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Crohn's disease

Inflammatory bowel disease - Crohn's disease; Regional enteritis; Ileitis; Granulomatous ileocolitis; IBD-Crohn's disease

Last reviewed: October 16, 2011.

Crohn's disease is a form of inflammatory bowel disease (IBD). It usually affects the intestines, but may occur anywhere from the mouth to the end of the rectum (anus).

See also: [Ulcerative colitis](#)

Causes, incidence, and risk factors

The exact cause of Crohn's disease is unknown. It is an autoimmune disorder. An autoimmune disorder is a condition that occurs when your body's immune system mistakenly attacks and destroys healthy body tissue.

People with Crohn's disease have ongoing (chronic) inflammation of the gastrointestinal tract (GI tract). Crohn's disease may involve the small intestine, the large intestine, the rectum, or the mouth. The inflammation causes the intestinal wall to become thick.

There are different types of Crohn's disease. The type depends on what part of your body is affected.

The following seem to play a role in Crohn's disease:

- Your genes
- Environmental factors
- The body over-reacts to normal bacteria in the intestines

Crohn's disease may occur at any age. It usually occurs in people between ages 15 - 35.

You are more likely to get this disease if you:

- Have a family history of Crohn's disease
- Are Jewish
- Smoke

Symptoms

Symptoms depend on what part of the gastrointestinal tract is affected. Symptoms range from mild to severe, and can come and go with periods of flare-ups.

The main symptoms of Crohn's disease are:

- Crampy abdominal (belly area) pain
- [Fever](#)
- Fatigue
- [Loss of appetite](#)
- Pain with passing stool ([tenesmus](#))
- Persistent, watery [diarrhea](#)
- [Weight loss](#)

Other symptoms may include:

- [Constipation](#)
- Eye inflammation
- [Fistulas](#) (usually around the rectal area, may cause draining of pus, mucus, or stools)

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- Joint pain and swelling
- Mouth ulcers
- Rectal bleeding and bloody stools
- Skin lumps or sores (ulcers)
- Swollen gums

Signs and tests

A physical examination may reveal an abdominal mass or tenderness, skin rash, swollen joints, or mouth ulcers.

Tests to diagnose Crohn's disease include:

- Barium enema or upper GI series
- Colonoscopy or sigmoidoscopy
- Computed tomography (CT scan) of the abdomen
- Endoscopy, including capsule endoscopy
- Magnetic resonance imaging (MRI) of the abdomen
- Enteroscopy

A stool culture may be done to rule out other possible causes of the symptoms.

This disease may also alter the results of the following tests:

- Albumin
- C-reactive protein
- Erythrocyte sedimentation rate
- Fecal fat
- Hemoglobin
- Liver function tests
- White blood cell count

Treatment

DIET AND NUTRITION

You should eat a well-balanced, healthy diet. It is important to get enough calories, protein, and essential nutrients from a variety of food groups.

No specific diet has been shown to make Crohn's symptoms better or worse. Specific food problems may vary from person to person.

However, certain types of foods can make diarrhea and gas worse. To help ease symptoms, try:

- Eating small amounts of food throughout the day.
- Drinking lots of water (drink small amounts often throughout the day).
- Avoiding high-fiber foods (bran, beans, nuts, seeds, and popcorn).
- Avoiding fatty, greasy or fried foods and sauces (butter, margarine, and heavy cream).
- Limiting dairy products if you have problems digesting dairy fats. Try low-lactose cheeses, such as Swiss and cheddar, and an enzyme product, such as Lactaid, to help break down lactose.
- Avoiding foods that you know cause gas, such as beans.

Ask your doctor about extra vitamins and minerals you may need:

- Iron supplements (if you are anemic)
- Calcium and vitamin D supplements to help keep your bones strong

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- Vitamin B12 to prevent anemia

STRESS

You may feel worried, embarrassed, or even sad and depressed about having a bowel accident. Other stressful events in your life, such as moving, a job loss, or the loss of a loved one can cause digestive problems.

Ask your doctor or nurse for tips on how to manage your stress.

