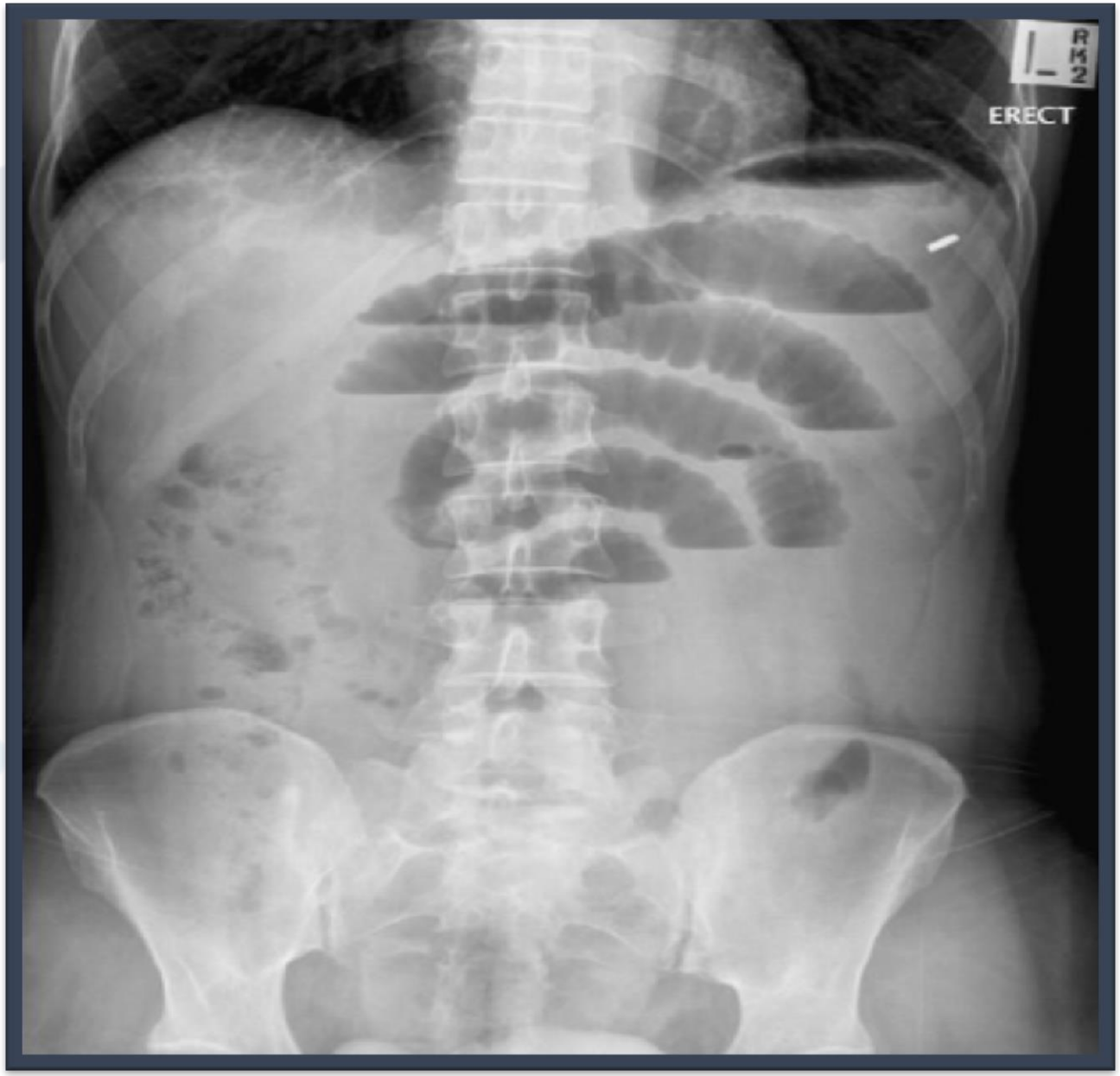
Tinitinalli J, Kelen GD, Stapczynski JS (eds) (2004) Emergency medicine: a comprehensive study guide, 6th edn. McGraw-Hill, New York

Q: What's your diagnosis?

