# Inflammatory Bowel Disease

Dr Paul Tervit

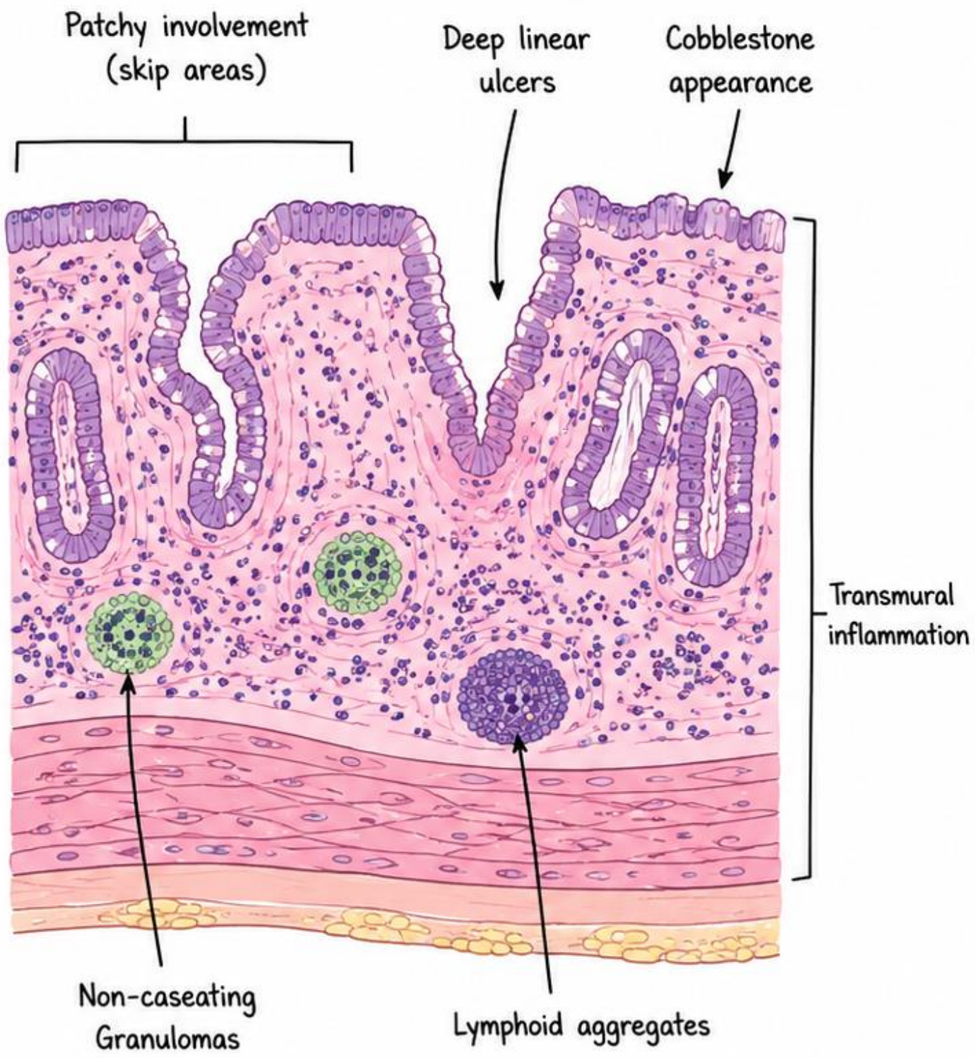
| Feature | Crohn's Disease (CD) | Ulcerative Colitis (UC) |
|---|---|---|
| **Distribution** | Can affect any part of the GI tract (mouth to anus); terminal ileum and colon most common | Limited to the colon and rectum |
| **Pattern of involvement** | Discontinuous ("skip lesions") | Continuous from the rectum proximally |
| **Rectal involvement** | Often spared | Almost always involved |
| **Depth of inflammation** | Transmural (full-thickness) | Mucosal and submucosal only |
| **Macroscopic appearance** | Cobblestoning, deep linear ulcers, strictures, fistulas | Diffuse erythema, friability, superficial ulceration, pseudopolyps |
| **Histology** | Transmural inflammation; non-caseating granulomas (15–30%) | Cryptitis, crypt abscesses, goblet cell depletion, no granulomas |
| **Small bowel involvement** | Common (especially terminal ileum) | Absent (except backwash ileitis in extensive disease) |
| **Perianal disease** | Common (fistulas, fissures, abscesses, skin tags) | Rare |
| **Fistulas** | Common | Rare |
| **Strictures** | Common due to fibrosis | Uncommon |
| **Obstruction** | May occur | Rare |
| **Bleeding** | Less prominent | Common, often significant |
| **Diarrhoea** | Usually non-bloody (unless colonic disease) | Typically bloody with mucus |
| **Abdominal pain** | Common, often right lower quadrant | Common, often left lower quadrant or cramping |
| **Weight loss** | Common | Less prominent |
| **Malabsorption** | Common (especially ileal disease) | Rare |
| **Smoking** | Increases risk and worsens disease | Appears protective (not recommended as therapy) |
| **Toxic megacolon** | Rare | More common |
| **Colorectal cancer risk** | Increased with longstanding colonic involvement | Increased with extensive, longstanding colitis |
| **Primary sclerosing cholangitis (PSC)** | Less common | More strongly associated |

