

Pathology

Pathology

The terminal ileum is the most commonly affected segment of bowel in patients with CD, often occurring in combination with other areas of disease. More proximal small bowel is less frequently involved. Colitis alone occurs in up to one-third of cases, the stomach and duodenum are affected in around 5% of cases, but perianal lesions are common, affecting up to 50% of patients. Perianal disease occurs in 25% of patients with small bowel disease and in 75% of patients with Crohn's colitis. - Macroscopically CD is characterised by fibrotic thickening of the intestinal wall with narrowing (stricturing) of the lumen - and fat wrapping (encroachment of mesenteric fat around the bowel) (Figure 75.9). There is usually dilated bowel just proximal to the stricture and deep mucosal ulcerations with linear or serpiginous (snake-like) patterns in the strictured area itself. Oedema between ulcers gives rise to a characteristic cobblestone appearance of the mucosa (Figure 75.10). The transmural inflammation (a pathognomonic feature of CD) may lead to segments of bowel becoming adherent to each other and to surrounding structures, forming inflammatory masses - with mesenteric abscesses and fistulation into adjacent organs (Figure 75.11). The serosa is usually opaque, with thickening of the mesentery and enlarged mesenteric lymph nodes. CD is characteristically discontinuous, with inflamed areas separated by apparently normal intestine, so-called skip lesions. Microscopically focal areas of chronic inflammation involving all layers of the intestinal wall with lymphoid aggregates are characteristic of CD. Non-caseating giant cell granulomas found in 60% of patients are pathognomonic of CD (Figure 75.2). They are most commonly seen in anorectal disease. Multifocal arterial occlusions are found in thickened muscularis propria. There may be nerve cell hyperplasia and deep, fissuring ulceration within affected areas. Characteristically, and unlike in UC, there may be completely normal areas immediately next to areas of severe inflammation.

Figure 75.9 Crohn's disease of the ileocaecal region showing typical thickening of the wall of the terminal ileum with encroachment of mesenteric fat. Figure 75.10 Crohn's disease of the terminal ileum illustrating longitudinal ulceration and cobblestone mucosa.

Revision #1

Created 2025-12-31 15:27:40 UTC by Omar Ayman

Updated 2025-12-31 15:27:40 UTC by Omar Ayman