

# Crohn's Disease

---



# Intestinal Tract

---



Esophagus

Stomach

Colon  
(Large Intestine)

Small intestine

Ileum

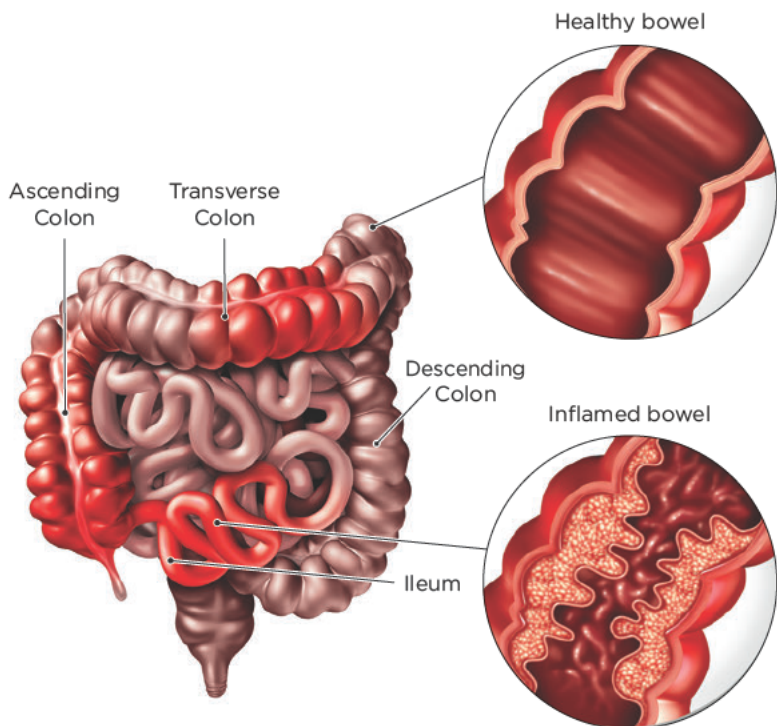
Rectum

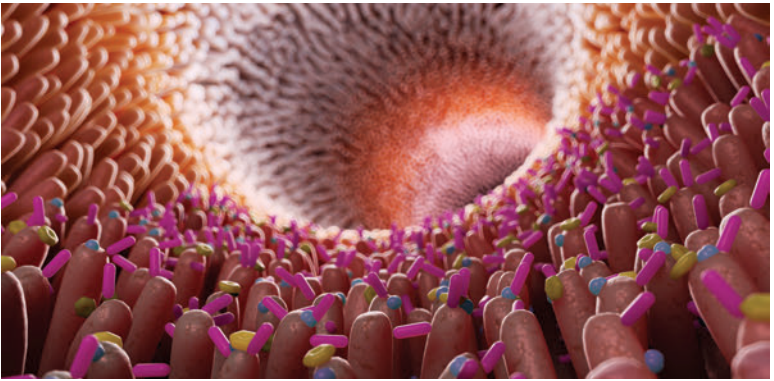
## Crohn's Disease

Crohn's disease is a chronic, recurrent inflammatory disease of the intestinal tract. The intestinal tract has four major parts: the esophagus, or food tube; the stomach, where food is churned and digested; the long, small bowel, where nutrients, calories, and vitamins are absorbed; and the colon and rectum, where water is absorbed and stool is stored.

*See illustration on left.*

The two primary sites for Crohn's disease are the ileum, which is the last portion of the small bowel (ileitis, regional enteritis), and the colon (Crohn's colitis). The condition begins as small, microscopic nests of inflammation which persist and smolder. The lining of the bowel can then become ulcerated and the bowel wall thickened. Eventually, the bowel may become narrowed or obstructed and surgery would be needed.