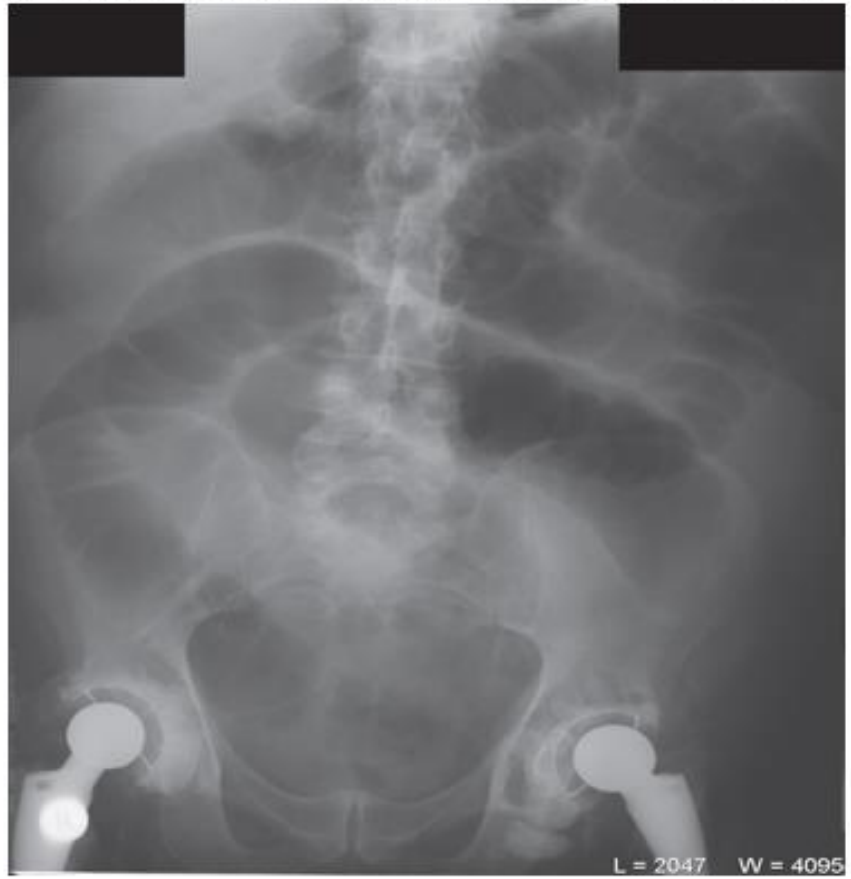
Intestinal Obstruction

Clinical features?

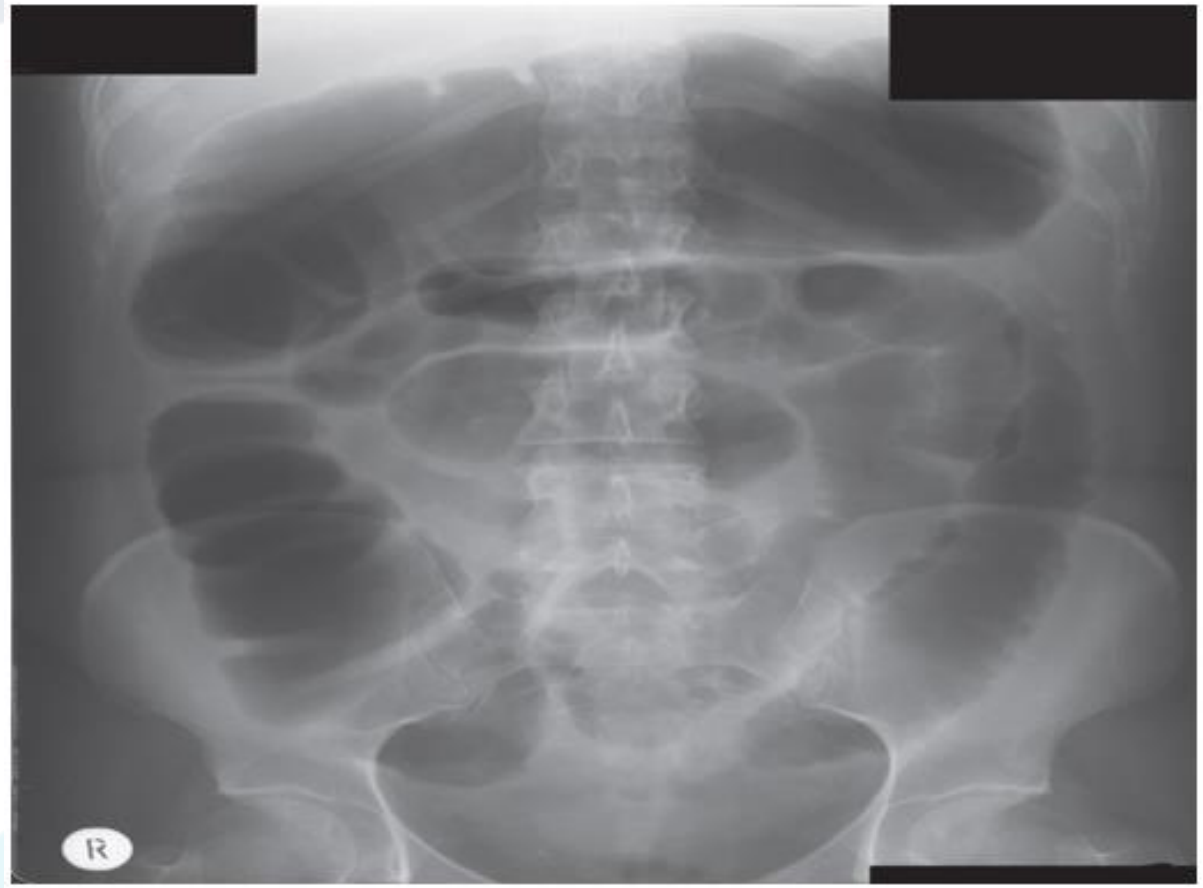
1- Vomiting
2- Abdominal Pain
3- Constipation
4- Abdominal distension



