CONDITION

Crohn disease

Crohn disease is a long-term condition in which inflammation can damage any part of the digestive tract.

WHAT IT IS
Chronic inflammatory bowel disease

BODY SYSTEM
Digestive system

MAIN SYMPTOMS
Diarrhea, abdominal pain, weight loss, fatigue

WHAT CAUSES IT
Abnormal immune response influenced by genes and environment

HOW IT IS DIAGNOSED
Colonoscopy with biopsies, supported by scans

MAIN TREATMENT
Immune treatments, nutrition support, and sometimes surgery

CAN IT BE CURED?
No - inflammation can return after treatment

IS IT AN EMERGENCY?
Sometimes - with severe pain, heavy bleeding, or fainting

LONG-TERM OUTLOOK
Flare-ups and remissions; many people remain active

Overview

Crohn disease, also called Crohn's disease, is a long-term condition that causes inflammation in the digestive tract. It is one type of inflammatory bowel disease, often shortened to IBD.

Inflammation can develop anywhere from the mouth to the anus. It most often affects the end of the small intestine and the beginning of the large intestine. Inflamed areas may appear in patches, with healthy tissue between them. The inflammation can extend through the full thickness of the bowel wall.

Crohn disease can cause periods of active symptoms, called flare-ups, followed by periods when symptoms improve, called remission. Some people have mild, occasional symptoms. Others need ongoing treatment to control inflammation and prevent bowel damage.

Crohn disease is different from irritable bowel syndrome, or IBS. IBS can cause pain and changes in bowel habits, but it does not cause the same visible inflammation or tissue damage.

Symptoms

Symptoms depend on which part of the digestive tract is affected and how active the inflammation is. They may begin gradually or develop over a short time.

Common symptoms include:

Inflammation near the anus may cause a painful swelling, drainage, a crack in the skin, or a fistula. A fistula is an abnormal tunnel connecting the bowel to the skin or another organ.

Crohn disease can also affect areas outside the digestive tract. Some people develop painful joints, mouth ulcers, skin changes, or eye inflammation. Children may grow more slowly or enter puberty later than expected.

Symptoms do not always show how much inflammation is present. Diarrhea or pain can have other causes, while bowel inflammation may continue even when you feel reasonably well. Follow-up tests can help assess this.

- Ongoing or recurring diarrhea
- Cramping or pain in the abdomen
- Tiredness, fever, reduced appetite, or unintended weight loss
- Blood or mucus in bowel movements

Causes and risk factors

The exact cause is not fully understood. Crohn disease appears to develop when the immune system reacts in an abnormal and ongoing way within the digestive tract. Genes, gut microorganisms and environmental factors all contribute.

Having a close relative with Crohn disease or another form of IBD increases the chance of developing it. However, many people with the condition have no family history.

Cigarette smoking raises the risk of developing Crohn disease and is linked to more flare-ups, complications and repeat surgery. This differs from ulcerative colitis, another form of IBD.

Food and stress do not directly cause Crohn disease. They can affect symptoms, eating patterns and quality of life. Some medicines, including nonsteroidal anti-inflammatory drugs such as ibuprofen, may worsen symptoms in some people.

Crohn disease is not caused by poor hygiene, and you cannot catch it from someone else.

Diagnosis

There is no single blood or stool test that confirms Crohn disease. Diagnosis usually combines your symptoms and medical history with tests that examine the bowel and rule out other causes.

Blood tests can look for anemia, inflammation and low levels of nutrients. Stool tests may check for infection and measure calprotectin, a protein that increases when the intestines are inflamed.

A colonoscopy is a key test. A flexible camera is passed through the anus to examine the large intestine and the end of the small intestine. Small tissue samples, called biopsies, are taken and examined under a microscope. Sedation and pain relief are usually offered.

Magnetic resonance imaging, or MRI, and computed tomography, or CT, can show parts of the small bowel that a colonoscopy cannot reach. They can also find narrowing, abscesses or fistulas. Ultrasound is used in some centres.

A capsule camera may be considered when other tests have not explained suspected small-bowel inflammation. It may not be suitable if narrowing could trap the capsule.

Treatment and management

Treatment aims to bring active inflammation under control, maintain remission, relieve symptoms and reduce the risk of permanent bowel damage. The best approach depends on where the inflammation is, how severe it is, previous treatments and your general health.

Corticosteroids like prednisone or hydrocortisone can reduce inflammation during a flare-up. They are generally used for limited periods because long-term use can cause significant side effects. They are not intended to maintain remission.

Medicines that alter specific parts of the immune response may be used for ongoing control. These include immunomodulators, biologic medicines and targeted oral medicines. Some are tablets, while others are given by injection or infusion. Blood tests and other safety checks may be needed before and during treatment.

Antibiotics like amoxicillin or doxycycline are not routine treatment for inflammation inside the bowel. They may be used for certain infections, abscesses or complications around the anus.

