

LOWER GI DISEASE



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GUMS
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IBS

Irritable bowel syndrome

MOST COMMONLY DIAGNOSED GI CONDITION.

- **FUNCTIONAL GI DISORDER:**

Chronic abdominal pain

Altered bowel habits

Female>male

Increase health care cost

Second highest cause of absenteeism

PATHOPHYSIOLOGY

- **Gastrointestinal motility**
- **Visceral hypersensitivity**
- **Intestinal inflammation**
- **Post infectious**
- **Alteration in fecal microflora**
- **BOG**
- **Food sensitivity**
- **Genetics**
- **Psychosocial dysfunction**

ASSOCIATED CONDITIONS

- **Fibromyalgia**
- **Chronic fatigue syndrome**

GERD

Dyspepsia

Non cardiac chest pain

Depression, anxiety, somatization

CLINICAL MANIFESTATION

- **Abdominal pain(Excess Abdominal Surgery),
bloating Flatulence or belching**
- **Altered bowel habits**
 - **Large volume diarrhea**
 - **(Bloody**
 - **Nocturnal**
 - **Greasy(NO)**

DIAGNOSIS

● **Rome IV criteria for IBS** – According to the Rome IV criteria, IBS is defined as recurrent abdominal pain, on average, at least one day per week in the last three months, associated with two or more of the following criteria:

- **Related to defecation**
- **Associated with a change in stool frequency**
- **Associated with a change in stool form (appearance)**

INITIAL EVALUATION

- History: Medication ,gastroenteritis Family history of IBD&CA celiac disease
- physical exam(NL ,MILD TENDER)
- LAB TEST(CBC)
- **Diarrhea(fecal calprotectin)**
- **Giardia,celiac,CRP**

ALARM FEATURES

- **Age of onset >50 y/o**
- **Rectal bleeding or melena**
- **Nocturnal diarrhea**
- **Progressive abdominal pain**
- **Unexplained weight loss**
- **Lab abnormality (IDA, elevated CRP or fecal calprotectin/lactoferrin)**

PTS WITHOUT ALARM FEATURES

- **No additional testing needed**
- **Only initial evaluation**

TREATMENT

ALARM SIGN??

INITIAL THERAPY

Clinician-patient relationship

Mild &intermittent symptoms :Life style &dietary modification

Moderate to severe symptoms that affect quality of life(Pharmacologic therapy)

Constipation,Diarrhea,abdominal pain

Exclusion of gas producing food

lactose-free diet

Low FODMAP diet

gluten free diet

Fiber??

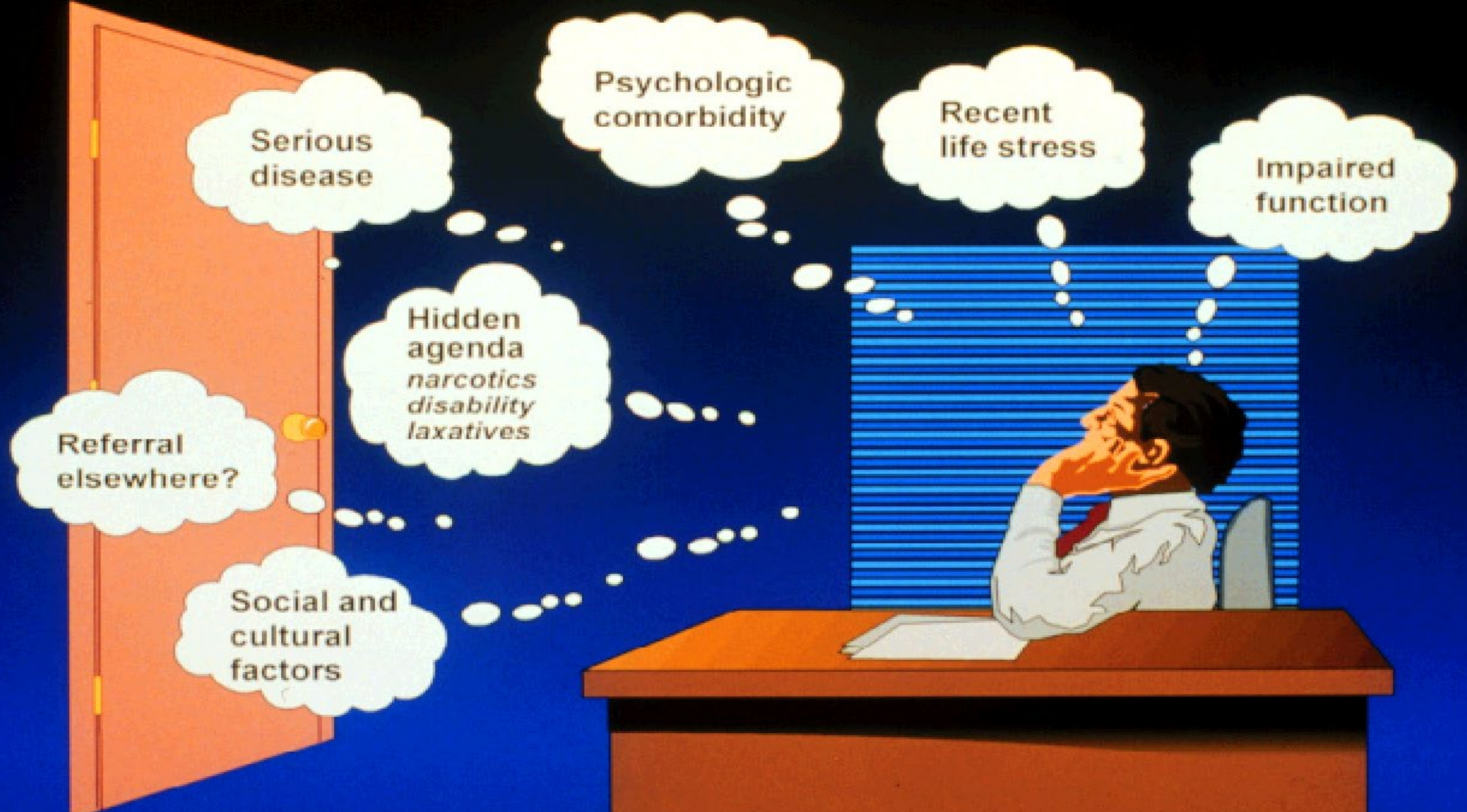
Physical activity

• **Probiotics???,Anxiolytics?? Herb? ,Accupuncture? Fecal microbiota transplantation?**