*Good bacteria, flora, and microbiome in the folds of the small intestine.*

### **What Causes Crohn's Disease?**

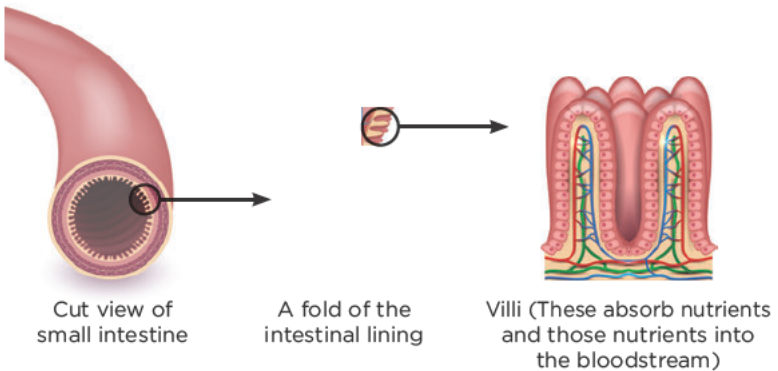
There is now evidence of a genetic link as Crohn's frequently shows up in a family group. In addition, there is evidence that for some people, the normal bacteria that grow in the lower intestine may be mistaken as harmful bacteria by the immune system. If this occurs, the immune system will attack the healthy bacteria causing the walls of the small intestine to become inflamed. If the inflammation does not subside ulceration may occur as well as chronic inflammation, thickening of the intestinal wall, and in the anal area, fissures form in the walls of the intestine.

There are still a number of unknowns about the cause of the disease. Fortunately, a great deal is known about the disease and especially its treatment.

### **Who Develops Crohn's Disease?**

The condition occurs in both sexes and among all age groups, although it most frequently begins in young people. Jewish people are at increased risk of developing Crohn's, while African Americans are at decreased risk, which speaks to the genetic link in this disease.

## Interior Wall of Small Intestine



### Symptoms

The symptoms of Crohn's disease depend on where in the intestinal tract the disorder appears.

### Signs and symptoms may include:

- Recurrent pain in the right lower abdomen (pain may mimic acute appendicitis)
- Diarrhea (sometimes bloody)
- Leaking of fluid waste from the anus caused by a fistula forming. A fistula is an abnormal passageway between an organ and another structure. For example, a fistula may form between two parts of a bowel, the bowel to the bladder, or the bowel and the vagina.
- Fever
- Mouth sores
- Inflammation of eyes, skin, joints, liver, or bile ducts
- Fatigue
- Reduced appetite
- Weight loss
- Delay in growth for children
- Delay in sexual development



*Physical exam*



*Blood tests*

## Diagnosis

There is no one conclusive diagnostic test for Crohn's disease. The patient's medical history and physical exam are always helpful. Certain blood and stool tests are performed to arrive at a diagnosis. X rays of the small intestine and colon (obtained through an upper GI series and barium enema) are usually required. In addition, a visual examination (sigmoidoscopy) of the lining of the rectum and lower bowel is usually necessary. A more thorough exam of the entire colon (colonoscopy) is often the best way of diagnosing the problem when the disease is in the colon.

## Course and Complications

The disorder often remains quiet and easily controlled for long periods of time. Most people with Crohn's disease continue to pursue their goals in life, go to school, marry, have a family, and work with few limitations or inconveniences. Some problems, outside the bowel, can occur. Arthritis, eye and skin problems, and in rare instances chronic liver conditions may develop. As noted, the disease can occur around the anal canal. Open sores called fissures can develop, which are often painful. A fistula can also form. This is a tiny channel that burrows from the rectum to the skin around the anus. In addition, when inflammation persists in the ileum or colon, narrowing and partial obstruction may occur. Surgery is usually required to treat



*X-ray with contrast dye*



*Colonoscopy*

this problem. When Crohn's disease has been present for many years in the colon there is an increased risk of cancer.

## **Treatment**

Effective medical and surgical treatment is available for Crohn's disease. It is particularly important to maintain good nutrition and health with a balanced diet, adequate exercise, and a positive, upbeat attitude.

Treatment may include:

- Antibiotics
- Immune system suppressors
- Anti inflammatory drugs
- Alterations to diet and nutrition
- Surgery

## **Erlanger Gastroenterology**

### **Baroness Campus**

979 East 3rd Street, Ste. C 825  
Chattanooga, TN 37403

### **Erlanger East Hospital**

1755 Gunbarrel Road, Ste. 300  
Chattanooga, TN 37421

---

PH 423 778 4830

Fax 423 778 4831



**erlanger**

**Gastroenterology**