



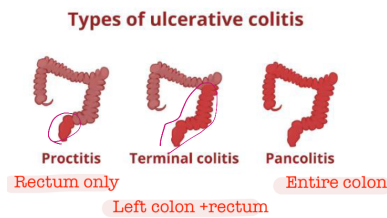
Round : ..General surgery

Group no : B3.....

Done By : ..Fatima abu assal

IBD:

Ulcerative colitis:



✦✦ Ulcerations and inflammation in the lining of colon and rectum (affect mucosa and submucosa only)

✦✦ Anal Involvement is **rare**

✦✦ ileum is not directly involved

✦✦ **diffuse** inflammation of the colonic mucosa and **continuous** lesion (no skip lesion) + symmetrical or circumferential

✦✦ The patient presents with acute- onset of :

diarrhea with pus or mucous

bleeding per rectum + Tenesmus

Tenderness in the left iliac fossa

the perianal disease are less common

✦✦ The major symptom is bloody diarrhea.

✦✦ M>F

✦✦ Intestinal wall **normal caliber** Without fibrosis

✦✦ **Mild** disease; erythema, sandpaper appearance

✦✦ **Moderate**; marked erythema coarse granulation contact bleeding **no** ulceration

✦✦ **severe** disease spontaneous bleeding and edematous and ulceration (**collar button ulcer** (trash the submucosa))

✦✦ Leadpipe sign

✦✦ crypt abscess

✦✦ long-standing; epithelial regeneration and **pseudopolyps**

✦✦ fulminant disease; **toxic megacolon**

✦✦ Ulcers when present are small and **superficial**

✦✦ Pseudopolyps in UC > crohn's (NOT premalignant)

✦✦ Note: Pseudopolyps are not coated with barium and appear dark on the barium enema

✦✦ **Smoking may prevent it**

✦✦ **Appendectomy is protective**

✦✦ anti-neutrophil polynuclear antibodies (**ANCA**) are **positive** in 50-60% of UC patients.

✦✦ CBC: hypoproteinemia , hypokalemia

✦✦ Colonoscopy to assess severity while biopsy is the diagnostic procedure

✦✦ UC has a higher risk to develop Colorectal cancer than CD

✦✦ Extra-intestinal symptoms : **Pyoderma-gangrenosum** and **ankylosing spondylitis**



CD نفاخ عكس



GENERAL FEATURES	ULCERATIVE COLITIS	CROHN'S DISEASE
1) DIARRHEA - BLOODY 2) ABDOMINAL PAIN 3) URGENCY 4) TENESMUS 5) WEIGHT LOSS 6) FEVER / NIGHT SWEATS 7) FATIGUE	EXTRA-INTESTINAL MANIFESTATIONS 1) ARTHRITIS (30%) - MOSTLY PERIPHERAL - OSTEOPOROSIS / OSTEOPENIA 2) SKIN (20%) - ERYTHEMA NODOSUM, PYDERMA GANGRENOZUM, FISTULA, STOMATITIS 3) EYES (10%) - UVEITIS, EPISCLERITIS 4) LIVER (5%) - FLD, HEPATITIS, GALLSTONES, PRIMARY SCLEROSING CHOLANGITIS (UC) 5) ANAEMIA - IRON / B12 / FOLATE	

GENERAL FEATURES

- 1) DIARRHEA - BLOODY
- 2) ABDOMINAL PAIN
- 3) URGENCY
- 4) TENESMUS
- 5) WEIGHT LOSS
- 6) FEVER / NIGHT SWEATS
- 7) FATIGUE

Crohn's disease:

- Chronic relapsing and remitting inflammation affecting any part of GI except rectum
- Anal Involvement is Common
- Etiology is immunological
- F > M
- Ileal disease is common
- Transmural inflammation and skip lesions
- Occurs mainly in ileocolic (50%) can present with similar manifestations of appendicitis
- Ileal 30%
- colic region 20%
- Macroscopic features: cobblestone appearance and creeping fat-adhesions and fistula
- Intestinal wall thickening and fibrosis (string sign)
- Microscopic features: focal crypt abscesses and atrophy and irregularity, granuloma, Basal lymphoplasmacytosis
- The major presenting symptoms are abdominal pain, watery diarrhea and weight loss.
- ulcers here are more prominent, aphthoid, deep, with fissuring ulcers
- Smoking is a risk factor
- Post inflammatory polyps here are always combined by intervening normal mucosa

