

## Definition

Idiopathic chronic inflammatory bowel disease of the colon that follows a course of relapse and remission. Characterized by focal, asymmetrical, transmural and occasionally granulomatous inflammation. Rose thorn mucosal ulceration & strictures. It may affect any part of the gastrointestinal tract, but particularly the terminal ileum (50%) and proximal colon. Small bowel only in 30% of patients and large bowel only in 20%. Fistulae and strictures may occur. Unlike ulcerative colitis, there may be skip lesions.

## Epidemiology

Prevalence: 0.05-0.1% in the Western world.

Peak incidences: 15-30yrs, smaller peak around 60yrs

## Aetiology

Unknown.

15-20% have family member with IBD. 70% monozygotic concordance.

Ashkenazi Jews having a particularly high incidence.

Smoking 3-4x risk

NSAIDs or infections (?TB) may cause an exacerbation.

## Presentation

### Symptoms

- Diarrhoea (often >6 wks, less bloody than UC), colicky abdominal pain, malabsorption.
- Systemic symptoms: malaise, fever, weight loss, and extraintestinal manifestations.

### Signs

- Depending on disease severity, may be clearly unwell, ↑HR, pale, ↓BP, ↑T & dehydrated.
- Abdo exam may reveal tenderness, or palpable masses (esp RIF)
- Anal and perianal lesions (pendulous skin tags, abscesses, fistulae) are characteristic
- Mouth ulcers
- Granulomata (in 50-70%) of skin, epiglottis, mouth, vocal cords, liver, nodes, mesentery, peritoneum, bones, joints, muscle or kidney

Children: may present with poor growth or delayed puberty

## Extraintestinal disease

- Anaemia (25%)
- Seronegative arthropathy affecting the wrists, hips, or knees (20%)
- Erythema nodosum or pyoderma gangrenosum (5%)
- Uveitis, iritis, or episcleritis (5%)
- Thromboembolic events (1%)
- Fatty liver, primary sclerosing cholangitis disease, or cholangiocarcinoma (5%)
- Urinary calculi (oxalate)
- Clubbing
- Sacroiliitis, or ankylosing spondylitis
- Malnutrition, bile salt malabsorption/gallstones, osteomalacia,
- Amyloidosis

## Differential Diagnosis

- Infectious: GE, TB, actinomycosis
- Other colitis: UC, ischaemic, radiation
- Bowel Ca, carcinoid, lymphoma,
- IBS
- Coeliac disease
- Diverticulitis
- Acute appendicitis.
- Amyloidosis
- Behcet's disease

## Investigations

Bloods: FBC ( $\downarrow$ Hb,  $\downarrow$ or $\uparrow$ MCV,  $\uparrow$ WCC), iron studies, UEC ( $\downarrow$ K<sup>+</sup>,  $\downarrow$ Mg<sup>2+</sup>,  $\downarrow$ Ca<sup>2+</sup>),  $\uparrow$ CRP (or ESR), LFT

Stool: Culture, including ova, cysts and parasites and also Clostridium difficile toxin.

Imaging: AXR (exclude toxic dilatation and perforation), barium studies, endoscopies & biopsies.

## Management

Resuscitation as needed

- Fluids

Drugs:

- Aminosalicylates - **mesalazine** (5ASA) [topical/PR or oral, for relapse & maintenance] or **sulfasalazine** PO [relapse only.  $\uparrow$ SE]
- Corticosteroids for relapses: **budesonide** or **prednisolone** PO/PR, **hydrocortisone** PR/IV.
- **Azathioprine**, **mercaptopurine**, or **methotrexate** for steroid-sparing or -intolerance
- Immunosuppressants in refractory cases - **infliximab**,
- **Metronidazole** is effective [SE: periph.neuropathy in chronic use] in colonic or resistant disease or after surgery. **Ciprofloxacin** may be an alternative.
- Proton pump inhibitors for gastro-oesophageal disease
- Antibiotics acutely if high suspicion of infection.

Dietary:

- Elemental or polymeric diets are less effective than corticosteroids
- TPN is appropriate adjunctive therapy in complex, fistulating disease.

Treat any extraintestinal complications

Smoking cessation [important factor in maintaining remission]

Surgery:

- Not curative
- Resection of specific lesions.
- Failed medical therapy
- Complex, fistulating disease
- May be appropriate as primary therapy in limited ileal or ileo-caecal disease.

## Complications

- Bowel: Strictures → obstruction, fistulae involving (bowel, bladder, vagina, or skin), perforation, haemorrhage, and  $\uparrow$ risk of colonic Ca
- Renal disease (secondary to obstruction of the right ureter by ileocaecal disease).
- Osteoporosis: quite common.

## Prognosis

- 50% require surgery in first 10yrs of disease, ~80% within lifetime
- Slight increase in mortality than normal population
- 15% of patients unable to work after 5-10 years of disease.