Dilated small bowel loops due to intestinal obstruction



Dilated large bowel loops due to toxic megacolon



Perforated viscus

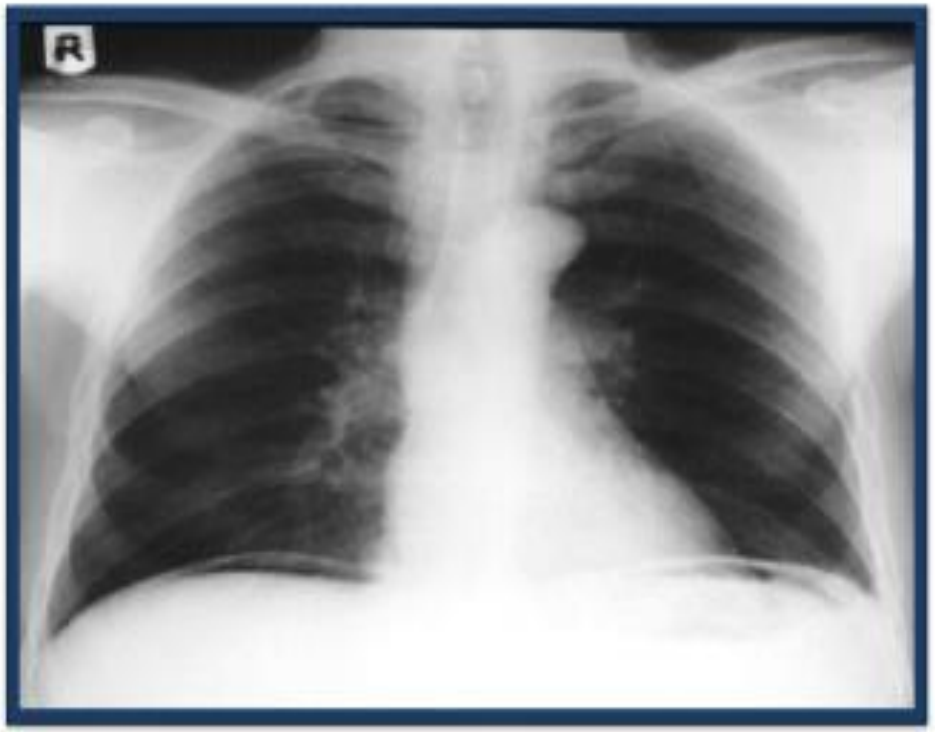
Q: The pt presents with sudden & severe abdominal pain.

What the abnormal finding shown on CXR?

Air Under The Diaphragm .

What is the Dx?

Perforated Viscous.



Causes of air under diaphragm:

- Perforated duodenal ulcer – The most common cause of rupture in the abdomen.
- Perforated peptic ulcer.
- Ruptured diverticulum.
- Penetrating trauma.
- Ruptured inflammatory bowel disease (e.g., megacolon)

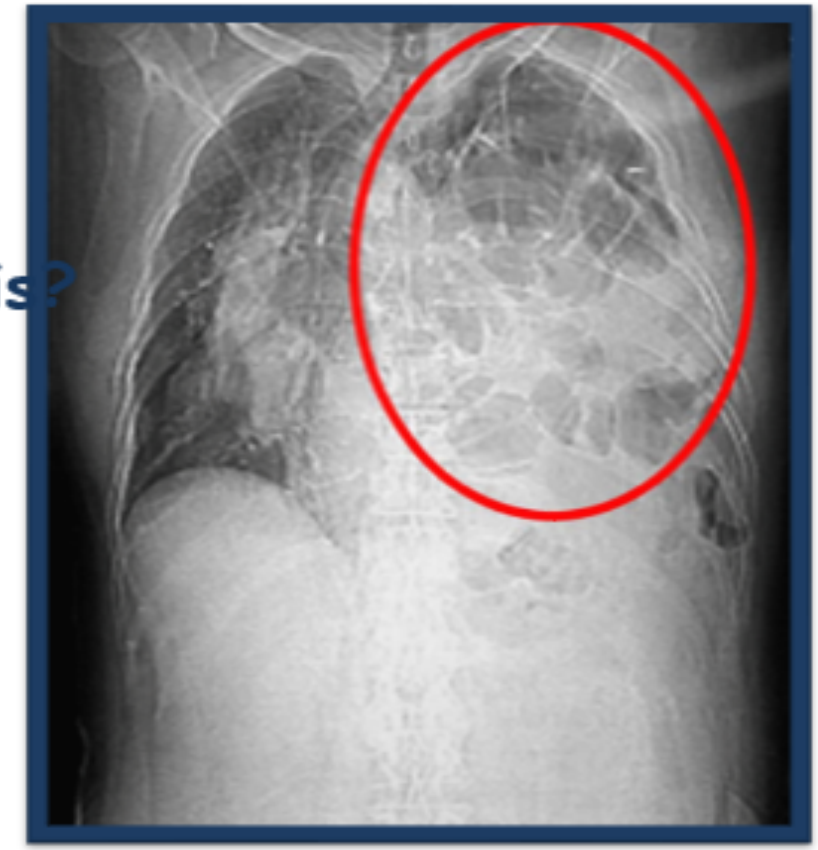
Differential diagnosis

1- A subphrenic abscess
2- Bowel interposed between diaphragm and liver (Chilaiditi syndrome)
3- Linear atelectasis at the base of the lungs
All those can simulate free air under the diaphragm on a chest X-ray.

