# Inflammatory bowel diseases

Learning objectives

Pathology and pathogenesis-1

Clinical features and assessment of severity-2

Complications-3

# Inflammatory bowel disease:

.Ulcerative colitis and Crohn’s disease are chronic IBD-

.Relapsing and remitting course, usually extending over years -

.Have many similarities-

.U.c ▭ involve the colon -

”.Crohn’s disease ▭ any part of the gut “from mouth to anus -

.The incidence varies between populations -

Crohn's appears to be very rare in the developing world" however"

.its incidence increasing

The incidence of u.c 10-20/ 100.000. prevalence 100- -

.200/100.000

IBD most commonly in young adult with second peak at 7th -

.decade

# Pathogenesis

- .IBD is multifactorial (environmental trigger + genetic)
- Activation of macrophages, lymphocytes, and .polymorphonuclear cells with release of inflammatory mediators
- In u.c acute and chronic inflammatory cells invariably involves the rectum (proctitis), may spread proximally to involve the sigmoid colon (proctosigoiditis) and in a minority the whole colon is involved (pancolitis). Inflammation is confluent and is more sever distally .

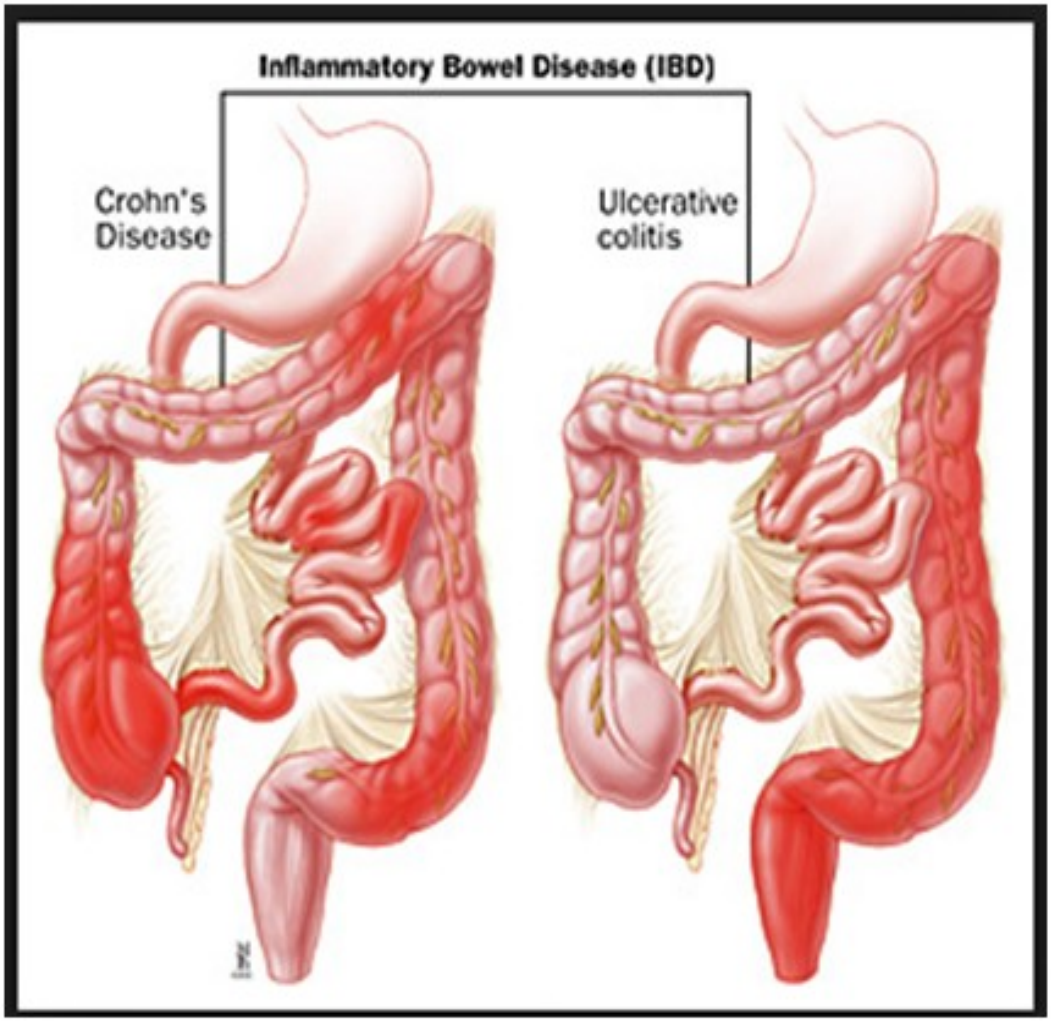
In long –standing pancolitis ▭ shortened and pseudopolyps develop “which represent normal or hypertrophied mucosa in areas of atrophy”. The inflammatory process is limited to the mucosa ▭ (lamina propria and the crypts, cryptitis). Crypt abscess .are typical. Dysplasia may herald the development of colon cancer