IBS - Patient's Agenda



IBS - Doctor's Agenda



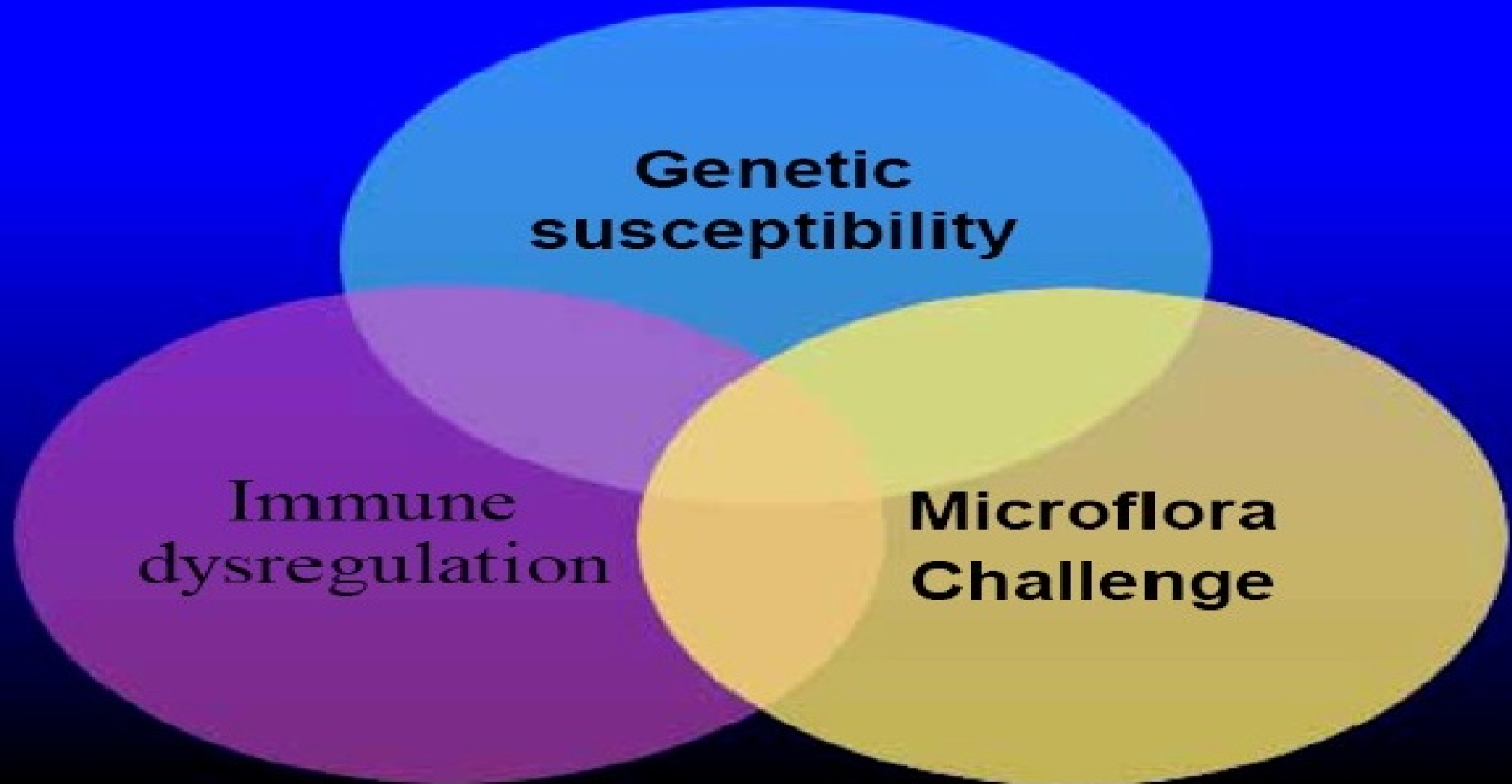
**Factors
Associated
with Better
Outcome**

- **Diarrhea**
 - Chaudhary, 1962
- **Post-infectious**
 - Chaudhary, 1962
- **Anxiety**
 - Fowlie, 1992; Lembo, 1996
- **Short history of symptoms**
 - Danquechin, 1994
- **No abdominal surgery**
 - Svendsen, 1985
- **Positive MD / patient relationship**
 - Owens, 1995
- **Male gender**
 - Harvey, 1987