Treatment:

Depends on cause
Usually a surgical consultation is indicated

Q: Whats the diagnosis ?
Diaphragmatic Hernia



Most comon cause of this condition in adult is?
Trauma

Radiological signs?
1-Abdominal contents in the thorax
2-Distortion of diaphragmatic margin

Clinical Features:
Marked respiratory distress
Decreased breath sounds on the affected side
Palpation of abdominal contents upon insertion of a chest tube
Auscultation of bowel sounds in the chest
Paradoxic movement of the abdomen with breathing
Diffuse abdominal pain

Thank You

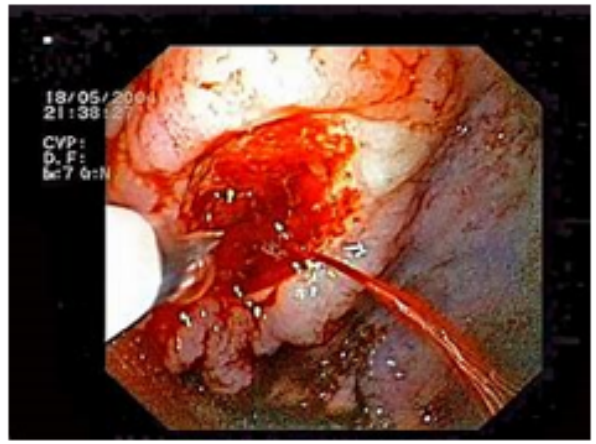
Cases

*46 YO male pt comes vomiting coffee ground blood & black stools. Pulse: 96, RR: 24, BP:100\60. He had dizziness, general fatigue & weakness, SOB , & palpitation at rest.

The first physical sign u want to look for?
postural hypotension.
Indications of severity?
hematochezia, sign and degree of shock (check vital sign).
Management?
IV fluid, Blood.
Mention 3 causes related to your case:
Peptic ulcer gastric or esophageal varix ,esophagitis.
2 confirmatory test:
Upper GI endoscopy, colposcopy.
2 complications related to your case:
Shock , sepsis

a case of bleeding peptic ulcer , with presentation (cant remember) + hg 10 g/dl , which of these isnt indicated

1- IV ppi
2- thermal coagulation
3- blood transfusion
4- metalic clips
5- epinephrine injection



what advice you give to the patient after discharge from the hospital
(the 4 other choices are false (cant remember)

test for h pylori and eradication treatment if present

GIT SECTIONS

Q1: Regarding this Upper GI endoscopy , active antral bleeding , all of the following initial to do , EXCEPT ? Then please mention the most common cause for this lesion

A. IV PPI

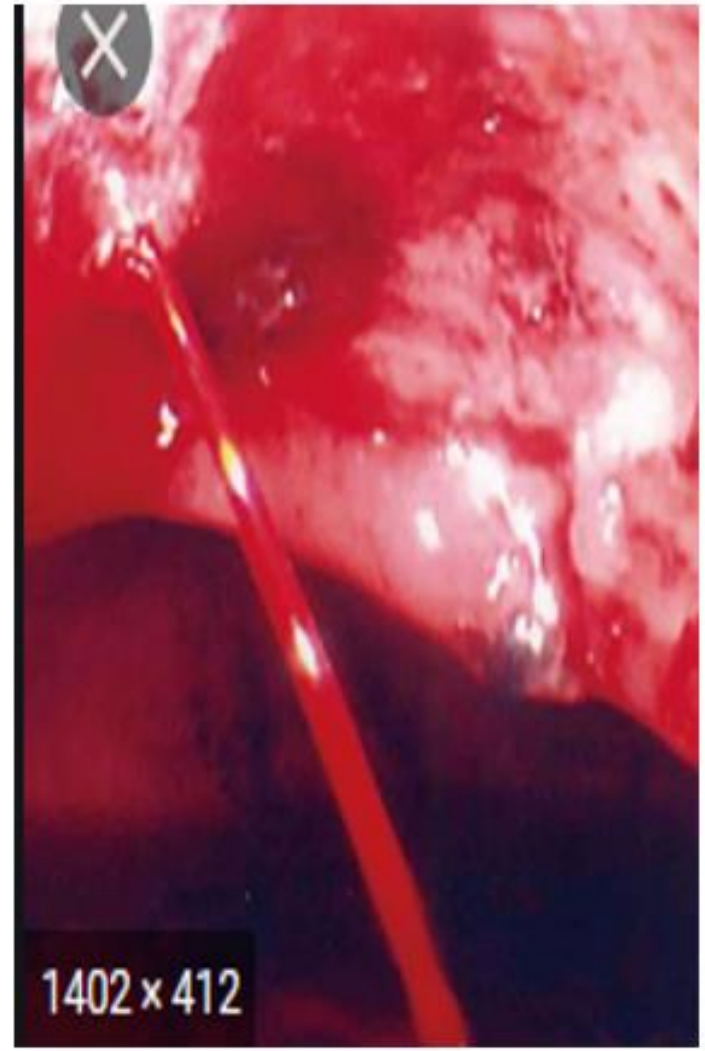
B. Thermal therapy

C. Mechanical Clips

D. Adrenaline Injection

E. Surgery

* H Pylori infection is the most common cause



Q: A previously healthy 36 YO male applied for a job in KSA, his application was refused because of abnormal liver function test. He drinks Alcohol occasionally, he was asymptomatic. his AST and ALT were mildly elevated. (numbers were mentioned in all the following tests, so you should know the normal ranges), his ALP was in normal range, +ve for Hbs IgG, +ve for Hbc antigen & Hbs antigen, –ve for other hepatophilic viruses. There was increase in LDL, Triacylglicerides, and a high BMI. Tests for metabolic and inherited liver diseases were normal.