## :Crohns disease

the sites most commonly involved, in order of frequency are terminal ileum + Rt side of colon, colon alone, terminal ileum alone, ileum and jejunum. The entire wall is involved. Deep ulcer appear as linear fissures, with the Mucosa between them is described as "cobblestone". This deep ulcers may penetrate through the bowel wall to form abscess or fistulae. (these changes .are patchy)

**Skip lesion**: a small lesion separated from a major area of .involvement

Histology, chronic inflammation is seen through all layers of bowel wall. Lymphoid aggregate or microgranulomas are also seen which ". may ulcerate to the mucosa "tiny aphthus-like ulcers


Inflammatory Bowel Disease (IBD)
Crohn's Disease
Ulcerative colitis

# C/F: u.c

".Blood diarrhaea "major symptom- 1

.The first attack is usually the most sever- 2

Relapse and remission. However chronic, unremitting- 3

.symptoms may seen

.Provoking factors: emotion, infection, G.I, antibiotics, NSAID- 4

5- Features depend on the site and activity of the disease.

. Proctitis: blood + mucosa ± tensmus-

some pass fluidy stool or constipated" but no constitutional"

.symptoms

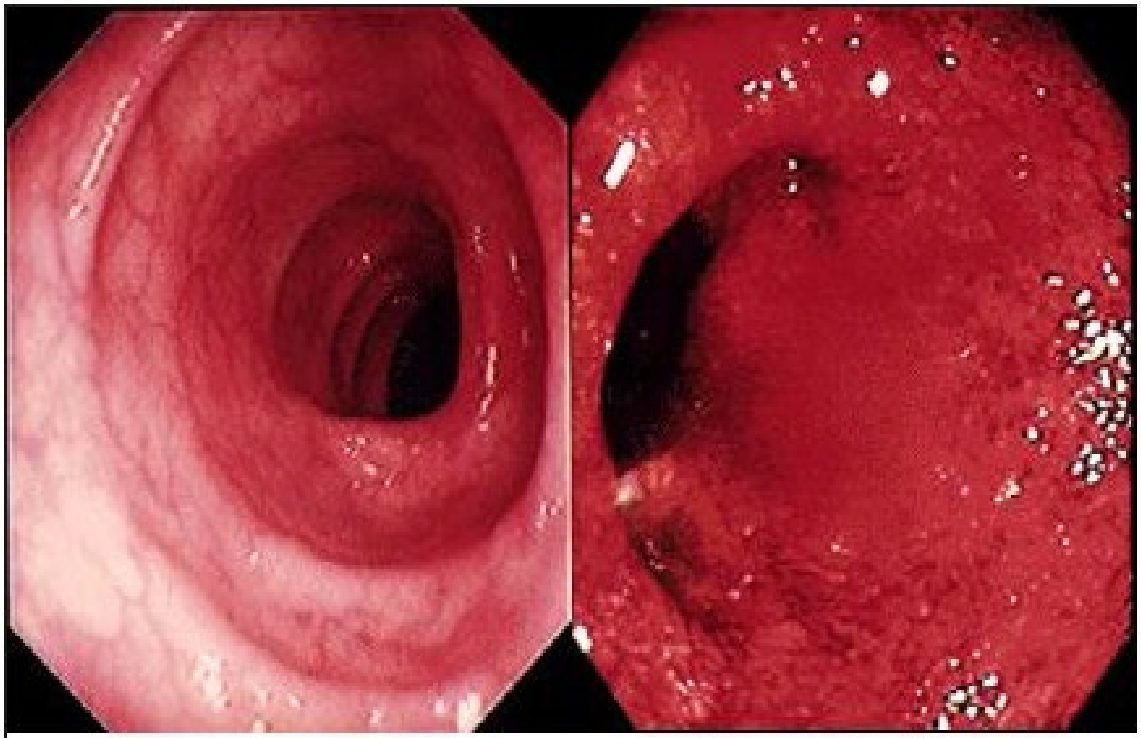
Proctosigmoiditis: bloody diarrhaea +mucose + constitutional -

