

Inflammatory Bowel Disease (IBD) - Study Notes

Definition: Inflammatory Bowel Disease (IBD) is a group of chronic, relapsing, and remitting inflammatory disorders of the gastrointestinal tract, mainly including Crohn's disease and Ulcerative colitis.

Etiopathogenesis:

- Genetic predisposition (mutations in NOD2, ATG16L1 genes).
- Dysregulated immune response to gut microbiota.
- Environmental triggers: smoking, diet, infections, stress.
- Result: Chronic inflammation → tissue injury → ulceration and fibrosis.

Clinical Manifestations:

- Abdominal pain, chronic diarrhea (often bloody in ulcerative colitis).
- Weight loss, fatigue, anorexia.
- Extra-intestinal manifestations: arthritis, uveitis, skin lesions (erythema nodosum, pyoderma gangrenosum).
- Complications: strictures, fistulas, colorectal cancer (long-standing disease).

Management:

Non-pharmacological:

- Lifestyle modification, stress management.
- Nutritional therapy (high-calorie diet, vitamins, iron, folate, B12).
- Smoking cessation (especially important in Crohn's disease).
- Psychological support and counseling.

Pharmacological:

- 5-ASA agents (sulfasalazine, mesalamine) – especially in ulcerative colitis.
- Corticosteroids (prednisolone, budesonide) – for acute flares.
- Immunomodulators (azathioprine, methotrexate).
- Biologic agents (anti-TNF: infliximab, adalimumab; anti-integrins; JAK inhibitors).
- Antibiotics in selected cases (perianal Crohn's disease).
- Surgery in refractory cases or complications (colectomy in UC, resection in Crohn's).

Flowchart: Pathophysiology of Inflammatory Bowel Disease