1- Mention 3 DDx ?
chronic hepatitis B infection, steatohepatits, Autoimmune diseases.
2- Mention 2 tests to confirm your diagnosis ?
(definite Dx) >> Ds-DNA of hepatitis B, Liverbiopsy .
3- Mention 5 health problems associated with his BMI.
DM, HF, HTN, OSA, Atherosclerosis.

Q: A 47 YO pt, known case of liver cirrhosis, presented with decreased level of consciousness. He takes propronolol, furosemide, spironolactone, lansoprazole, lactulose. He has been constipated for the last 2 weeks. His wife noticed abdominal distension. On P/E he is jaundiced, has ascites but no tenderness, paracentesis revealed clear fluid with 55 neutrophils per ml, gram stain was -ve. Lab results

showed hyponatremia, hypokalemia, high creatinine.

1- What's the Dx?

Hepatic encephalopathy.

2- What's the cause of his hypokalemia?

Furosemide.

3- Give 2 possible causes for his condition?

Constipation, Hypokalemia (= diuretics).

Barone Rocks The Official Site of John Barone, M.D.	**Primary Biliary Cirrhosis PBC**	**Primary Sclerosing Cholangitis PSC**
Clinical	• Females > Males • Middle age • Fatigue & pruritis • Cholestatic Labs	• Males > Females • 20-40's • Progressive obstructive jaundice • Cholestatic Labs
Site of Involvement	Intrahepatic	Intrahepatic & Extrahepatic
Cause of Obstruction	Granulomatous inflammation destroying bile ducts	Fibrosis destroying bile ducts
Key Microscopic Feature	Florid duct lesion (granulomas)	Concentric "onion-skin" fibrosis around bile ducts
Diagnostic clue	Anti-mitochondrial antibodies (AMA) - Antibodies against the subunit of pyruvate dehydrogenase complex	Beaded appearance of bile ducts on cholangiogram/ERCP/MRCP Baronerocks.com
Association	Other autoimmune disorders Sjögrens, RA, etc.	Ulcerative colitis
Long-term Complication	Cirrhosis	Cirrhosis Cholangiocarcinoma

Q: A male patient presented complaining of itching for 3months not responding to antihistamine. His lab data:

- -Total protein 85 / Albumin 35 / Bilirubin 80 / Direct 20
- -GGT and ALP high
- -Antimitrochondial titer positive 1/280.
- -ALT and AST normal.
- -Ultrasound normal

Mention two signs on the examination of this patient.
Jaundice / spider nevi … etc
What is the Diagnosis ?
Primary biliary cirrhosis.
What is the finding expected on ERCP?
Some said obstruction, others answered normal. We're not sure?
Diagnostic confirmatory test?
Liver biopsy.
What's the treatment for his itching?
Cholestyramine.

Q: A 30 YO female patient presented with jaundice & itching. Can't recall the rest of the case!

In lab results there was direct hyperbilirubinemia, AST & ALT were slightly high, ALP = 800, +ve anti-mitochondrial antibody, biliary tree is normal (on US).

1.What's your diagnosis ?
Primary Biliary Cirrhosis.
2. Mention 2 serological test ?
ANA , AMA (antimitochondrial antibodies).
3. Best diagnostic test ?
Liver biopsy
4. Treatment?
Ursodeoxycholic acid or ursodiol fist line of treatment
Liver transplant if less aggressive treatment have failed or develops liver failure.

Q: A 55 year-old woman presents complaining of fatigue for the last 2-3 months, Yellowish discoloration of her sclerae, Arthralgia, & itching. She doesn't have fever, hx is negative for a recent infection, ill- contacts, or blood transfusion.

On examination, HR: 74/min, BP: 128/76 mmHg. Liver is not palpable but the spleen is felt 2 cm under the left costal margin. It is not tender.

All lab investigations for Hepatitis viruses were negative.

Total bilirubin 84 mmol/L (3–17 mmol/L) Direct bilirubin 2 mmol/L (1.0–5.1 mmol/L), ALP 794 IU/L (30–300 IU/L), Gamma-glutamyl transpeptidase 568 IU/L (11–51 IU/L), ALT 63 IU/L (5–35 IU/L), AST 50 IU/L (10 to 34 IU/L).

Ultrasound reveals normal liver, biliary tract, & pancreas., No gall bladder stones, & no dilatation in intra- or extra- hepatic bile ducts.

What is your diagnosis?

Primary biliary cirrhosis

What additional tests will you order?

Antimitochondrial antibodies (AMA), ANA, anticentromere antibodies

What is the diagnostic confirmatory test?

Liver biopsy (Although it's not routinely used to confirm the diagnosis!).

What other diseases are you expecting to accompany this condition?

Sjogrens syndrome, systemic sclerosis, lupus , rheumatoid arthritis, hypothyroidism.

