

# Crohn's Disease

Crohn's disease is a chronic autoimmune disease that can affect any part of the gastrointestinal tract but most commonly occurs in the ileum (the area where the small and large intestine meet).

In Crohn's disease, these rogue immune cells attack the gastrointestinal system. The cause is unknown, but genetic factors seem to play a role.

Inflammation frequently occurs at the end of the small intestine that joins the large intestine, but the condition may affect any area of the digestive tract. As a result of the immune attack, the intestinal wall becomes thick, and deep ulcers may form. In addition to the bowel abnormalities, Crohn's disease can also affect other organs in the body, causing:

- Skin rash
- Fistulas (abnormal connections between bowel and adjacent organs or skin)
- Liver inflammation
- Joint disease (arthritis)
- Eye inflammation
- Kidney stones
- Clotting problems (deep vein thrombosis)

The disease may occur at any age, but adolescence and early adulthood are the periods of highest risk. The only known risk factors include a family history of Crohn's disease, Jewish ancestry, and smoking. About 7 out of every 100,000 people will develop Crohn's disease. Whites much more than other groups.

Your health care provider may prescribe medications such as 5-aminosalicylate to control the inflammatory process. If this is not effective or if the case is severe, treatment may require corticosteroids and immunomodulators such as azathioprine or 6-mercaptopurine.

If you have abscesses or fistulas, your health care provider may prescribe antibiotics. Infliximab (an antibody to an immune chemical called TNF-alpha, which promotes inflammation) can be effective for patients with fistulous disease and those with moderate to severe disease.

If medical therapy is not effective, you may need surgery (see bowel resection) to remove a diseased or strictured segment of the bowel or to drain an abscess. However, unlike ulcerative colitis, surgical removal of a diseased portion of the intestine does not cure the condition.

No specific diet has been shown to improve or worsen the bowel inflammation in Crohn's disease. An adequate intake of calories, vitamins, and protein is important.

In a small, initial clinical trial led by the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health, doctors found that up to 75 percent of people with Crohn's disease responded to an antibody designed to disable interleukin-12 (IL-12), an immune system protein involved in inflammation. People with Crohn's produce excess IL-12. Previous studies by NIAID researcher Warren Strober, M.D., linked IL-12 to the cascade of immune system events that leads to the debilitating symptoms of Crohn's disease.

Another new strategy that has shown great success is treatment with thalidomide.

A gene that leads to a predisposition to this disorder was discovered in 2004.