MEDICATIONS

You can take medication to treat very bad diarrhea. Loperamide (Imodium) can be bought without a prescription. Always talk to your doctor or nurse before using these drugs.

Other medicines to help with symptoms include:

- Fiber supplements may help your symptoms. You can buy psyllium powder (Metamucil) or methylcellulose (Citrucel) without a prescription. Ask your doctor about these products.
- Always talk to your doctor before using any laxative medicines.
- You may use acetaminophen (Tylenol) for mild pain.
- Drugs such as aspirin, ibuprofen (Advil, Motrin), or naproxen (Aleve, Naprosyn) may make your symptoms worse.

Your doctor may also give you a prescription for stronger pain medicines.

Medicines that may be prescribed include:

- Aminosalicylates (5-ASAs) are medicines that help control mild to moderate symptoms. Some forms of the drug are taken by mouth; others must be given rectally.
- Corticosteroids (prednisone and methylprednisolone) are used to treat moderate to severe Crohn's disease. They may be taken by mouth or inserted into the rectum.
- Medicines such as azathioprine or 6-mercaptopurine quiet the immune system's reaction.
- Antibiotics may be prescribed for abscesses or fistulas.
- Biologic therapy is used to treat patients with severe Crohn's disease that does not respond to any other types of medication. Medicines in this group include Infliximab (Remicade) and adalimumab (Humira), certolizumab (Cimzia), and natalizumab (Tysabri).

SURGERY

If medicines do not work, a type of surgery called bowel resection may be needed to remove a damaged or diseased part of the intestine or to drain an abscess. However, removing the diseased portion of the intestine does not cure the condition.

Patients who have Crohn's disease that does not respond to medications may need surgery, especially when there are complications such as:

- Bleeding (hemorrhage)
- Failure to grow (in children)
- Fistulas (abnormal connections between the intestines and another area of the body)
- Infections (abscesses)
- Narrowing (strictures) of the intestine

Some patients may need surgery to remove the entire large intestine (colon), with or without the rectum.

For information on what to expect after you are in the hospital for Crohn's disease, see: Crohn's disease - coming home from the hospital

See also:

- Ileostomy
- Large bowel resection
- Small bowel resection

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- [Total abdominal colectomy](#)
- [Total proctocolectomy with ileostomy](#)

Support Groups

The Crohn's and Colitis Foundation of America offers support groups throughout the United States. See <http://www.cdfa.org/chapters/>

Expectations (prognosis)

There is no cure for Crohn's disease. The condition is marked by periods of improvement followed by flare-ups of symptoms.

It is very important to stay on medications long-term to try to keep the disease symptoms from returning. If you stop or change your medications for any reason, let your doctor know right away.

You have a higher risk for small bowel and colon cancer if you have Crohn's disease.

Complications

- Abscess
- [Bowel obstructions](#)
- Complications of corticosteroid therapy, such as thinning of the bones
- [Erythema nodosum](#)
- Fistulas in the following areas:
 - Bladder
 - Skin
 - Vagina
- Impaired growth and sexual development in children
- Inflammation of the joints
- Lesions in the eye
- Nutritional deficiency (particularly [vitamin B12](#) deficiency)
- Pyoderma gangrenosum

Calling your health care provider

Call for an appointment with your health care provider if:

- You have very bad abdominal pain
- You cannot control your diarrhea with diet changes and drugs
- You have lost weight, or a child is not gaining weight
- You have rectal bleeding, drainage, or sores
- You have a fever that lasts for more than 2 or 3 days, or a fever higher than 100.4°F without an illness
- You have nausea and vomiting that lasts for more than a day
- You have skin sores or lesions that do not heal
- You have joint pain that prevents you from doing your everyday activities
- You have side effects from any drugs prescribed for your condition

