

affects the terminal ileum. The disease involves all layers of the bowel wall (transmural) in a discontinuous fashion, meaning that between areas of intact mucosa, there are areas of affected mucosa (skip lesions). The inflammation may result in ulcerations; fibrosis; adhesions; stiffening of the bowel wall; stricture formation; and fistulas to other loops of bowel, bladder, vagina, or skin.

Diagnostic Evaluation

The diagnosis of ulcerative colitis and Crohn disease comes from the history, physical examination, laboratory evaluation, and other diagnostic procedures. Laboratory tests include a CBC to evaluate anemia and an erythrocyte sedimentation rate (ESR) or CRP to assess the systemic reaction to the inflammatory process. Levels of total protein, albumin, iron, zinc, magnesium, vitamin B₁₂, and fat-soluble vitamins may be low in children with Crohn disease. Stools are examined for blood, leukocytes, and infectious organisms. A serologic panel is often used in combination with clinical findings to diagnose IBD and to differentiate between Crohn disease and ulcerative colitis.

In patients with Crohn disease, an upper GI series with small bowel follow-through assists in assessing the existence, location, and extent of disease. Upper endoscopy and colonoscopy with biopsies are an integral part of diagnosing IBD ([Ellis and Cole, 2011](#)). Endoscopy allows direct visualization of the surface of the GI tract so that the extent of inflammation and narrowing can be evaluated. CT and ultrasonography also may be used to identify bowel wall inflammation, intraabdominal abscesses, and fistulas. Colonoscopy can confirm the diagnosis and evaluate the extent of the disease. Discrete ulcers are commonly seen in patients with Crohn disease, whereas microulcers and diffuse abnormalities and inflammation are seen in patients with ulcerative colitis ([Grossman and Baldassano, 2016](#)). Crohn disease lesions may pierce the walls of the small intestine and colon, creating tracts called *fistulas* between the intestine and adjacent structures, such as the bladder, anus, vagina, or skin.

Therapeutic Management

The natural history of the disease continues to be unpredictable and