(مهم)

- Anti-saccharomyces cerevisiae antibodies (ASCA) are positive in 50- 60% of CD
- biopsy is diagnostic
- Erythema nodosum and Sacroiliitis & arthritis: extra-intestinal symptoms

Ulcerative Colitis	Crohn's Disease
- Inflammation limited to mucosa and submucosa - Submucosa often compressed - Crypt abscesses common - Goblet cells diminished - Paneth cell metaplasia common - Epithelioid granulomas absent in submucosa and deeper tissue levels	- Transmural inflammation with lymphoid aggregates - Submucosa expanded by inflammation and fibrosis - Crypt abscesses less common - Goblet cells often normal - Paneth cell metaplasia rare - Granulomas are frequent (40-60%)

	Crohn's disease	Ulcerative colitis
Terminal ileum involvement	Commonly	Seldom
Colon involvement	Usually	Always
Rectum involvement	Seldom	Usually
Involvement around the anus	Common	Seldom
Bile duct involvement	No increase in rate of primary sclerosing cholangitis	Higher rate
Distribution of Disease	Patchy areas of inflammation (Skip lesions)	Continuous area of inflammation
Endoscopy	Deep geographic and serpiginous (snake-like) ulcers	Continuous ulcers
Depth of inflammation	May be transmural, deep into tissues	Shallow, mucosal
Fistulae	Common	Seldom
Stenosis	Common	Seldom
Autoimmune disease	Widely regarded as an autoimmune disease	No consensus
Cytokine response	Associated with T_H1	Vaguely associated with T_H2
Granulomas on biopsy	May have non-necrotizing non-peri-intestinal crypt granulomas	Non-peri-intestinal crypt granulomas not seen
Surgical cure	Often returns following removal of affected part	Usually cured by removal of colon
Smoking	Higher risk for smokers	Lower risk for smokers

+ Uveitis + Aphthous ulcer

Therapeutic drugs:

- 1-Aminosalicylates/5-ASA (فيهم مقطع sala)
- يستخدم للحالات الخفيفة و اعراضه الجانبية هي:

(3H: hemolytic anemia, hypersensitivity, headache) and GI upset

✦ 2-antimicrobial agents perianal ds. يستخدم للحالات الخفيفة ايضا تحديدا الاشخاص الي عندهم

Metronidazole can cause sensory neuropathy

✦ 3-corticosteroids: للحالات المتوسطة و الصعبة فقط له اعراض جانبية عديده منها

cosmetic effects, suppression of linear growth in children, and osteopenia

Don't use it in acute cases

✦ 4-TNF inhibitors (اذا كل الي فوق فشل): thalidomide (antiemetic and sedative) used in fistulizing CD ,severe active CD ,refractory CD for steroids

أعراضه الجانبية انه يزيد خطر الإصابة بالسل

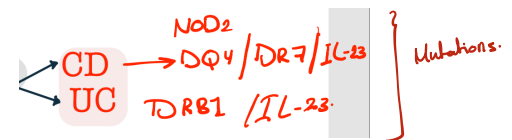
✦ If these failed do IPAA in UC (anastomosis of ileum to the anus, forming a pouch that allows the elimination of wastes normally after removal of the entire large intestine.)

✦ IPAA is contraindicated in:

Crohn's disease (because it can affect any part of the GI)

- Obvious rectal cancer, because is not a healthy pelvis
- Indefinite diagnosis

Crohn's ds can't be cured by surgery



absolute indications	Relative & optional indication
- Free perforation → causing diffuse peritonitis. - Massive hemorrhage. - Possible appendicitis - Carcinoma suspicion	- Recurrent or chronic obstruction and strictures. - Malabsorption, retarded growth. - Intra-abdominal abscess or mass - Retarded growth - Strictures - Toxic megacolon. - Fistulas. - Blind loop syndrome (food doesn't follow the normal digestion route and by passes a section of your intestine) - Incontinence - Perianal disease; management: • Drainage of abscess • Minimal conservative surgery. • Medical management. • Rarely proctectomy is needed.