Nutrition is an important part of care. A dietitian can help if you are losing weight, avoiding

many foods or lacking iron, vitamin B12, vitamin D or other nutrients. Liquid nutrition may be used as a main treatment in some situations, especially for children. No single diet controls Crohn disease for everyone.

Surgery may be needed to remove a badly narrowed or damaged section of bowel, drain an abscess, or treat a fistula. Some operations require a temporary or permanent stoma, where bowel is brought through an opening in the abdomen. Surgery can provide major relief, but it does not cure Crohn disease because inflammation may later develop elsewhere.

Regular monitoring may include blood tests, stool calprotectin, scans or repeat endoscopy. Monitoring can detect inflammation before it causes obvious symptoms.

Complications

Long-lasting inflammation can cause scar tissue and narrowing, known as a stricture. A severe narrowing may block the movement of food and waste through the bowel.

Inflammation extending through the bowel wall can form fistulas. An infected collection called an abscess may develop. Problems around the anus can include painful cracks, fistulas and abscesses.

Poor absorption, blood loss and reduced food intake can lead to anemia, low vitamin levels, weight loss or weakened bones. Some medicines also affect infection risk or bone health.

People with Crohn disease affecting much of the colon for many years have an increased risk of colorectal cancer. The level of risk is not the same for everyone. Planned colonoscopy surveillance may be recommended based on the location, duration and activity of inflammation.

Prevention

There is no proven way to prevent Crohn disease. It is not caused by a particular food, personal habit or failure to look after yourself.

If you smoke, stopping can reduce the chance of flare-ups and further bowel problems. Taking maintenance treatment as agreed and attending monitoring appointments can help prevent inflammation from causing silent damage.

Vaccination and infection prevention may need extra attention if you take medicines that suppress the immune system. Your care team can review which vaccines are appropriate before and during treatment.

Living with it and what to expect

Crohn disease usually follows a course of flare-ups and remissions over months and years. The timing and severity are not predictable. Some people have long periods with few symptoms, while others need changes in treatment or surgery.

Treatment can often control inflammation and allow work, study, travel, exercise and family life to continue. Fatigue, urgent bowel movements and uncertainty about toilet access can still affect daily plans, even when symptoms are not severe.

Keeping a record of symptoms, weight and medication can help identify changes. Food restriction should not become broader than necessary. During a flare, softer or lower-fibre foods may be easier for some people, especially if the bowel is narrowed, but dietary needs change over time.

Emotional effects are also common. Anxiety about symptoms, body image, relationships or access to toilets can be burdensome. Support from an IBD nurse, dietitian, mental health professional or patient group may help.

Pregnancy is possible for most people with Crohn disease. Planning is important because active inflammation can affect pregnancy, and medicines should be reviewed rather than stopped without advice.

When to get medical help

Arrange routine follow-up if symptoms are gradually becoming more frequent, you are losing weight, fatigue is persistent, or your treatment seems less effective. Also report possible medicine side effects or difficulty taking treatment as planned.

Seek urgent medical advice the same day for:

Seek emergency care for severe or rapidly worsening abdominal pain, a swollen abdomen with vomiting, heavy or continuous rectal bleeding, fainting, confusion, or difficulty staying awake. These symptoms may indicate a blockage, serious bleeding, a perforation or a severe infection.

- Increasing abdominal pain, fever or repeated vomiting
- Frequent bloody diarrhea or signs of dehydration
- A new painful swelling, redness or drainage near the anus
- Symptoms of a flare while taking immune-suppressing treatment

Common questions

Is Crohn disease the same as ulcerative colitis?

No. Both are forms of inflammatory bowel disease. Crohn disease can affect any part of the digestive tract and may involve the full bowel wall. Ulcerative colitis affects the large intestine and begins in the rectum.

Can changing my diet cure Crohn disease?

No diet has been shown to cure it. Food choices may reduce particular symptoms or correct poor nutrition. Major exclusions can cause nutrient deficiencies, so restrictive diets are best planned with a dietitian.

Is Crohn disease cancer?

No. Crohn disease is an inflammatory condition, not cancer. Long-standing inflammation in the colon can increase colorectal cancer risk, which is why some people need planned surveillance colonoscopies.

Is Crohn disease contagious?

No. It cannot be spread through food, touch, sex or shared bathrooms.

Will I need surgery?

Not everyone needs surgery. It may become necessary for a blockage, abscess, fistula, severe bowel damage or inflammation that medicines have not controlled. Surgery treats the affected area but does not prevent Crohn disease from returning elsewhere.

Can I have children if I have Crohn disease?

Most people can. Fertility is often normal when the condition is controlled, although active inflammation and some types of surgery can affect it. Pregnancy planning allows treatment and nutritional needs to be reviewed safely.

Sources

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