What is the cause of xanthelasma?

Hypercholestremia

Q: A pt presented with pallor, fatigue, cold intolerance, ... The pt also had Vitiligo. [They gave us the result of the pt's CBC which showed that the pt had pan-cytopenia; all the blood elements are low].

What is the most probable diagnosis?

Pernicious anemia.

What's the cause of the patient's "cold intolerance"?

Hashimoto's thyroiditis.

What finding can you see in an upper GI endoscopy for this patient?

Chronic atrophic gastritis.

What is the drug used to treat this condition?

Vit B12 supplements.

Mention the route of administration for this drug.

Intramuscular.

Q: patient presented with bloody diarrhea , fever , cramping abdominal pain:

-mention 3 important investigations to be done in the emergency room .

CBC
urea,creat,electrolytes
stool analysis, stool culture

- What's your first line management ?

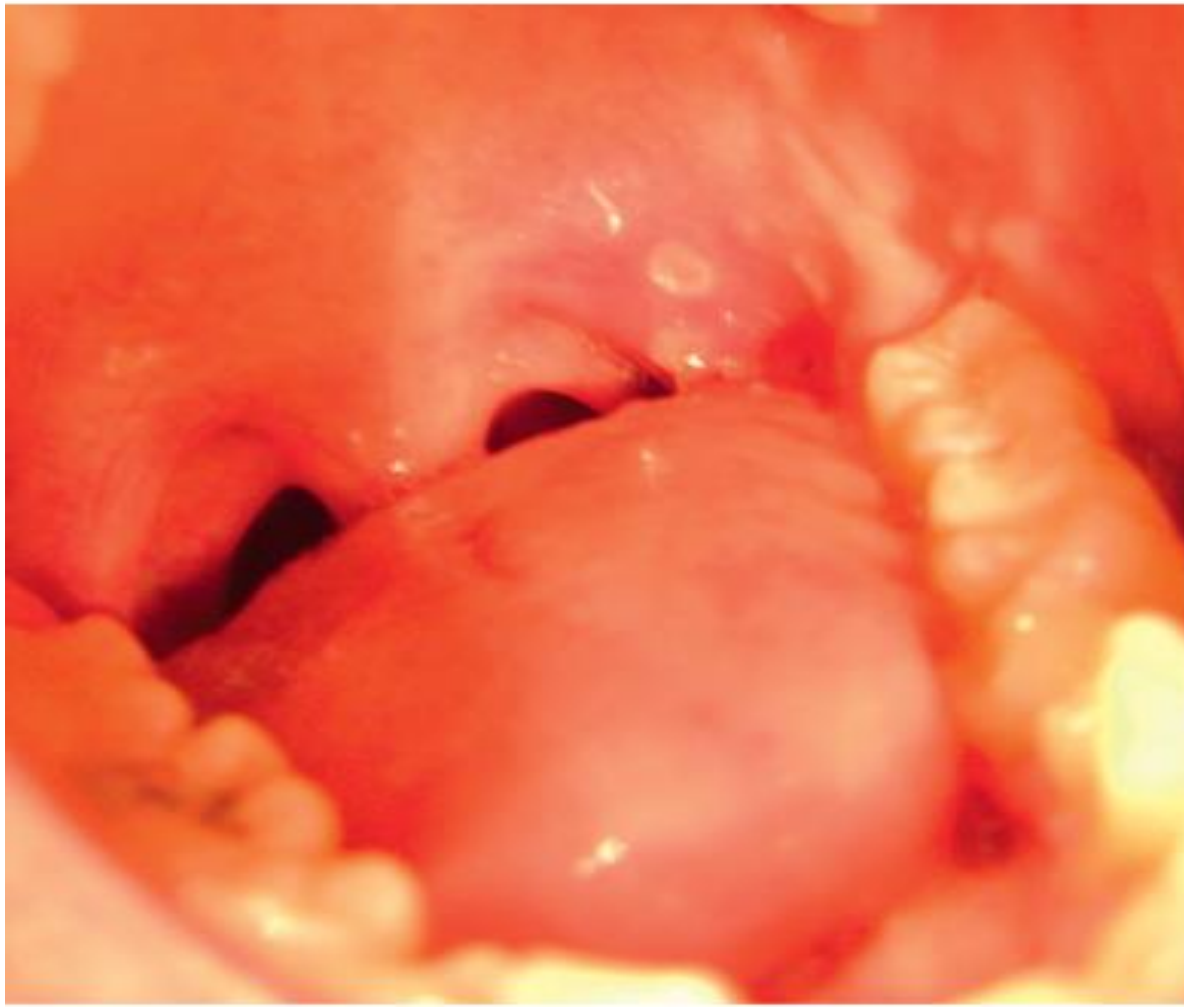
IV fluid

Q: A 40 Year old Woman , with 1 month history of Upper abdominal discmofort ,
Fatigue , pruritis , on examination she is found to be icteric , and the liver is palpated 3 cm
below costal margin a liver function test ordered and the result was as following :
Albumin 30 g/l
AST 167 u/l
ALT 189 u/l
ALP 170 u/l
Total Bilirubin 30 umol/l
direct bilirubin 12 umol/l