Indications for Surgery in CD =

Microscopic features in IBD (both UC and CD)

CHRONICITY (hallmark of IBD)	Activity (disease may be active "relapsing" or inactive "remission")
1. Crypt architectural distortion (Crypts are branched with disarray)	Presence of Neutrophils (Cryptitis or crypt abscess)
2. Basal cell plasmacytosis	Ulcerations, erosions
Paneth cell metaplasia	
Also, muscularis mucosae duplication	

V. Important	Crohn Disease	Ulcerative Colitis
Granulomas	Yes (~35%) Non-Casating	No
Fistulas/sinuses	Yes	No
Clinical Perianal fistula & fissures	Yes (in colonic disease)	No
Fat/vitamin malabsorption	Yes	No
Malignant potential	Less (with colonic involvement)	More
Recurrence after surgery	Common	No
Toxic megacolon	None	Yes
Smoking	Increases its risk	Decreases its risk

V. Important	Crohn's Disease	Ulcerative Colitis
Bowel region affected	Ileum ± colon	Colon only
Rectal involvement	Usually spared	Always
Distribution	Skip lesions	Diffuse
Stricture	Yes	Rare
Bowel wall appearance	Thick	Thin
Inflammation	Transmural	Limited to mucosa and submucosa
Pseudopolyps	Mild-moderate	Marked
Ulcers	Deep, knife-like	Superficial, broad-based
Lymphoid reaction	Marked	subtle
Fibrosis	Marked	Mild to none
Serositis	Marked	None

	Crohn's disease	Ulcerative colitis (UC)
Incidence	Effect on M and F equally	More in F
Etiology	Immunologically	Immunologically
Pathology	- affect any part of GIT from mouth to anus. - affects all layers (deep) from mucosa → serosa - skip areas (cobble stone) + granuloma formation	- effect the colon (either left or the whole) - + rectum - affect mucosa only (superficial) - continuous + multiple crypt abscesses + Pseudopolyps
Clinical picture	→ gradual-onset → diarrhea without pus or mucus → NO bleeding per rectum → Tenderness in the RLQ → perianal disease	→ acute-onset → diarrhea with pus or mucus → bleeding per rectum → Tenderness in the left iliac fossa → perianal disease less common
Complications	→ stricture → IO → Fistula + abscess → Malabsorption → G.B stones	→ Toxic megacolon (urgent surgery) - X-ray: Distended transverse colon (mostly) with loss of haustration → Haemorrhage → shock & anaemia → Colon cancer
Investigations	- Laboratory: 1- Stool analysis . 2- CBC 3- Barium enema 4- Endoscopy (upper and lower) & ileoscopy 5- biopsy are diagnostic	The same.. except ileoscopy because the UC cant effect on ileum .
Treatment	1- Medical treatment is the main line of treatment 2- Surgical treatment when → failure of medical treatment or complications BY: - Limited resection of affected segment - AND avoid resection of long segment to avoid malabsorption - Stricturoplasty.	1- Medical treatment is the main line of treatment 2- Surgical treatment when → failure of medical treatment or complications BY: - Proctocolectomy → then ileostomy - Total Colectomy → then ileo-rectal - anastomosis



7. An important distinguishing feature of Crohn disease when compared to ulcerative colitis is:

- a. The lack of “skip” lesions
- b. Response to biologic therapy
- c. Perianal disease**
- d. The presence of pyoderma gangrenosum
- e. The presence of arthritis

7. **Answer: c.** Distinguishing between ulcerative colitis and Crohn colitis can be difficult. Ulcerative colitis is characterized by mucosal disease that always begins in the rectum and extends proximally without skip lesions. Crohn colitis or disease causes full thickness disease, can involve any part of the GI tract and commonly has “skip” lesions or areas of disease interspersed between normal areas. Crohn disease also commonly causes fistulae and includes

perianal disease which distinguish Crohn's from ulcerative colitis. Pyoderma gangrenosum or other systemic manifestations of IBD can be associated with either Crohn disease or ulcerative colitis.