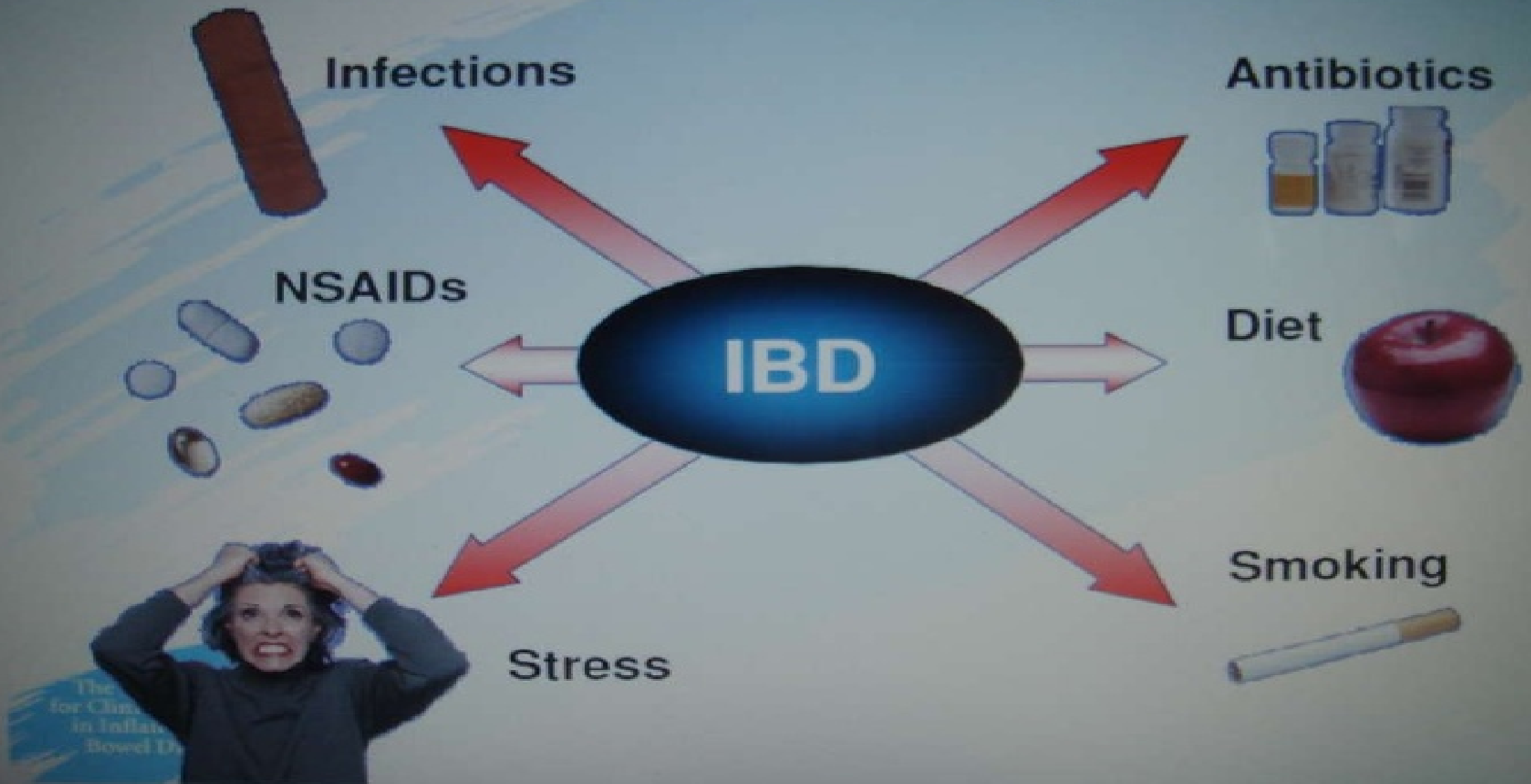
**INFLAMMATORY
BOWEL DISEASE
(IBD)
UC&CROHNS
DISEASE**

- `Age(15-30,60_80)`
- `Urban>rural.`

Etiologic Factors in IBD



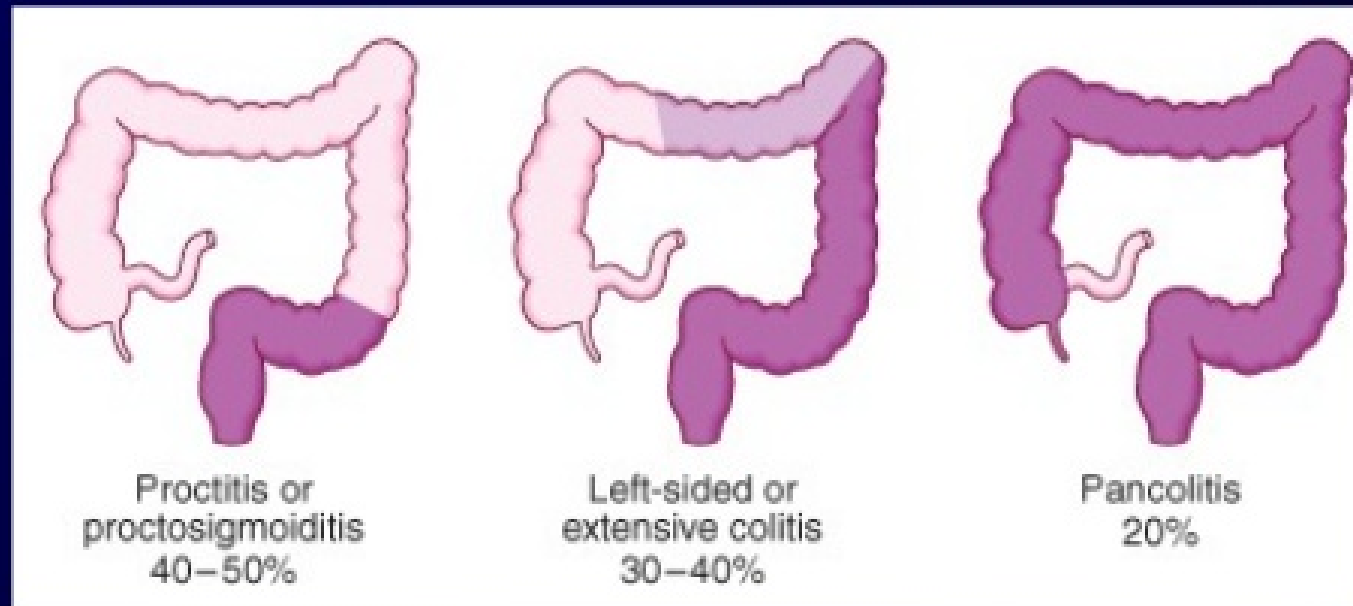
Environmental Triggers



CLINICAL MANIFESTATION

- **Diarrhea, Rectal bleeding, Tenesmus**
- **Sever pain is not common**
- **Anorexia, N, V, fever, wt loss**

- **Extensive colitis:** Involvement extending proximal to the splenic flexure.
- **Pancolitis (universal colitis):** Involvement of the entire colon. It is may be associated with inflammation of the terminal ileum (**backwash ileitis**).



Disease Presentation

	Low	Moderate	Severe
Depositions	<4/day	4-6 day	>6 day
Blood in stool	Few	Moderate	Intense
Fever	No	Mean <37.5°C	Mean > 37.5°
Tachycardia	No	<90	>90
ESR	<30 mm		>30 mm
Endoscopic aspect	Erythema, decrease of vascular model, fine granularity.	Intense erythema, thick granularity, absence of vascular marks, contact hemorrhage, no ulcerations.	Spontaneous hemorrhage, ulcerations.

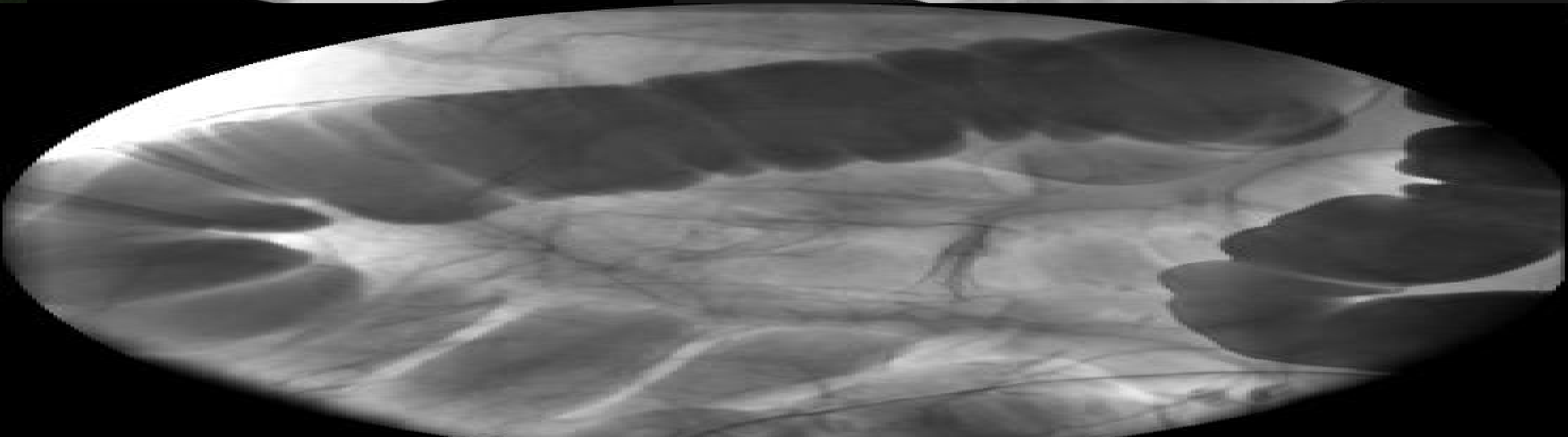
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LAB DATA