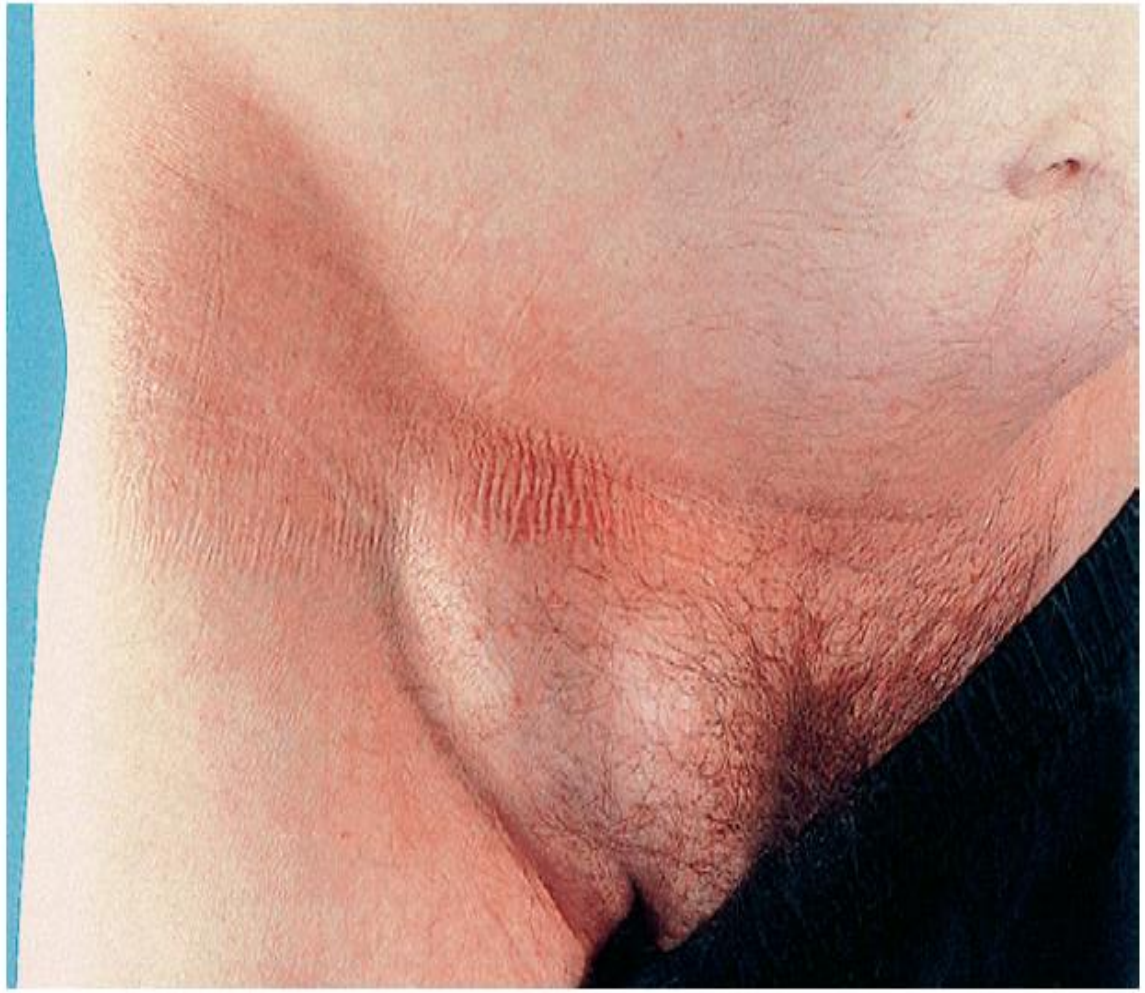
1) what is best test to screen for hepatitis B inf?
Hepatitis b Surface antigen
2)what is the best test to screen for hepatitis C inf?
Hepatitis C antibodies
3) if both hepatitis B and C were negative what is the most likely diagnosis ?
Autoimmune
4) Mention 2 seromarkers for this diagnosis ?
ANA, antismooth muscle antibodies