.symptoms

.Extensive colitis: bloody diarrhaea + mucosa-

Sever condition ▭ toxic with tachycardia + signs of peritoneal

.inflammation



Healthy Colon

Ulcerative Colon

## :Crohn's disease

Pain- 1

Diarrhaea- 2

W.t loss (Ileal Crohn's disease causes abdominal pain due to- 3

subacute intestinal obstruction/ w.t loss (due to avoidance of food,

.malabsorption)

.Abscess formation or acute intestinal obstruction may occur -

.Other presentation similar to u.c -

.Isolated perianal disease (fissures, fistulae) -

.Rectal sparing -

# :Severity assessment in u.c

| sever | Mild | |
|---|---|---|
| 6< | 4> | Bowel frequency |
| + + + | -/+ | Blood in stool |
| 400< | 200> | Stool volume (g/24h) |
| 90 < | 90 > | Pulse |
| )2/4day(37.8> | normal | Temp |
| blood in lumen | normal or | Sigmoidoscopy |
| | granular mucosa | |
| dilated bowel | normal | Abd. X-ray |
| 100> | normal | Hb |
| 30< | normal | ESR |
| 34> | 35< | .Serum alb |

:C

:E

| Unrelated | Active |
| --- | --- |
| Autoimmune hepatitis.1<br>2.1ry sclerosing colangitis and cholargiocarcinoma<br>Gallstones. 3<br>Amyloidosis + oxalate. 4<br>calculi<br>5. Sacroillitis(Aukyloising Spond<br>.Metabolic bone disease. 6 | Conjunctivitis, Iritis,. 1<br>Episcleritis<br>mouth ulcer. 2<br>fatty liver. 3<br>liver abscess/ portal. 4<br>.pyaemia<br>mesenteric or portal vein. 5<br>thrombosis<br>.Venous thrombosis 6<br>7.Arythralgia<br>Erythema nodosum8 .<br>Pyoderma gangrenosum.9 . |

## - Intestinal 2

- Life threatening inflammation.

Perforation -

.Acute reamorrhage-

.Fistula and perianal disease -

.Cancer > 8 years -

# Investigation:

1- Anaemia, albumin, ESR (exacerbation or abscess), CRP in crohn's disease.

. Bacteriology (exclude superimposed infection)- 2

.Endoscopy- 3

. Barium studies-4

Other (x-ray)-5

# Management: Aim

1-Treat acute attacks.

.Prevent relapses- 2

.Detect carcinoma at an early stage- 3

. Select patients for surgery- 4

- aminosalicylates (Mesalazine, Olsalazine, sulfasalazine, balsalazine).

Corticosteroids (Prednisolone, H.C, budesonide) -

Thiopurines (Azathioprine) -

.Methotrexate -

Ciclosporin -

.Infliximab -

.Antibiotics -

# Irritable bowel syndrome

- Learning objectives
- Epidemiology and aetiology-1
- Clinical presentations-2
- Approach to diagnosis and differential-3 diagnosis
- Management-4

# Irritable Bowel Syndrome

"absence of structural pathology"

.Affect 20% of population- 1

.Young women 2-3 times than men- 2

Overlap with (D.Dx): non-ulcer dyspepsia, chronic fatique- 3

.syndrome, dysmenorrhoea and urinary frequency

## :Aetiology

Psychosocial factors: most patient don't have psychological- 1

.problems

.Altered G.I motility- 2

.Abnormal visceral perception- 3

.Luminal factors (lactose and wheat)- 4

## :C/F

.Colicy or cramping lower abdominal pain- 1

.Bloating- 2

.Variable bowel habbit- 3

.Mucos is common but rectal bleeding does not occur- 4

.No weight loss- 5

.No constitutional symptoms- 6

.Physical exam reveal no abnormality-7

# :- Dx

Full blood count  + ESR - 1

.Sigmoidoscopy done routinely- 2

## :D.Dx of predominant diarrhaea IBS

.microscopic colitis. 1

.lactose intolerance. 2

.bile acid malabsorption. 3

.celiac disease. 4

.thyrotoxicosis. 5

.parasitic infection. 6

## :Management

.Reassure the patient- 1

Elimination diets are generally unhelpful but up to 20% benefit- 2 from a wheat- free diet, lactose exclusion, excess intake of .caffeine

.Amitriptyline 10-25mg/ night- 3

.5HT4 agonists- 4