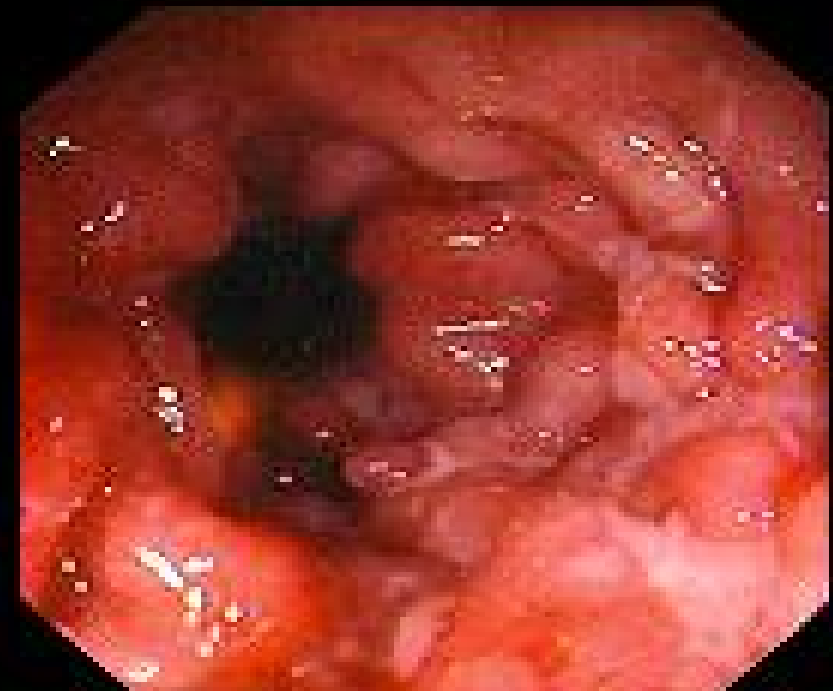
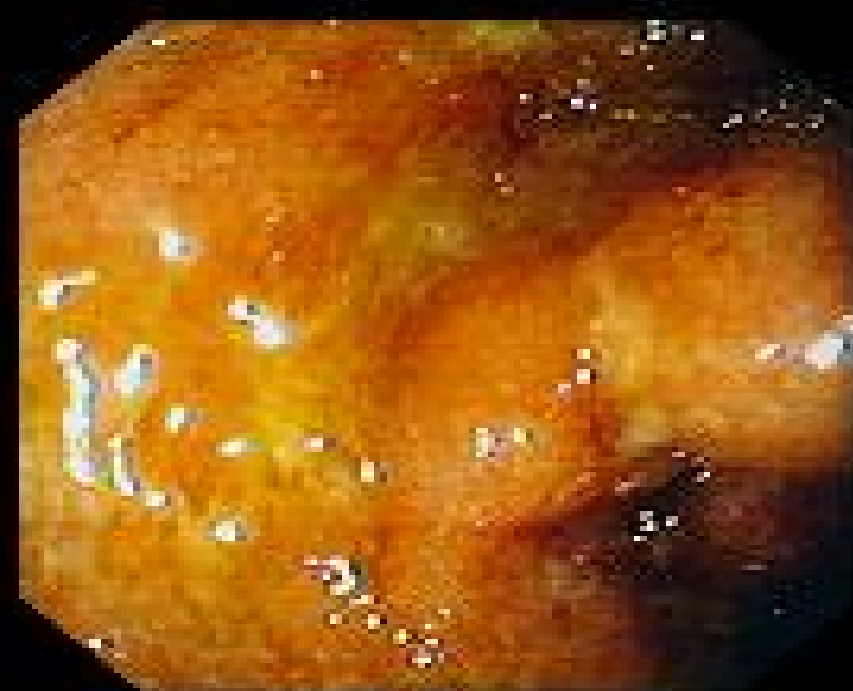
- **Acute-phase reactants:**
[CRP]), ESR
- platelet count
- hemoglobin..
- Albumin
- **Fecal calprotectin**
-



- **Abdominal x-ray**
- **Barrium enema???**







COMPLICATIONS:

- **Sever Attack(10%)**
- **Massive bleeding(3%)**
- **Perforation,**
- **Stricture(wrong diagnosis,malignancy)?**
- **Fulminant colitis Toxic megacolon(most sever complication)0-2% mortality**
- **Post splenic involvement**
- **Proctitis&proctosigmoiditis have no chance**
- **More than 10 yrs :Colorectal cancer**

CLINICAL MANIFESTATION OF CROHNS DISEASE(CD)

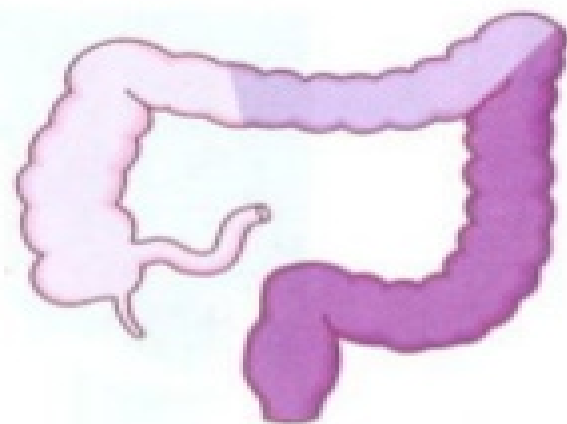
- More variable than UC.
- symptoms for many years prior to diagnosis
- **Abdominal pain**
- Diarrhea
- Weight loss
- Fistula
- Phlegmon/abscess
- Perianal disease
- Malabsorption: B12, folate and vitamins A, E, and K.
- Zinc, selenium, copper, and magnesium

- **Illeitis 30-40%**
- **Illeocolitis 40-50%**
- **Colitis 15-25%**
- **1/3 rectal sparing, fistule 1/3 (liver, pancreas)**
- **Full thickness, pseudopolyp, cobble stone appearance**