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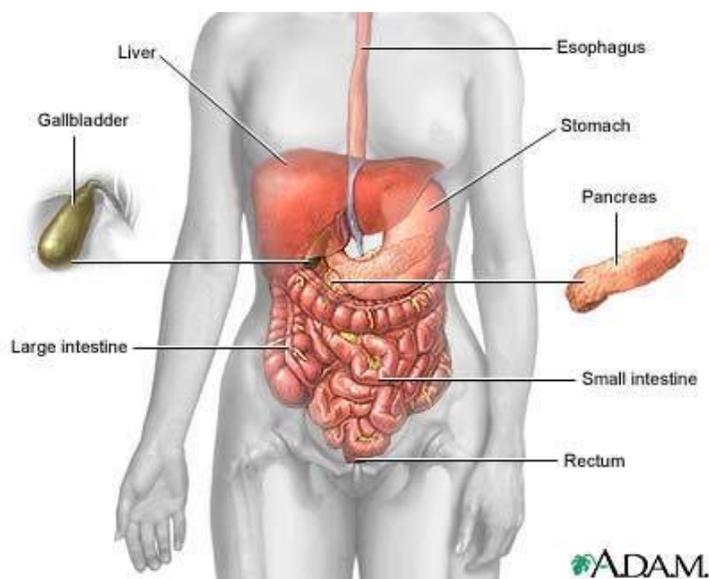
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Reviewed by: David Zieve, MD, MHA, Medical Director, A.D.A.M., Inc., and George F. Longstreth, MD, Department of Gastroenterology, Kaiser Permanente Medical Care Program, San Diego, California.

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Figures



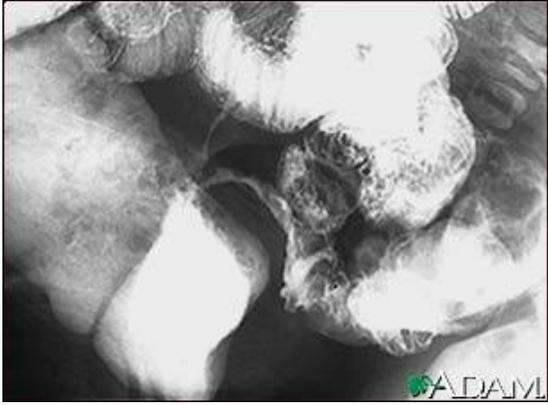
Digestive system

The esophagus, stomach, large and small intestine, aided by the liver, gallbladder and pancreas convert the nutritive components of food into energy and break down the non-nutritive components into waste to be excreted.

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Reviewed by: Linda J. Vorvick, MD, Medical Director, MEDEX Northwest Division of Physician Assistant Studies, University of Washington, School of Medicine; George F. Longstreth, MD, Department of Gastroenterology, Kaiser Permanente Medical Care Program, San Diego, California. Also reviewed by David Zieve, MD, MHA, Medical Director, A.D.A.M. Health Solutions, Ebix, Inc.

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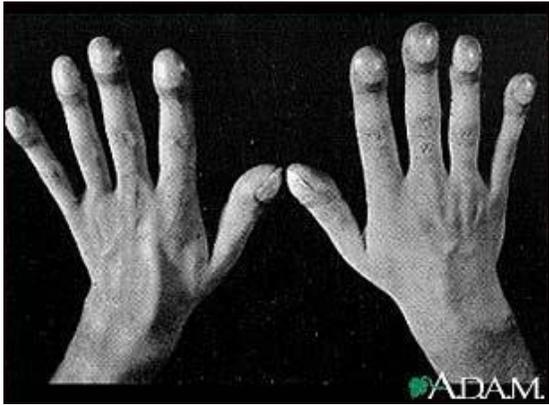
Crohn's disease, x-ray

This lower abdominal x-ray shows narrowing (stenosis) of the end of the small intestine (ileum), caused by Crohn's disease. Crohn's disease typically affects the small intestine, whereas ulcerative colitis typically affects the large intestine. A solution containing a dye (barium), was swallowed by the patient. When it passed into the small intestines, this x-ray was taken (lower GI series).

