

Crohn Disease

Crohn disease and ulcerative colitis are chronic **inflammatory bowel diseases** (IBDs). Although they have similar symptoms, they are different disease processes. **Ulcerative colitis** affects only the **colon** (large intestine). Crohn disease may involve the entire gastrointestinal (GI) tract but most often occurs in the **ileum** (the last part of the small intestine). Irritable bowel syndrome has symptoms similar to IBD, but is not an immune disease. The inflammation seen in Crohn disease has similarities to the disease process of other immune diseases such as rheumatoid arthritis: the body's immune system reacts to **antigens** (proteins from the environment such as bacteria or food components that the body senses as invaders) and this causes the inflammatory process. The April 9, 2008, issue of *JAMA* includes an article about Crohn disease.

SIGNS AND SYMPTOMS

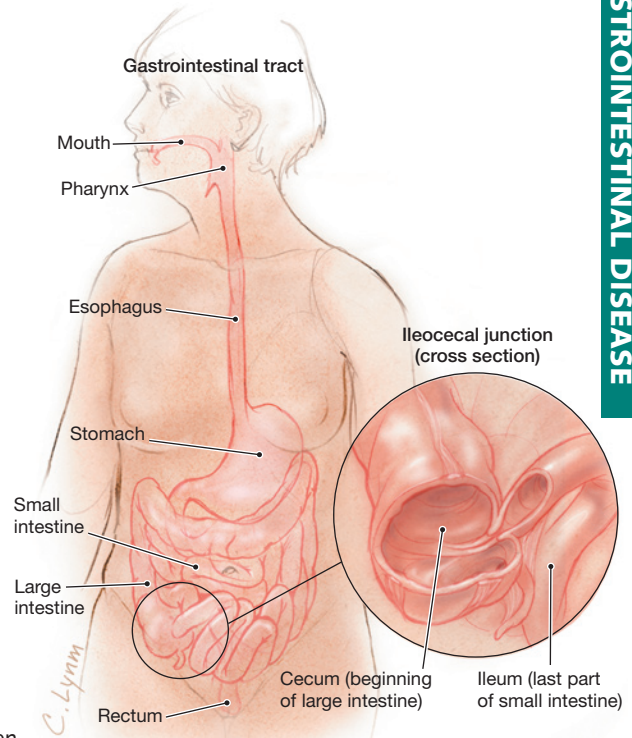
- Diarrhea
- Rectal bleeding
- Abdominal pain
- Weight loss
- Arthritis
- Fever
- Anemia
- Poor growth in children

DIAGNOSIS AND TESTING

With a complete medical history and physical examination, the physician seeks other causes of the symptoms of Crohn disease, particularly the presence of colon or rectal cancer. Complete blood count, blood chemistries, other blood tests for markers of inflammation, along with imaging studies, are the basic tests used to diagnose Crohn disease. **Endoscopy** (insertion of a tube to visualize the intestine) is often used, with **biopsies** (tissue samples) of involved tissues sent for laboratory examination. Most persons with Crohn disease see a **gastroenterologist**, a doctor with specialized training in the treatment of gastrointestinal diseases.

TREATMENT OPTIONS

- Steroid medications
- Other anti-inflammatory medications (including sulfasalazine)
- Nonspecific immunosuppressive drugs (such as azathioprine and mercaptopurine) help to reduce the body's reaction to antigens and decrease the inflammatory response.
- Monoclonal antibodies (such as infliximab, adalimumab, and natalizumab) work against specific inflammatory substances in the body.
- Surgical treatment may include **colectomy** (removal of the colon) or part of the small intestine if the disease process does not respond to treatment with medications. Operations may also be required to treat complications of Crohn disease, such as **abscess** (localized infection), **bowel obstruction** (intestinal blockage), or **fistulas** (drainage channels that develop between the intestine and the skin).
- Antibiotics may be prescribed for infections.
- Vitamins, minerals, and other nutritional supplements may be useful to treat specific deficiencies.



FOR MORE INFORMATION

- National Institute of Diabetes and Digestive and Kidney Diseases www.digestive.niddk.nih.gov
- Crohn's and Colitis Foundation of America www.cdfa.org
- American Gastroenterological Association www.gastro.org

INFORM YOURSELF

To find this and previous JAMA Patient Pages, go to the Patient Page Index on JAMA's Web site at www.jama.com. Many are available in English and Spanish. A Patient Page on irritable bowel syndrome was published in the February 22, 2006, issue; one on colon cancer was published in the September 27, 2006, issue; and one on colon cancer screening was published in the March 8, 2006, issue.

Sources: National Institute of Diabetes and Digestive and Kidney Diseases; Crohn's and Colitis Foundation of America; American Gastroenterological Association

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