

Ulcerative

Ulcerative colitis (UC) is a disease in which the lining of the colon becomes inflamed. The immune system inappropriately targets the lining of the colon, causing inflammation, ulceration, bleeding and diarrhea.

Although ulcerative colitis is a chronic condition and has no cure, it can usually be well controlled. Most people are able to live active and productive lives. Control of the disease includes long-term medical treatment and regular monitoring for complications.

CAUSES

The development of ulcerative colitis appears to be influenced by two factors: genetic susceptibility and environmental triggers.

Genetics

Ulcerative colitis tends to run in families, suggesting that genetics have a role in this disease. About 10 to 25 % of affected people have a first-degree relative with inflammatory bowel disease .

Environment

Several environmental factors, such as infections, are suspected of triggering UC in people who have a genetic susceptibility.

For unknown reasons, ulcerative colitis is more common in people who live in northern climates and in developed countries. UC affects men and women equally. The peak incidence of UC occurs between the ages of 15 and 30.

COMMON VOCABULARY

- Ulcerative proctitis refers to disease limited to the rectum.
- Distal colitis or proctosigmoiditis is used when the inflammatory process extends into the mid-sigmoid colon
- Left sided colitis refers to disease that extends to but not beyond the splenic flexure
- Extensive colitis is defined as disease that extends beyond the splenic flexure but not as far as the cecum
- Pancolitis is used when the inflammatory process extends to the cecum.

SYMPTOMS

The symptoms of ulcerative colitis can be mild, moderate, or severe and can fluctuate over time. The term "flare" is used to describe periods in which the disease becomes more active. The term "remission" is used to describe periods of quiescence, or inactivity.

Mild disease

Symptoms of mild UC include intermittent rectal bleeding, mucus discharge, and mild diarrhea (defined as fewer than four stools per day). Symptoms may also include mild, crampy abdominal pain; painful straining with bowel movements; and bouts of constipation.

Moderate disease

Symptoms of moderate UC include frequent, loose bloody stools (up to 10 per day), mild anemia, mild to moderate abdominal pain, and a low-grade fever.

Severe disease

Patients with severe UC usually have a large region of the colon involved, often the entire colon. Symptoms of severe ulcerative colitis include frequent loose stools (more than 10 per day), severe abdominal cramps, fever, dehydration, and significant bleeding, frequently leading to anemia. Severe ulcerative colitis can lead to rapid weight loss.

Fulminant disease

Fulminant UC is a worsening of severe ulcerative colitis that causes a high white blood cell count, loss of appetite, and severe abdominal pain.

Extraintestinal disease

Inflammation often affects the large joints (arthritis, and sacroiliitis), the eye (episcleritis and anterior uveitis), the skin (pyoderma gangrenosum and erythema nodosum), and, less commonly, the lung .

These events usually occur in patients who are having a flare of the disease. Other types of inflammation can occur in patients with UC even when the colonic disease appears to be in remission. One of these is a type of arthritis of the spine , which can cause low back pain. Another, occurring in about 5 % of people, is inflammation of the bile ducts, which can lead to a liver disease called primary sclerosing cholangitis (PSC). PSC is usually detected with blood tests of liver function. People with UC are also at increased risk for blood clots and certain types of anemia.

DIAGNOSIS

UC is usually diagnosed based upon the signs and symptoms noted during a thorough medical history and physical examination. In addition, the results of certain diagnostic tests, including blood and stool tests and a sigmoidoscopy or colonoscopy are important to consider.

TREATMENT

Treatment of UC is tailored to the region of the colon that is involved, the severity of inflammation and symptoms, and other individual factors. For most patients UC is characterized by a frustrating pattern of flares and remissions. As a result, the two main goals of treatment are to achieve and maintain remission, which usually requires long-term medications. On the other hand, about 15 % of people who have an initial attack will remain in remission without medications, possibly for the rest of their lives.

Proctitis and proctosigmoiditis

Proctitis or proctosigmoiditis are usually treated with one or more medications that are given as an enema or a suppository or foam for proctitis.

Some patients also require treatment with oral medications such as sulfasalazine and an 5-aminosalicylate or related drugs (eg, Pentasa, Asacol, Colazal, Lialda, and Dipentum). In some cases, a steroid treatment (eg, Cortenema) is required.

These treatments usually produce improvement after three weeks, lead to remission in up to 90 % of people, and provide prolonged remission in up to 70 % of people. Continuous treatment with a 5-ASA-containing drug is usually recommended to maintain remission, although it is often possible to taper the dose of medication.

Extensive and pancolitis

Most patients require an oral medication if their inflammation extends above the sigmoid colon. Some patients may also benefit from combined treatment with oral and topical preparations. Patients with moderate to severe symptoms may require temporary treatment with a steroid drug (usually **prednisone**), either as an outpatient or given intravenously in the hospital. Remission can be achieved in most patients. Once remission is achieved, patients usually continue to take one of the oral 5-ASA drugs.

Sulfasalazine

It is one of the oldest drugs used to treat UC. Common side effects associated with its use include headaches, skin rash, nausea, and reversible infertility in men; these side effects occur in over 10 % of patients. People who take sulfasalazine should take folic acid supplements since the drug may interfere with its absorption in foods.