Macleod pictures

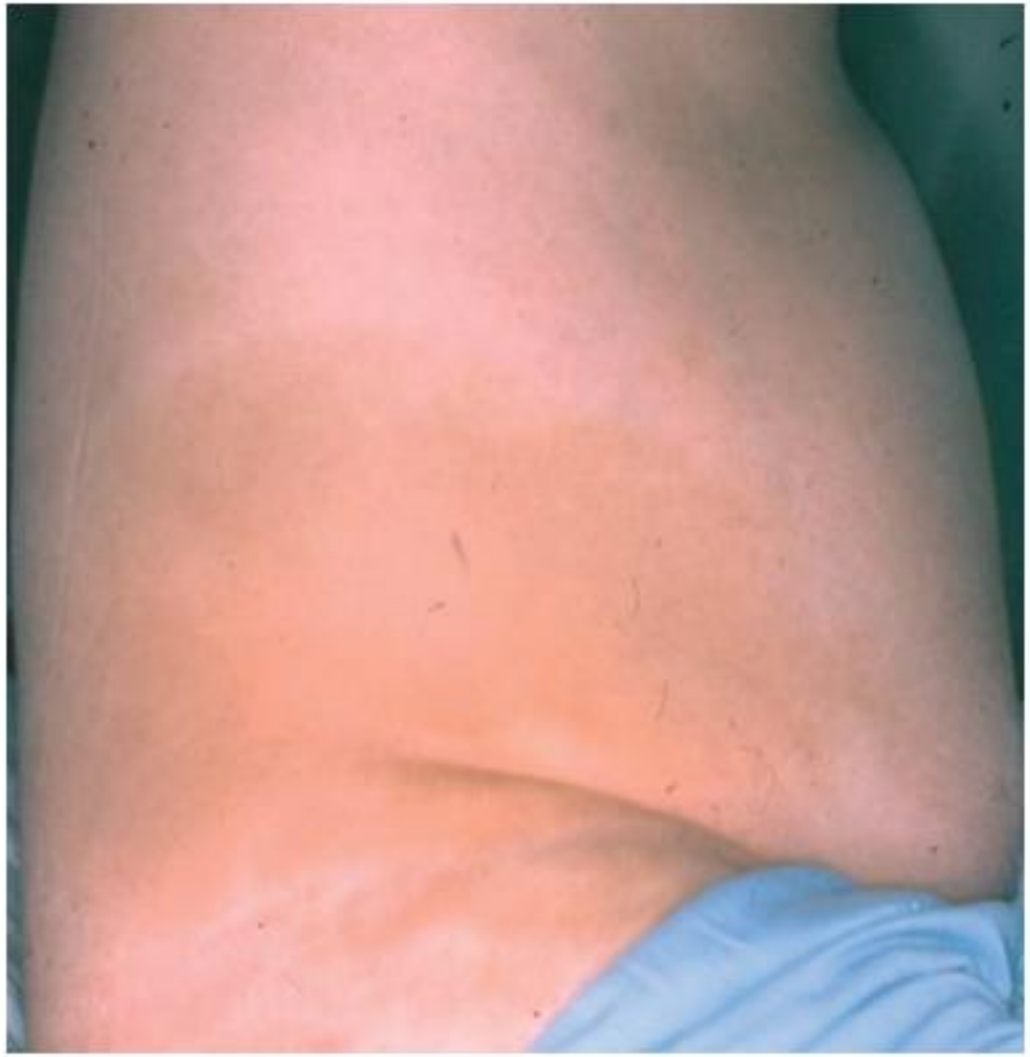
Aphthous ulcer



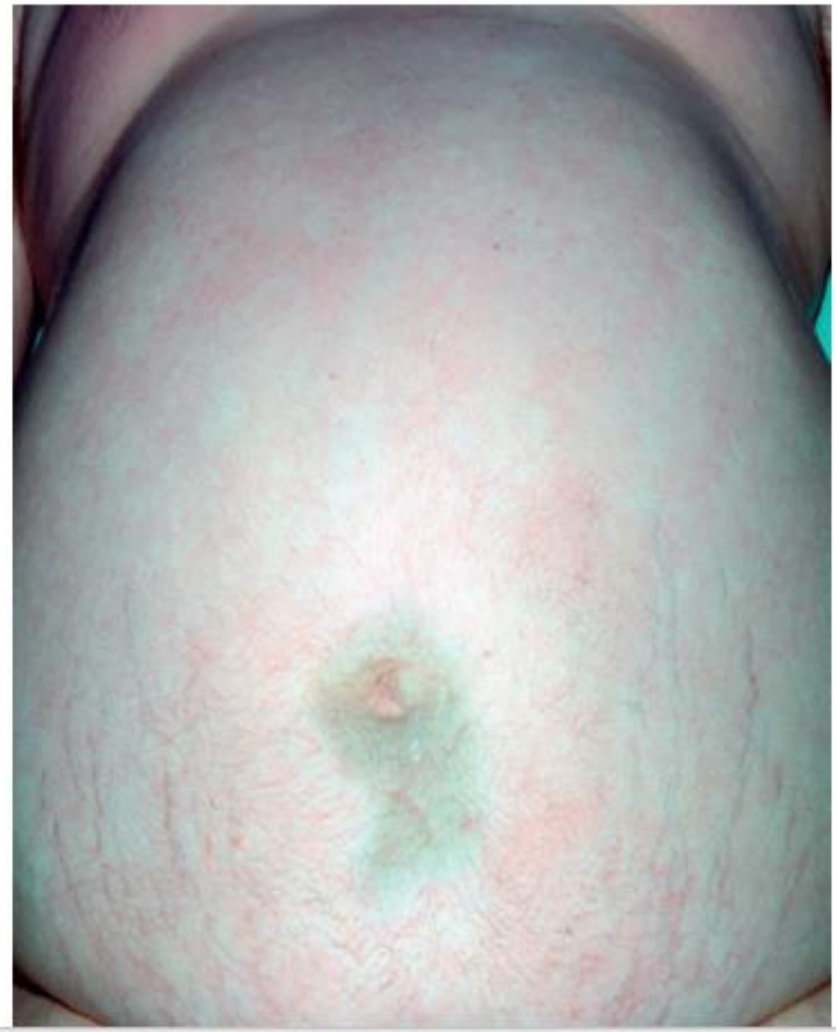
Right inguinal hernia



Grey-turner sign



Cullen sign



Thank You