| Feature | Crohn’s Disease (CD) | Ulcerative Colitis (UC) |
|---|---|---|
| **Extraintestinal manifestations** | Arthritis, uveitis, episcleritis, erythema nodosum, pyoderma gangrenosum, PSC, VTE | Similar spectrum; PSC is more frequent |
| **Endoscopic findings** | Patchy inflammation, aphthous ulcers, cobblestoning, deep fissures | Continuous inflammation beginning at rectum, loss of vascular pattern, friability |
| **Imaging** | Bowel wall thickening, “string sign”, fistulas, abscesses | Colonic wall thickening; loss of haustra in chronic disease (“lead pipe” colon) |
| **Surgical cure** | No (disease frequently recurs after resection) | Yes (total proctocolectomy is curative for colonic disease) |
| **Common complications** | Fistulas, abscesses, strictures, malnutrition, nephrolithiasis, gallstones | Severe bleeding, toxic megacolon, colorectal cancer |
| **First-line induction (mild–moderate)** | Budesonide (ileocecal disease), systemic corticosteroids if more severe | 5-ASA (mesalazine) ± topical therapy; corticosteroids for moderate–severe flares |
| **Maintenance therapy** | Immunomodulators and biologics; 5-ASA has limited role | 5-ASA effective in mild disease; immunomodulators and biologics for moderate–severe disease |
| **Biologic options** | Anti-TNF, anti-integrin, anti-IL-12/23, anti-IL-23, JAK inhibitors (selected cases) | Anti-TNF, anti-integrin, anti-IL-12/23, anti-IL-23, JAK inhibitors |

**High-yield exam differences**

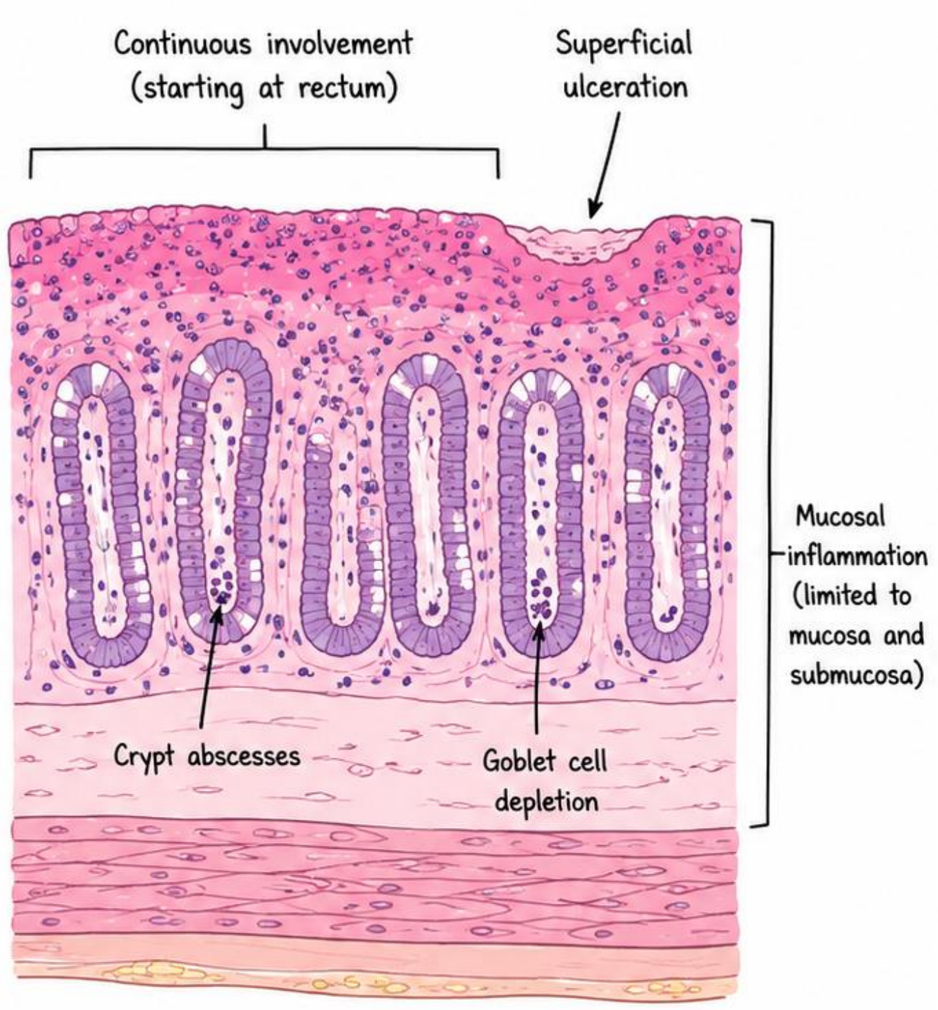
| Crohn’s Disease | Ulcerative Colitis |
|---|---|
| **Skip lesions** | **Continuous disease** |
| **Transmural inflammation** | **Mucosal inflammation** |
| **Anywhere mouth → anus** | **Colon only** |
| **Terminal ileum common** | **Rectum always involved** |
| **Fistulas & strictures** | **Toxic megacolon** |
| **Granulomas may be present** | **Crypt abscesses** |
| **Smoking worsens disease** | **Smoking appears protective** |
| **Surgery not curative** | **Colectomy is curative** |

## CROHN'S DISEASE




- Discontinuous ("skip lesions")
- Transmural inflammation
- Non-caseating granulomas (15-30%)
- May affect any part of GI tract

## ULCERATIVE COLITIS




- Continuous disease from rectum proximally
- Mucosal & submucosal inflammation only
- Crypt abscesses, goblet cell depletion
- Limited to colon and rectum