Ulcerative colitis



Proctitis or
proctosigmoiditis
40–50%

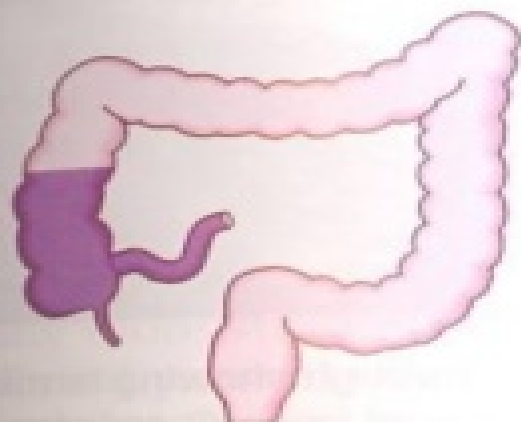


Left-sided or
extensive colitis
30–40%

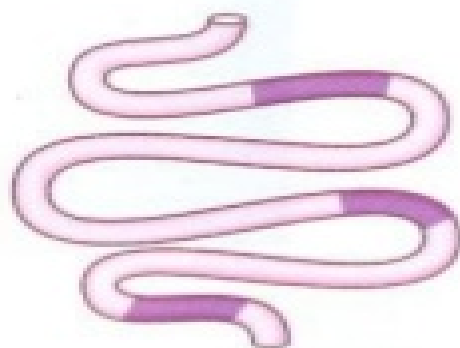


Pancolitis
20%

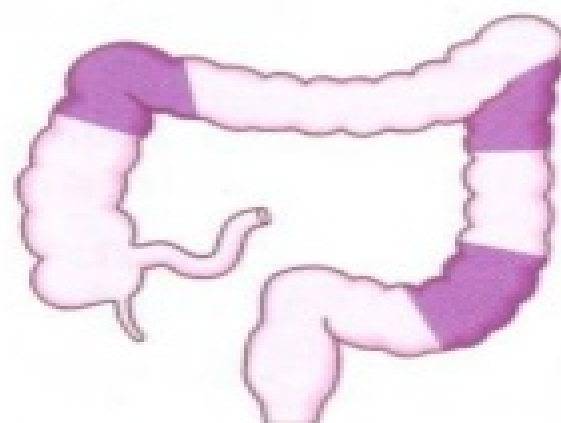
Crohn's disease



Ileal or ileocolonic
40%



Small intestinal
30–40%



Crohn's colitis
c. 20%



- Vit B12,Thrombocytosis,ESR ,Albumin Anemia,WBC

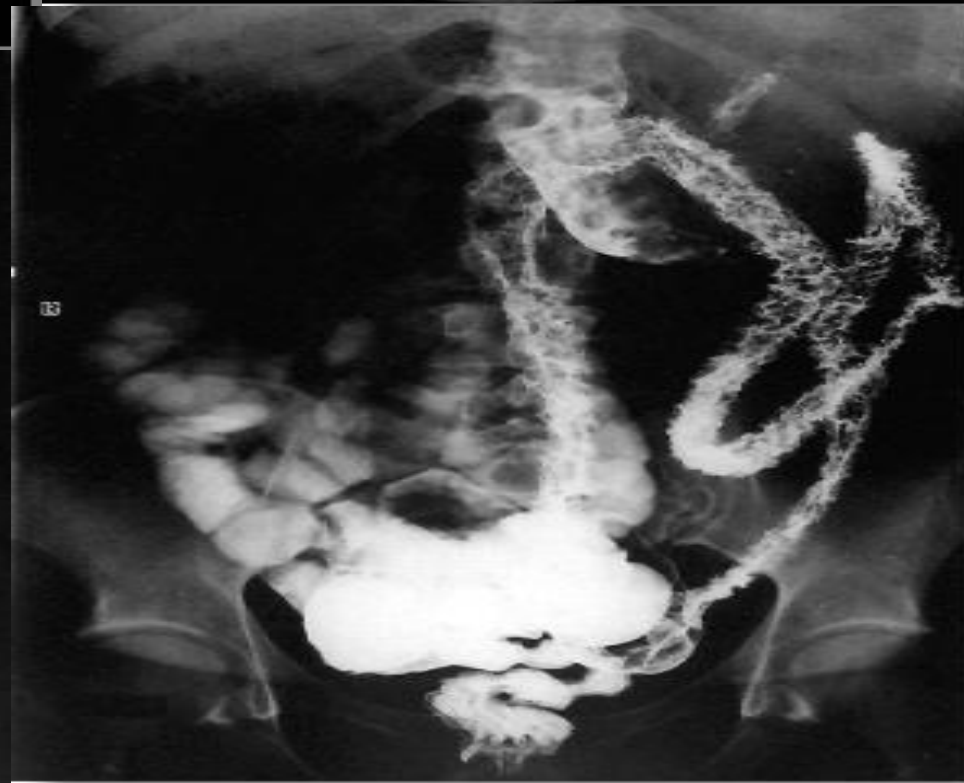
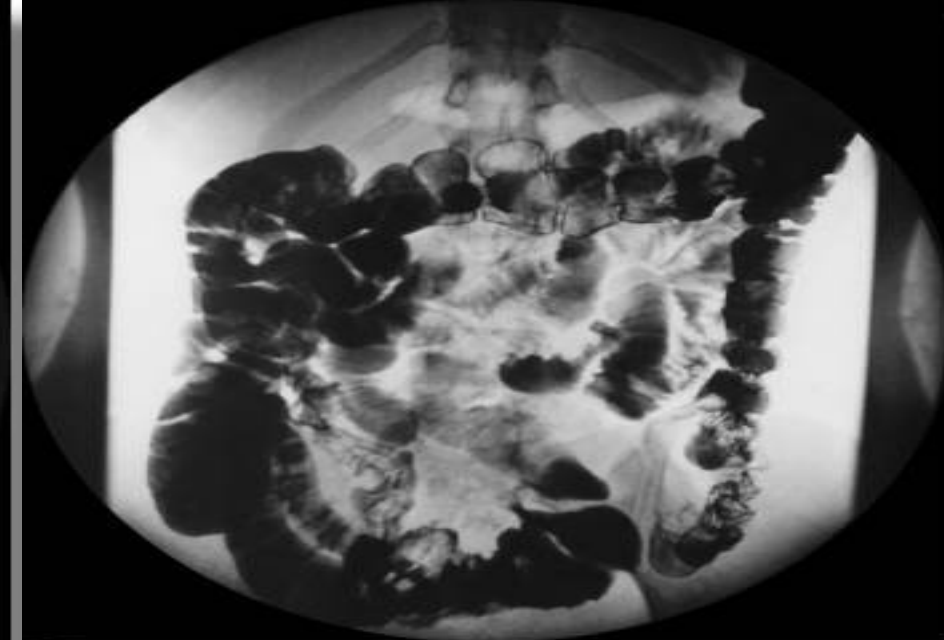
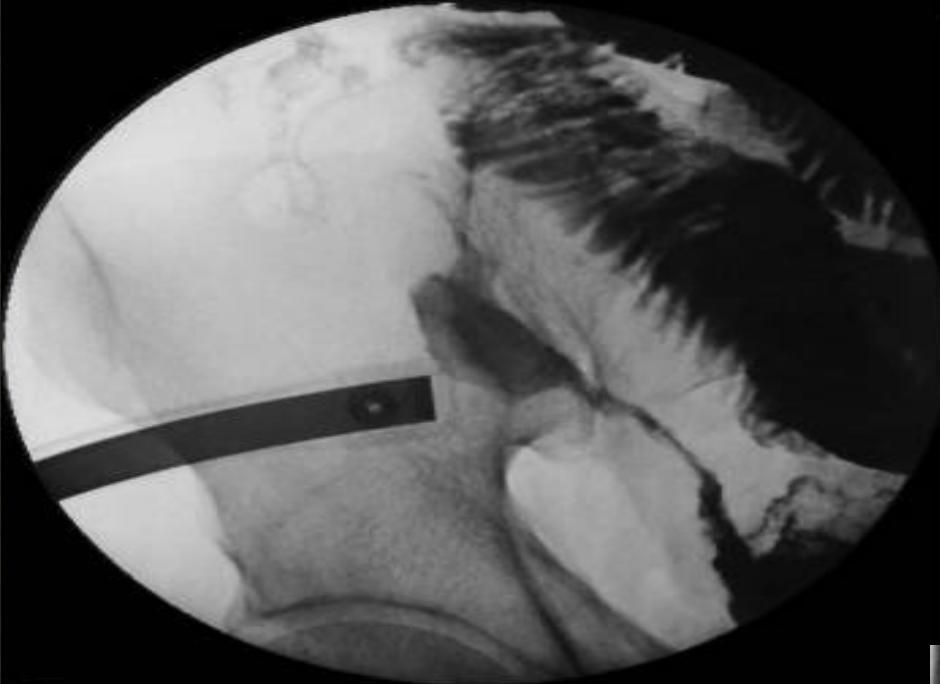
- Endoscopic finding

