

Inflammatory Disease of the Bowel

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Comparisons of various factors in Crohn's disease and ulcerative colitis

	Crohn's Disease	Ulcerative Colitis
Involves terminal ileum?	Commonly	Seldom
Involves colon?	Usually	Always
Involves rectum?	Seldom	Usually
Peri-anal involvement?	Commonly	Seldom
Bile duct involvement?	Not associated	Higher rate of Primary sclerosing cholangitis ^[13]
Distribution of Disease	Patchy areas of inflammation	Continuous area of inflammation
Endoscopy	Linear and serpiginous (snake-like) ulcers	Continuous ulcer
Depth of inflammation	May be transmural, deep into tissues	Shallow, mucosal
Fistulae, abnormal passageways between organs	Commonly	Seldom
Biopsy	Can have granulomata	Crypt abscesses and cryptitis
Surgical cure?	Often returns following removal of affected part	Usually cured by removal of colon, can be followed by pouchitis
Smoking	Higher risk for smokers	Lower risk for smokers

Autoimmune disease?	Generally regarded as an autoimmune disease	No consensus
Cancer risk?	Lower than ulcerative colitis	Higher than Crohn's

p-ANCA → commonly found in UC
 ASCA → commonly found in Crohn's

Treatment for Crohn's:

- NGT if suspected obstruction
- Antidiarrheal agents loperamide or diphenoxylate with atropine
- Fluid and electrolyte replacement
- **Sulfasalazine or mesalamine (Asacol)**
- Prednisone (40-60 mg/d)
- **Azathioprine** (2 mg/kg/d) or its active metabolite, 6-mercaptopurine (6-MP)
- Cipro and/or Metronidazole
- If medical therapy fails, surgical resection of the inflamed bowel
- Infliximab, adalimumab, certolizumab
- Tacrolimus

Treatment for UC:

- **Sulfasalazine or Mesalamine**
- Corticosteroids
- 5-ASA and steroid enemas
- **Azathioprine, Cyclosporine, 6-Mercaptopurine**
- Infliximab
- Surgery
- Antibiotics

Radiation Colitis:

- Acute injury is a function of fractionation of the dose, field size, type of radiation, and frequency of treatment
- Cells are most sensitive to radiation during the G2 and M stages of mitotic division
- Acute injury is caused by injury to the mitotically active intestinal crypt cells
- Chronic injury is a function of the total dose of radiation used
- Chronic radiation injury is caused by injury to the less mitotically active vascular endothelial and connective tissue cells