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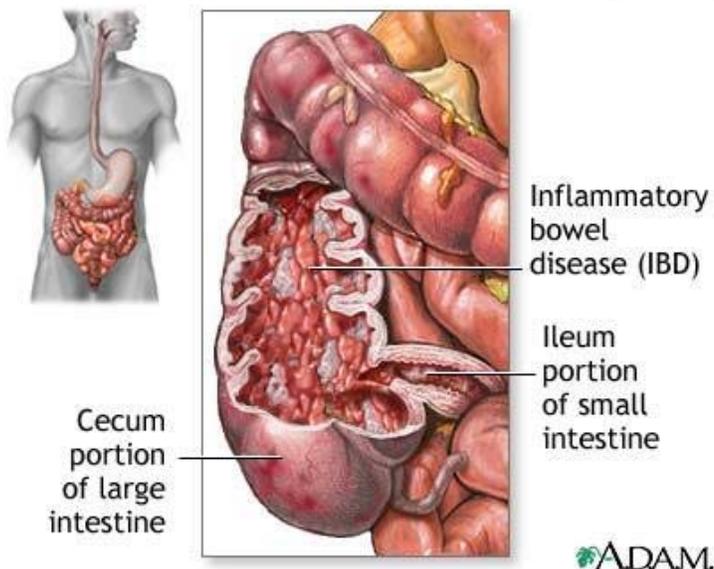
Clubbing

Clubbing may result from chronic low blood-oxygen levels. This can be seen with cystic fibrosis, congenital cyanotic heart disease, and several other diseases. The tips of the fingers enlarge and the nails become extremely curved from front to back.

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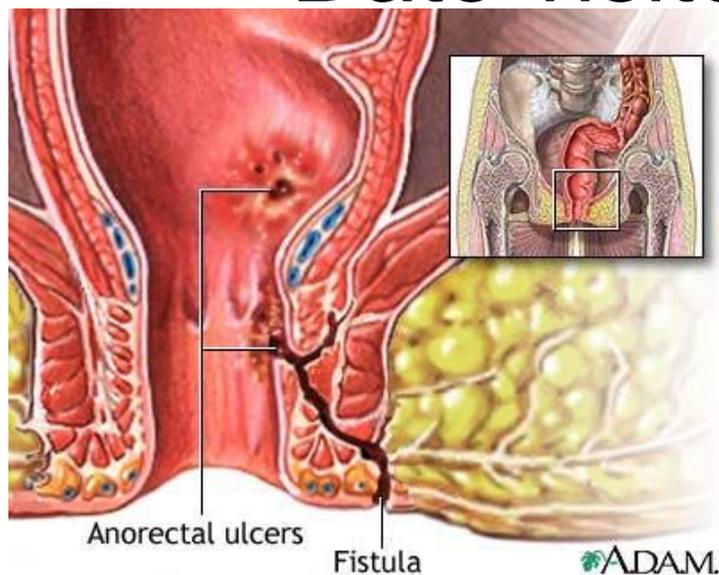
Inflammatory bowel disease

Crohn's disease, also called regional enteritis, is a chronic inflammation of the intestines which is usually confined to the terminal portion of the small intestine, the ileum. Ulcerative colitis is a similar inflammation of the colon, or large intestine. These and other IBDs (inflammatory bowel disease) have been linked with an increased risk of colorectal cancer.

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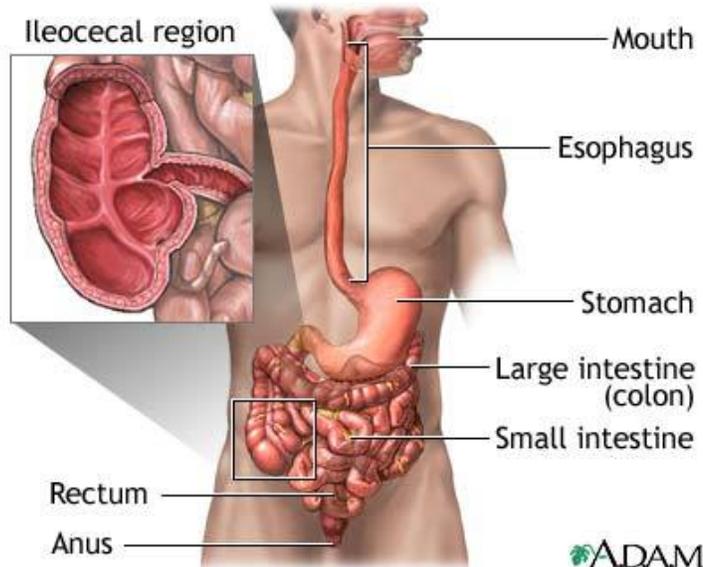
Anorectal fistulas

