

# Crohn's Disease

*National Digestive Diseases Information Clearinghouse*



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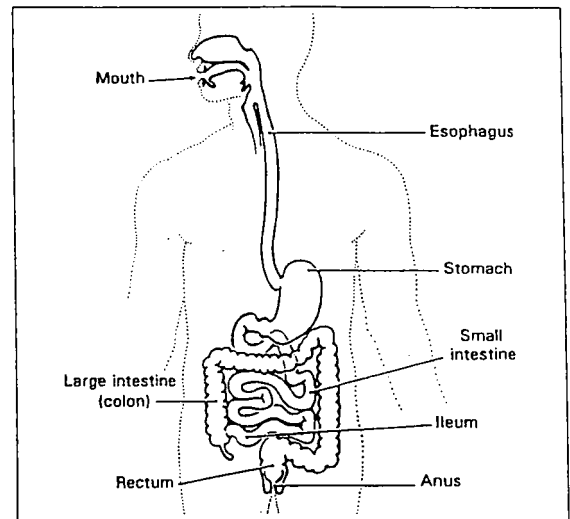
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Inflammatory bowel disease (IBD) is a group of chronic disorders that cause inflammation or ulceration in the small and large intestines. Most often IBD is classified as ulcerative colitis or Crohn's disease but may be referred to as colitis, enteritis, ileitis, and proctitis.

Ulcerative colitis causes ulceration and inflammation of the inner lining of the colon and rectum, while Crohn's disease is an inflammation that extends into the deeper layers of the intestinal wall.

Ulcerative colitis and Crohn's disease cause similar symptoms that often resemble other conditions such as irritable bowel syndrome (spastic colitis). The correct diagnosis may take some time.

Crohn's disease usually involves the small intestine, most often the lower part (the ileum). In some cases, both the small and large intestine (colon or bowel) are affected. In other cases, only the colon is involved. Sometimes, inflammation also may affect the mouth, esophagus, stomach, duodenum, appendix, or anus. Crohn's disease is a chronic condition and may recur at various times over a lifetime. Some people have long periods of remission, sometimes for years, when they are free of symptoms. There is no way to predict when a remission may occur or when symptoms will return.



## What Are the Symptoms?

The most common symptoms of Crohn's disease are abdominal pain, often in the lower right area, and diarrhea. There also may be rectal bleeding, weight loss, and fever. Bleeding may be serious and persistent, leading to anemia (low red blood cell count). Children may suffer delayed development and stunted growth.

## What Causes Crohn's Disease and Who Gets It?

There are many theories about what causes Crohn's disease, but none has been proven. One theory is that some agent, perhaps a virus or a bacterium, affects the body's

immune system to trigger an inflammatory reaction in the intestinal wall. Although there is a lot of evidence that patients with this disease have abnormalities of the immune system, doctors do not know whether the immune problems are a cause or a result of the disease. Doctors believe, however, that there is little proof that Crohn's disease is caused by emotional distress or by an unhappy childhood.

Crohn's disease affects males and females equally and appears to run in some families. About 20 percent of people with Crohn's disease have a blood relative with some form of inflammatory bowel disease, most often a brother or sister and sometimes a parent or child.

## **How Does Crohn's Disease Affect Children?**

Women with Crohn's disease who are considering having children can be comforted to know that the vast majority of such pregnancies will result in normal children. Research has shown that the course of pregnancy and delivery is usually not impaired in women with Crohn's disease. Even so, it is a good idea for women with Crohn's disease to discuss the matter with their doctors before pregnancy. Children who do get the disease are sometimes more severely affected than adults, with slowed growth and delayed sexual development in some cases.

## **How Is Crohn's Disease Diagnosed?**

If you have experienced chronic abdominal pain, diarrhea, fever, weight loss, and anemia, the doctor will examine you for signs of Crohn's disease. The doctor will take a history and give you a thorough physical exam. This exam will include blood tests to find out if you are anemic as a result of blood loss, or if there is an increased number of white blood cells, suggesting an inflammatory process in your body. Examination of a stool sample can tell the doctor if there is blood loss, or if an infection by a parasite or bacteria is causing the symptoms.

The doctor may look inside your rectum and colon through a flexible tube (endoscope) that is inserted through the anus. During the exam, the doctor may take a sample of tissue (biopsy) from the lining of the colon to look at under the microscope.

Later, you also may receive x-ray examinations of the digestive tract to determine the nature and extent of disease. These exams may include an upper gastrointestinal (GI) series, a small intestinal study, and a barium enema intestinal x-ray. These procedures are done by putting the barium, a chalky solution, into the upper or lower intestines. The barium shows up white on x-ray film, revealing inflammation or ulceration and other abnormalities in the intestine.

If you have Crohn's disease, you may need medical care for a long time. Your doctor also will want to test you regularly to check on your condition.

## **What Is the Treatment?**

Several drugs are helpful in controlling Crohn's disease, but at this time there is no cure. The usual goals of therapy are to correct nutritional deficiencies; to control inflammation; and to relieve abdominal pain, diarrhea, and rectal bleeding.