- string sign,Aphtus lesion,cobble stone appearance

- Serologic assay::

- pANCA(60-70%UC,5-10%CD)

- ASCA(60-70%CD,5-10%UC)



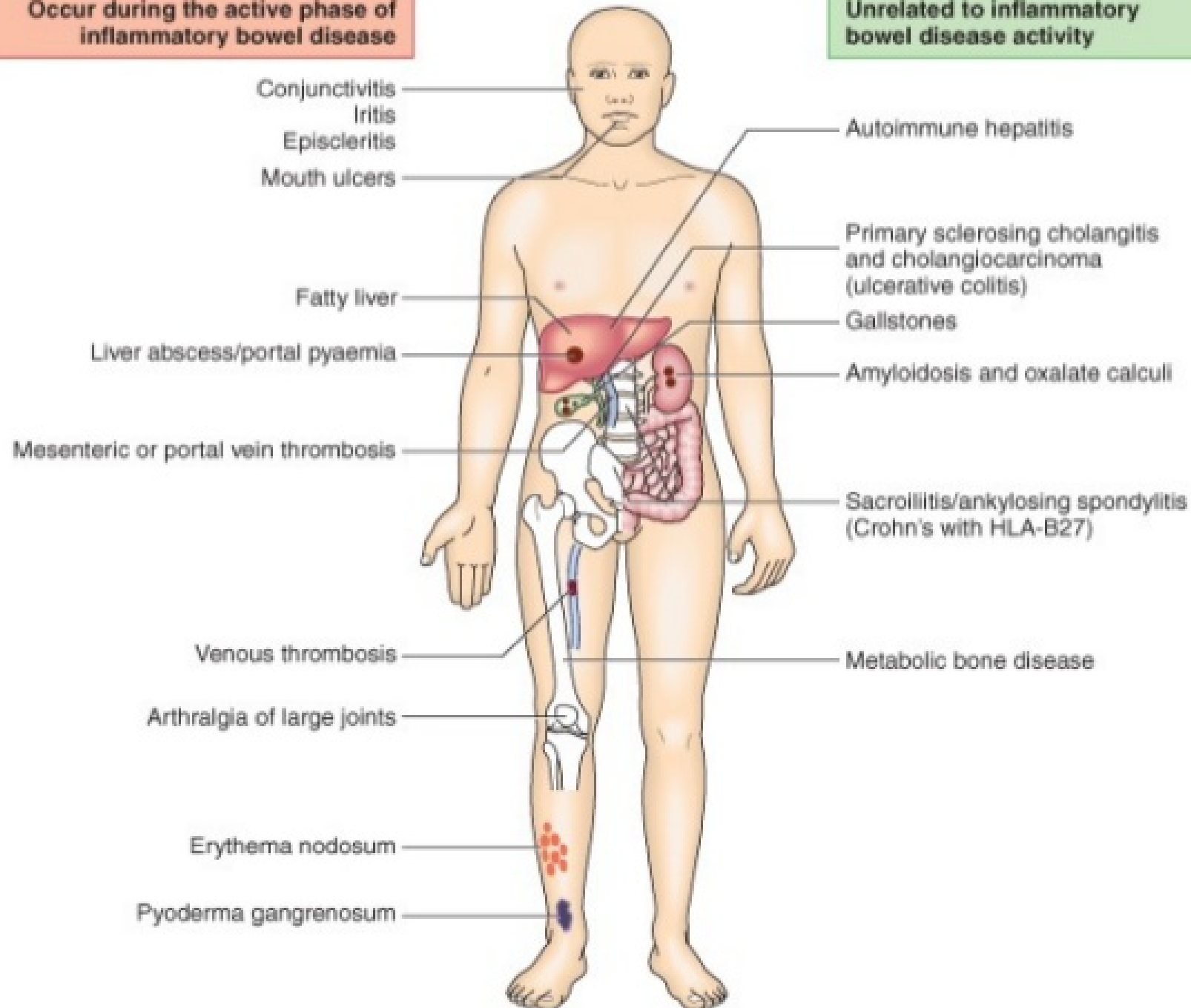
DIFF. DIAGNOSIS

- 10-20% not possible
- **Infectious** (salmonella, yersinia, clustidium deffici, mycobacterium, HSV, CMV, HIV, ameboa, histoplasmosis, candidiasis, parasitic infestation)

Non infectious :Diverticulitis, ischemic colitis
, radiation colitis, NSAID induced colitis, SRU