Crohn's disease is an inflammation of the intestines caused by immune response to an infection. The lining of the intestine may ulcerate and form channels of infection, called fistulas. Fistulas tunnel from the area of ulceration, creating a hole which may continue until it reaches the surface of the organ, or the surface of nearby skin. These holes typically spread the infection that creates them, and life-threatening conditions such as peritonitis (inflammation of the lining of the abdomen) may occur.

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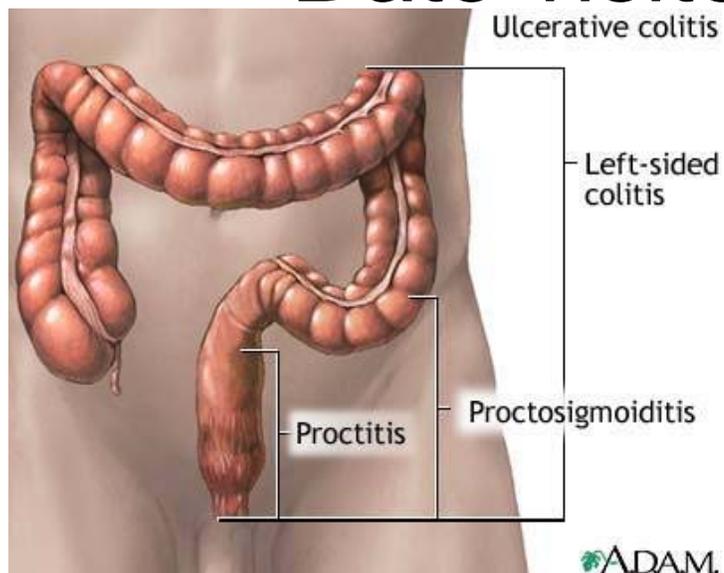
Crohn's disease - affected areas

The inflammation of Crohn's disease is nearly always found in the ileocecal region. The ileocecal region consists of the last few inches of the small intestine (the ileum), which moves digesting food to the beginning portion of the large intestine (the cecum). However, Crohn's disease can occur anywhere along the digestive tract.

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Ulcerative colitis

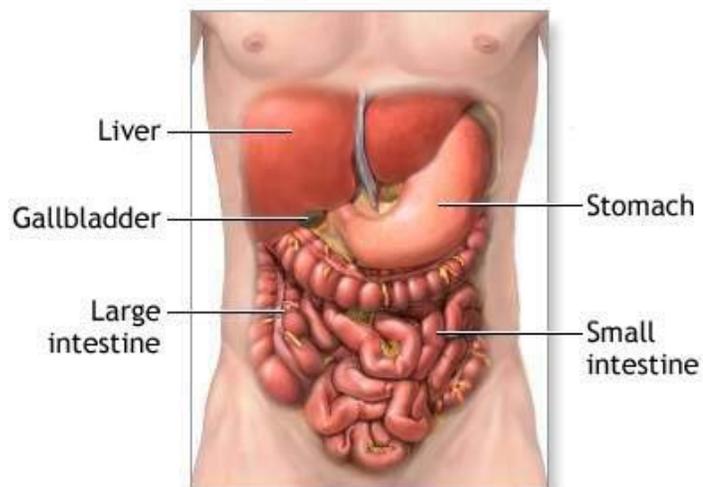
Ulcerative colitis is categorized according to location:

- Proctitis involves only the rectum
- Proctosigmoiditis affects the rectum and sigmoid colon
- Left-sided colitis encompasses the entire left side of the large intestine
- Pancolitis inflames the entire colon

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Digestive system organs

The digestive system organs in the abdominal cavity include the liver, gallbladder, stomach, small intestine and large intestine.

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