Abdominal cramps and diarrhea may be helped by drugs. The drug sulfasalazine often lessens the inflammation, especially in the colon. This drug can be used for as long as needed, and it can be used along with other drugs. Side effects such as nausea, vomiting, weight loss, heartburn, diarrhea, and headache occur in a small percentage of cases. Patients who do not do well on sulfasalazine often do very well on related drugs known as mesalamine or 5-ASA agents. More serious cases may require steroid drugs, antibiotics, or drugs that affect the body's immune system such as azathioprine or 6-mercaptopurine (6-MP).

## **Can Diet Control Crohn's Disease?**

No special diet has been proven effective for preventing or treating this disease. Some people find their symptoms are made worse by milk, alcohol, hot spices, or fiber. But there are no hard and fast rules for most people. Follow a good nutritious diet and try to avoid any foods that seem to make your symptoms worse. Large doses of vitamins are useless and may even cause harmful side effects.

Your doctor may recommend nutritional supplements, especially for children with growth retardation. Special high-calorie

liquid formulas are sometimes used for this purpose. A small number of patients may need periods of feeding by vein. This can help patients who temporarily need extra nutrition, those whose bowels need to rest, or those whose bowels cannot absorb enough nourishment from food taken by mouth.

## **What Are the Complications of Crohn's Disease?**

The most common complication is blockage (obstruction) of the intestine. Blockage occurs because the disease tends to thicken the bowel wall with swelling and fibrous scar tissue, narrowing the passage. Crohn's disease also may cause deep ulcer tracts that burrow all the way through the bowel wall into surrounding tissues, into adjacent segments of intestine, into other nearby organs such as the urinary bladder or vagina, or into the skin. These tunnels are called fistulas. They are a common complication and often are associated with pockets of infection or abscesses (infected areas of pus). The areas around the anus and rectum often are involved. Sometimes fistulas can be treated with medicine, but in many cases they must be treated surgically.

Crohn's disease also can lead to complications that affect other parts of the body. These systemic complications include various forms of arthritis, skin problems, inflammation in the eyes or mouth, kidney stones, gallstones, or other diseases of the liver and biliary system. Some of these problems respond to the same treatment as the bowel symptoms, but others must be treated separately.

## Is Surgery Often Necessary?

Crohn's disease can be helped by surgery, but it cannot be cured by surgery. The inflammation tends to return in areas of the intestine next to the area that has been removed. Many Crohn's disease patients require surgery, either to relieve chronic symptoms of active disease that does not respond to medical therapy or to correct complications such as intestinal blockage, perforation, abscess, or bleeding. Drainage of abscesses or resection (removal of a section of bowel) due to blockage are common surgical procedures.

Sometimes the diseased section of bowel is removed. In this operation, the bowel is cut above and below the diseased area and reconnected. Infrequently some people must have their colons removed (colectomy) and an ileostomy created.

In an ileostomy, a small opening is made in the front of the abdominal wall, and the tip of the lower small intestine (ileum) is brought to the skin's surface. This opening, called a stoma, is about the size of a quarter or a 50-cent piece. It usually is located in the right lower corner of the abdomen in the area of the beltline. A bag is worn over the opening to collect waste, and the patient empties the bag periodically. The majority of patients go on to live normal, active lives with an ostomy.

The fact that Crohn's disease often recurs after surgery makes it very important for the patient and doctor to consider carefully the benefits and risks of surgery compared with other treatments. Remember, most people with this disease continue to lead useful and productive lives. Between periods of disease activity, patients may feel quite well and be free of symptoms. Even though there may be long-term needs for medicine and even periods of hospitalization, most patients are able to hold productive jobs, marry, raise families, and function successfully at home and in society.

## Additional Readings

*Bleeding in the Digestive Tract and Ulcerative Colitis*. National Digestive Diseases Information Clearinghouse, 2 INFORMATION WAY, BETHESDA, MD 20892-3570; (301) 654-3810. General patient information fact sheets.

Brandt, LJ, Steiner-Grossman, P, eds. *Treating IBD: A Patient's Guide to the Medical and Surgical Management of Inflammatory Bowel Disease*. New York: Raven Press, 1989. General guide for patients with sections on treatment and descriptions and drawings of surgical procedures. Available from the Crohn's & Colitis Foundation of America.

Hanauer, SB, Peppercorn, MD, Present, DH. Current concepts, new therapies in IBD. *Patient Care*, 1992; 26(13): 79-102. General review article for health care professionals.

Steiner-Grossman, P, Banks PA, Present, DH, eds. *The New People Not Patients: A Source Book for Living with IBD*. Dubuque, Iowa: Kendall/Hunt Publishing Company, 1992. Book for patients with sections on diagnostic tests, medications, nutrition, coping with employment and health insurance problems, and IBD in children and teenagers, older adults, and during pregnancy. Available from the Crohn's & Colitis Foundation of America.

## Additional Resources

Crohn's & Colitis Foundation of America, Inc., 386 Park Avenue South, 17th Floor, New York, NY 10016-8804; (800) 932-2423 or (212) 685-3440.

Pediatric Crohn's & Colitis Association, Inc., P.O. Box 188, Newton, MA 02168; (617) 244-6678.

Reach Out for Youth with Ileitis and Colitis, Inc., 15 Chemung Place, Jericho, NY 11753; (516) 822-8010.

United Ostomy Association, 36 Executive Park, Suite 120, Irvine, CA 92714; (800) 826-0826 or (714) 660-8624.