Occur during the active phase of inflammatory bowel disease

Unrelated to inflammatory bowel disease activity

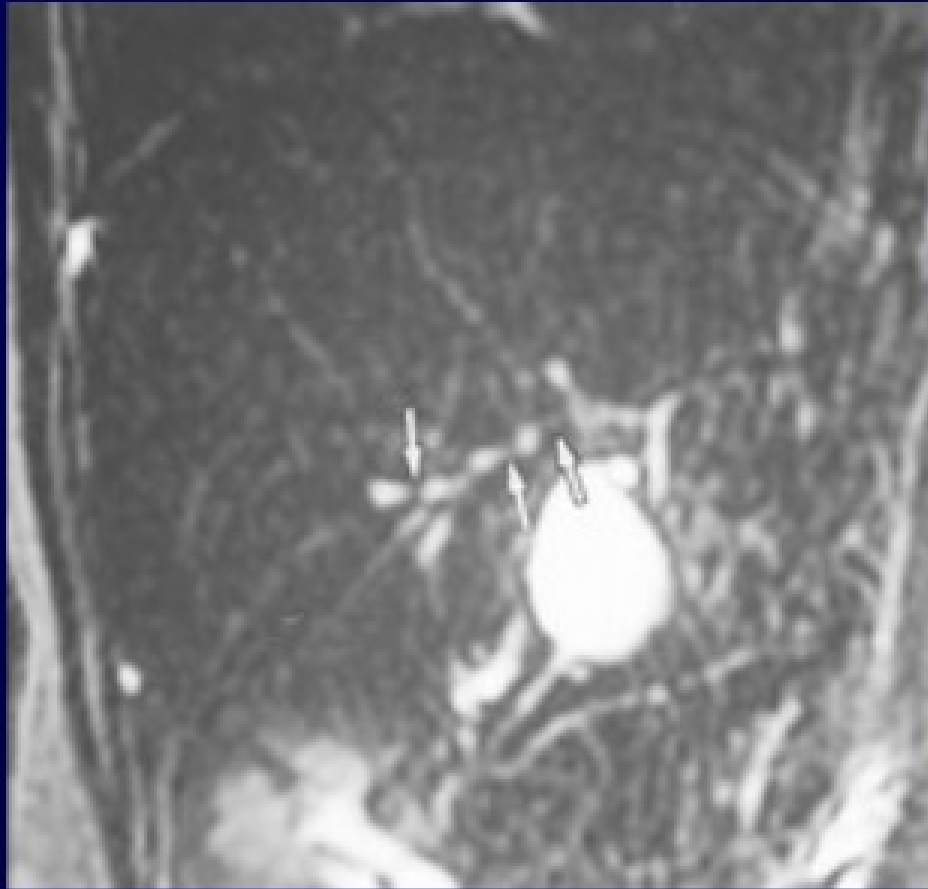


EXTRAINTESTINAL MANIFESTATIONS

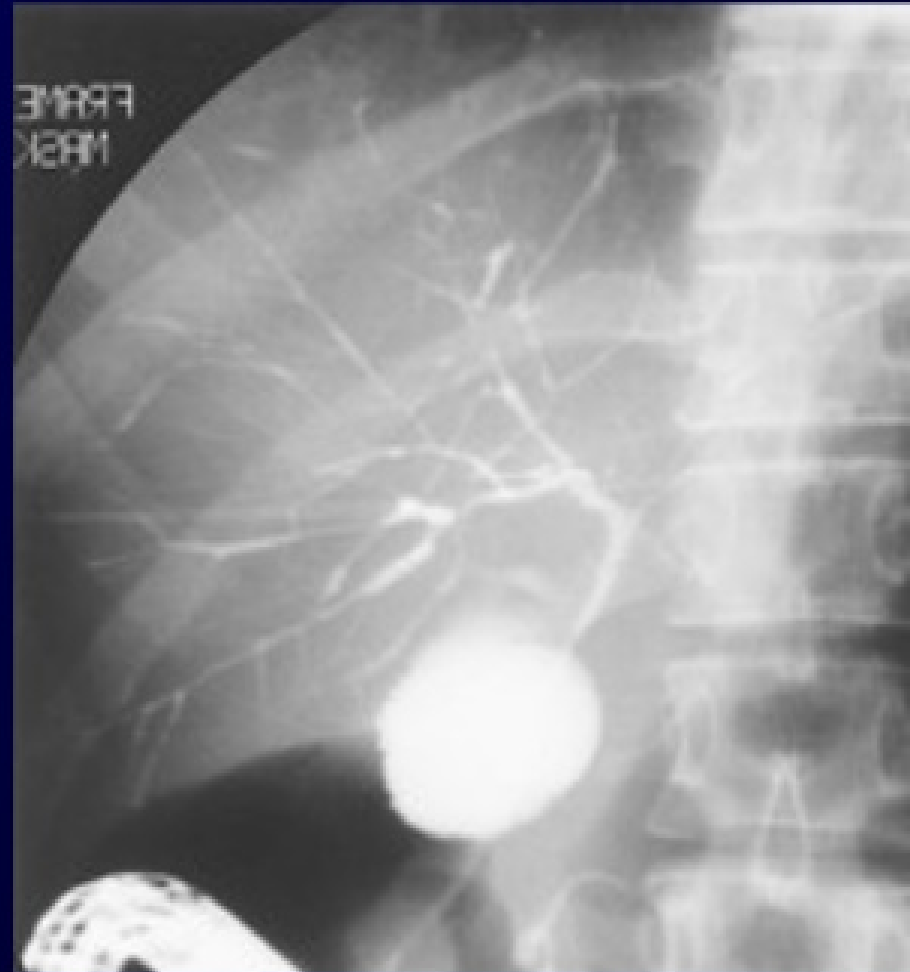
- Most common **arthritis, active disease**
- Hepatic complication(PSC)

Extra-intestinal Complications of UC

Primary sclerosing cholangitis (PSC)



MRCP



ERCP



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THROMBOEMBOLIC MANIFESTATIONS

- DVT, Pulmonary emboli, CVA
- Reactive ↓
thrombocytosis, factor 5, 8, fibrinogen, thromboplastin, antithrombin 3

OTHERS

- Osteoporosis
- Endocarditis, myocarditis, pleuropericarditis.ILD
- CD(amyloidosis)
- pancreatitis

TREATMENT

5-ASA (**Allergic reaction**)

Steroids

Antibiotics

- Immunesuppress drugs(**Azathioprine**) **MTX, Cyclosporine**
- **Anti TNF(INFLEXIMAB)**
- **Surgical treatment**

PROGNOSIS:

- Good for first attack
- Mortality in sever form
- 17% in >60y/o
- 2%in 20-59y/o
- 20% in toxic megacolon

IBD & PREGNANCY

- In active disease abortion, still birth, congenital

Anomally (6 months) ↑

Drug?