5-Aminosalicylates

5-aminosalicylate medications are generally tolerated better than sulfasalazine. As a result, they can be given in higher doses, which is often more effective. The most common side effects are headache, malaise, gas, and cramps. Hair loss and skin rash are less common.

Glucocorticoids (steroids)

Steroids may be the most difficult medication to tolerate since there are many side-effects. Increased appetite, weight gain, acne, fluid retention, trembling, mood swings, and difficulty sleeping are common. Other side effects occur in patients who take steroids for long periods of time, particularly if high doses are used. These include diabetes, thinning of the skin, easy bruising, a "cushingoid" appearance (widening of the face and a hump in the back), thinning of the bones, body hair growth, cataracts, high blood pressure, stomach ulcers, avascular necrosis (a serious joint problem), and infections. Because of the risk of these side effects, most patients are tapered off of steroids as soon as possible.

TREATMENT OF REFRACTORY DISEASE

Refractory ulcerative colitis occurs when a person's disease does not respond or responds poorly to the medical treatments used to treat the disease. Patients who depend upon steroids to control their symptoms are usually referred to as having refractory disease.

Most patients are treated with drugs that suppress the immune system. The most commonly used drugs are 6-mercaptopurine and azathioprine, and more recently infliximab. Colectomy (surgical removal of the colon) may be required if medical treatments are unsuccessful or if complications develop. Patients who cannot tolerate the constant battle with their disease sometimes prefer to have their colon removed.

6-mercaptopurine and azathioprine

Azathioprine has been used to treat refractory UC for many years. These drugs lessen symptoms in 60 to 70 % of people and help to maintain remission and decrease the need for steroids. These treatments may require three to six months to produce their maximal effect. Patients taking these drugs need to be closely monitored for side effects, which can include a decrease in the white blood cell count, inflammation of the pancreas, and, less commonly, hepatitis (inflammation of the liver).

Cyclosporine

Cyclosporine is a powerful immunosuppressive drug usually used after organ transplantation. It can be very effective when given into a vein to patients who are

hospitalized with refractory fulminant colitis . However, it is not usually used for long-term maintenance treatment of UC.

Infliximab

Infliximab is a powerful medication that has been used to treat Crohn's disease and rheumatoid arthritis, and is now used to treat refractory ulcerative colitis. Infliximab works differently than other treatments for UC. It is in a class of medications known as biologic response modifiers, which work by interfering with pathways involved in inflammation. Infliximab must be given into a vein in a doctor's office or clinic, which takes one to three hours to complete.

SURGERY

The most common reason a person with UC will require surgery is because medical therapy is not effective or poorly effective. Surgical treatment of UC is discussed in detail in a separate topic review.

NUTRITIONAL CONSIDERATIONS

People with advanced forms of UC often lose weight and develop nutritional deficiencies. A well balanced, nutritious diet can help maintain health and a normal body weight. There are no specific foods that cause UC or help to maintain remission. The only foods that should be avoided are those that are known to worsen symptoms .

It is reasonable to take a multivitamin daily. As mentioned above, patients taking sulfasalazine should take folic acid supplements.

Pain medications containing nonsteroidal antiinflammatory drugs (NSAIDs), such as ibuprofen and naproxen, should usually be avoided since they can worsen symptoms or cause a flare. Acetaminophen should not cause a problem, although you should check with your doctor or pharmacist before taking any pain medication.

Patients with abdominal cramps and diarrhea may notice relief when they reduce their intake of fresh fruit and vegetables, caffeine, carbonated drinks, and sorbitol-containing products .

Herbal therapies

Several herbal therapies given by mouth or by enema have been suggested, but these are of unproven benefit and should probably be avoided.

PSYCHOSOCIAL THERAPIES

Stress can worsen UC. Some people prefer to meet one-on-one with a counselor while others prefer to meet in a group setting with other people who have a similar diagnosis.

COMPLICATIONS

Long-standing and/or severe UC can be associated with serious and sometimes life-threatening complications.

Stricture

A stricture is a narrowing of the colon or rectum. This occurs in a small percentage of people with UC. Strictures can cause a blockage of the colon.

Bleeding

Some degree of bleeding occurs in most patients with UC. In some patients, the colitis is severe enough that it affects a small artery in the colon, leading to heavy bleeding.

Toxic megacolon

Toxic megacolon is one of the most serious complications of patients with severe colitis. It occurs when inflammation in the colon causes it to dilate, causing the walls to become thin and fragile. This can eventually lead to rupture. Surgery is usually advised if this condition does not respond to medical treatment within about 72 hours.

COLORECTAL CANCER AND UC

Overall, people with UC have an increased risk of colorectal cancer, although the degree of risk varies from one person to another. The risk of colorectal cancer is related to the duration and extent of UC.

The risk of colon cancer is also increased in patients with coexisting primary sclerosing cholangitis (PSC). PSC is a chronic progressive disorder that causes inflammation, hardening, and narrowing of ducts in the liver and gall bladder.

Surveillance recommendations

Colorectal cancer usually develops from precancerous changes of the colonic lining, which can be detected with regular screening tests such as colonoscopy.

In general, colonoscopy is recommended 8 to 10 years after symptoms appear in people with pancolitis, and starting 15 years after symptoms appear in people with left-sided colitis. Thereafter, colonoscopy should be repeated every one to three years. If advanced precancerous changes or cancer are discovered, surgical removal of the colon is usually recommended.