Increase infetal mortality and abortion
post surgery

RISK OF COLON CA IN UC?

- Pancolitis > 8-10 yrs
- Lt sided colitis > 12-15 yrs

COLON CA IN CD

- Risk factors in CD: Colitis or ileocolitis
- Chronic disease
- lymphoma, squamous cell carcinoma of skin in CD
- Small intestine CA in CD

HEMORRHOIDAL DISEASE

- The prevalence of hemorrhoidal disease is not selective for age or sex.
- The prevalence of hemorrhoidal disease is less in underdeveloped countries.
- The typical low-fiber, high-fat Western diet is associated with constipation and straining and the development of symptomatic hemorrhoids



HEMORRHOIDS

- **External or internal.**
- **External hemorrhoids are painful when thrombosed.**
- **Internal hemorrhoids originate above the dentate line and are covered with mucosa and transitional zone epithelium and represent the majority of hemorrhoids.**

CLINICAL MANIFESTATION

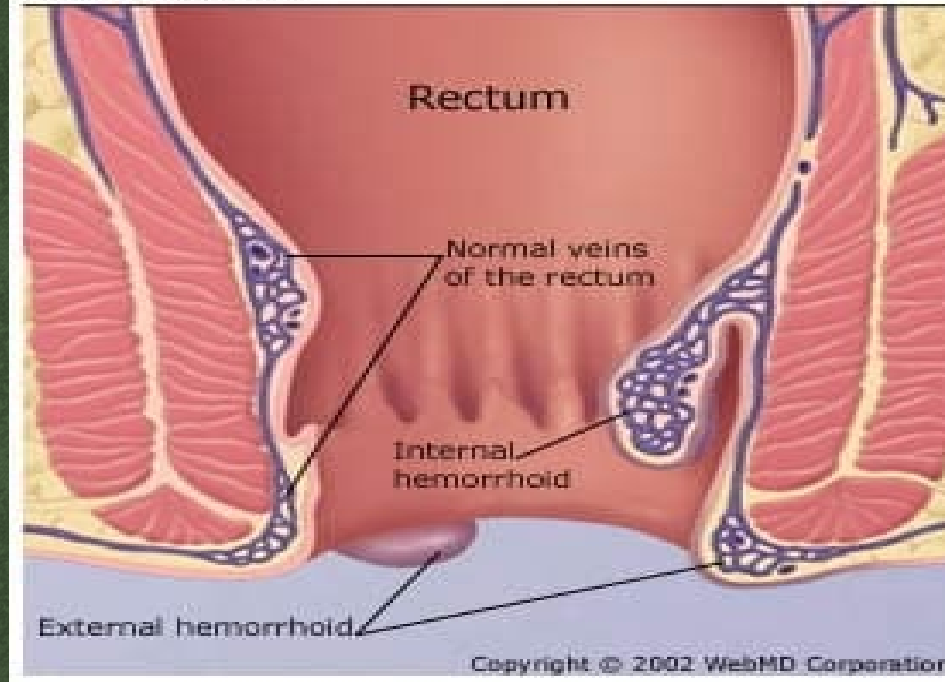
- **bleeding and protrusion.**
- **Pain is less common than with fissures**
- **Hemorrhoidal bleeding is described as painless bright red blood seen either in the toilet or upon wiping.**
- **Occasional patients can present with significant bleeding, which may be a cause of anemia; however, the presence of a colonic neoplasm must be ruled out in anemic patients.**

DIAGNOSIS

- **physical examination**



Hemorrhoids



TREATMENT

	DESCRIPTION OF CLASSIFICATION	TREATMENT
1	Enlargement with bleeding	Fiber supplementation Short course of cortisone suppository Sclerotherapy Infared coagulation
2	Protrusion with spontaneous reduction	Fiber supplementation Short course of cortisone suppository Sclerotherapy Infared coagulation
3	Protrusion requiring manual reduction	Fiber supplementation Short course of cortisone suppository Rubber band ligation Operative hemorrhoidectomy
4	Irreducible protrusion	Fiber supplementation Cortisone suppository Operative hemorrhoidectomy



ANAL FISSURE

- **At all ages**
- **More common in the third through the fifth decades.**
- **A fissure is the most common cause of rectal bleeding in infancy.**
- **The prevalence is equal in males and females.**
- **It is associated with constipation, diarrhea, infectious etiologies, perianal trauma, and Crohn's disease**
- **Trauma to the anal canal occurs following defecation.**
- **This injury occurs in the anterior or, more commonly, the posterior anal canal.**
- **A fissure that is not in the posterior or anterior position should raise suspicion for other causes, including tuberculosis, syphilis, Crohn's disease, and malignancy**



PRESENTATION AND EVALUATION

- A fissure can be easily diagnosed on history alone.
- The classic complaint is **pain**, which is strongly **associated with defecation** and is relentless.
- The **bright red bleeding** that can be associated with a fissure is **less extensive** than that associated with hemorrhoids.
- On examination, **most fissures** are located in either the **posterior or anterior position**.
- **A lateral fissure** is worrisome because it may have a **less benign nature**, and systemic disorders should be ruled out.
- A chronic fissure is indicated by the presence of a hypertrophied anal papilla at the proximal end of the fissure and a sentinel pile or skin tag at the distal end.
- Often the circular fibers of the hypertrophied internal sphincter are visible within the base of the fissure.
- If anal manometry is performed, elevation in anal resting pressure and
- a sawtooth deformity with paradoxical contractions of the sphincter muscles are pathognomonic.

- **The management of the acute fissure is conservative.**
- **Stool softeners** for those with constipation, increased dietary fiber, **topical anesthetics, glucocorticoids, and sitz baths** are prescribed and will **heal 60–90% of fissures.**
- **Chronic fissures are those present for >6 weeks.**
- **These can be treated with modalities aimed at decreasing the anal canal resting pressure including nifedipine ointment applied three times a day and botulinum toxin type A, up to 20 units, injected into the internal sphincter on each side of the fissure.**
- **Surgical management includes anal dilatation and lateral internal sphincterotomy.**
- **Recurrence rates from medical therapy are higher, but this is offset by a risk of incontinence following sphincterotomy. Lateral internal sphincterotomy may lead to incontinence more commonly in women.**

A still life photograph featuring a white, cylindrical vase on a light grey surface. The vase contains several bright yellow lilies with green leaves. A dark, gnarled branch with small, light green leaves extends from the vase towards the upper left corner of the frame. The background is a solid, light grey. The overall composition is clean and minimalist.

Thank You!