



## Ulcerative colitis

### What is ulcerative colitis?

Ulcerative colitis (UC) refers to a disease in which the lining of the colon (the large intestine) becomes inflamed. It is one of two main disorders that come under the heading of "inflammatory bowel disease," the other being Crohn's disease. In patients with ulcerative colitis, the immune system inappropriately targets the lining of the colon, causing inflammation, ulceration, bleeding and diarrhoea. The inflammation almost always affects the rectum and lower part of the colon, but can also affect the entire colon. 1 out of every 10,000 people have UC. UC affects men and women equally. The peak incidence of UC occurs between the ages of 15 and 30. Although ulcerative colitis is a chronic condition that can usually be well controlled. Most people live normal and productive lives. Control of the disease entails long-term medical treatment and regular monitoring for any complications.

### What causes ulcerative colitis?

The development of UC appears to be influenced by genetics & environmental triggers. About 20% of effected people have a first-degree with either ulcerative colitis or Crohn's disease. No single factor has been consistently proven to be the main trigger.

### How extensive is my colitis?

- Proctitis** refers to disease limited to the rectum.
- Distal colitis** is used when the inflammatory process extends into the mid-sigmoid colon
- Left-sided ulcerative colitis** is defined as disease that extends to the splenic flexure.
- Pancolitis** is used when the inflammatory process extends beyond the splenic flexure throughout the bowel

In about 15 percent of people with limited forms of ulcerative colitis (left sided or below), the disease begins to involve more of the colon within five years of diagnosis.

### What are the symptoms of ulcerative colitis?

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

**Mild disease** — intermittent rectal bleeding, mucus discharge, and mild diarrhoea  
**Moderate disease** — frequent, loose bloody stools (less than 10 per day); anaemia & pain;  
**Severe disease** — frequent loose stools (over 10 per day), severe cramps & bleeding, anaemia, and weight loss.  
**Fulminant disease**— very severe colitis that causes blood abnormalities, loss of appetite, and severe abdominal pain.

### Can ulcerative colitis affect other parts of my body?

For poorly understood reasons, patients with UC can develop inflammation outside of the colon. Inflammation often affects the large joints (arthritis, and sacroiliitis), the eye (episcleritis), the skin (erythema nodosum), These events usually occur in patients who are having a flare of the disease. In about 5% of people, bile duct inflammation called primary sclerosing cholangitis (PSC) can develop. PSC is usually detected by the presence of abnormal liver tests.

### How is ulcerative colitis diagnosed?

Ulcerative colitis is usually diagnosed based upon the symptoms, stool tests and a colonoscopy with biopsies

### Is my risk of colon cancer increased?

People with UC have an increased risk of colorectal cancer, but the risk varies from person to person. The risk of cancer is related to the duration and extent of colitis. In pancolitis, the risk begins to increase about 10 years after the symptoms first appear. Their cumulative risk of cancer is 10% after 20 years and 20% after 30 years of UC. In people with left-sided colitis, the risk of colorectal cancer begins to increase, relative to the general risk, about 15 to 20 years after the symptoms of ulcerative colitis first appear. In proctitis studies suggest that the risk of colorectal cancer is not significantly increased In general, colonoscopy is recommended starting 10 years after symptoms appear in people with pancolitis, Thereafter, colonoscopy should be repeated every one year as part of a colon cancer surveillance program

## *Ulcerative Colitis therapies*

### **What treatment is available?**

Treatment depends on the region of the colon that is involved and the severity of disease. Most patients suffer a series of flares and remissions. As a result, the goals of treatment are to achieve and maintain remission, which usually requires long-term medications. On the other hand, about 15 percent of people who have an initial attack will remain in remission without medications, possibly for the rest of their lives.

### **Treatment options depend on the extent and severity of disease**

- **Proctitis** - topical drugs (enemas, suppository or foam)
- **Left-sided colitis and proctocolitis** — Most patients require oral medications once 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 with prednisone). Remission can be achieved in most patients. Once remission is achieved, patients are typically maintained on one of the oral Mesalazine drugs.

**Sulfasalazine** is one of the oldest drugs used to treat UC. Common side-effects (those occurring in over 10 percent of patients) associated with its use include headaches (which are dose-dependent), skin rash, nausea, and reversible infertility in men. Much less common side effects include hives, itching, pancreatitis (inflammation of the pancreas), hepatitis (inflammation of the liver), and a low white or red blood cell count. Rare side effects include severe allergic reactions, thyroid problems, severe liver problems, and kidney problems. People who take Sulfasalazine should take folic acid supplements since the drug may interfere with the absorption of folate in foods.

**Mesalazine** — Drugs that contain Mesalazine or related compounds are generally tolerated better than Sulfasalazine. As a result, they can be given in higher doses, which can be more effective. The most common side effects are headache, malaise, gas, and cramps. Hair loss and skin rash are less common. Rare side effects include pericarditis (inflammation of the lining surrounding the heart), myocarditis (inflammation of the heart), hypersensitivity pneumonitis (inflammation of the lungs), allergic reactions, pancreatitis, kidney problems, decreased blood counts, and hepatitis.

**Corticosteroids** — Corticosteroids are usually the most problematic drugs for patients since they have many side effects. Increased appetite, weight gain, acne, fluid retention, tremulousness, mood swings, and difficulty sleeping are very common. Many other side-effects occur in patients who take corticosteroids 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), osteoporosis, body hair growth, cataracts, high blood pressure, stomach ulcers, avascular necrosis (a serious joint problem) and infections. Because of all the side effects, doctors try to wean patients off of steroids as quickly as possible.

### **What treatment is used for refractory disease?**

Most of these patients are treated with drugs that suppress the immune system. The most commonly used drugs are 6-mercaptopurine and Azathioprine. Colectomy (surgical removal of the colon) may be required if medical treatments are unsuccessful or if complications have developed. Patients who can no longer tolerate the constant battle with the disease may also prefer to have their colon removed.

**6-Mercaptopurine and Azathioprine** — Azathioprine and its metabolite (6-Mercaptopurine) have been used to treat refractory ulcerative colitis for many years. These drugs lessen symptoms in 60 to 70 percent of people and also help to maintain remission and decrease the need for steroids. Both drugs 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, pancreatitis, and, less commonly, hepatitis. Longterm use of these drugs has also been associated with an increased risk of infections and possibly certain types of tumors.

**Cyclosporine** — Cyclosporine is a powerful immunosuppressant drug usually used in patients who have undergone organ transplantation. It can be very effective in hospitalized patients with refractory fulminant colitis when given intravenously. However, its role for maintenance therapy is limited.

About 30 percent of people with UC eventually undergo colectomy, typically after 25 years of disease. The need for colectomy varies with the extent of disease: about 10 percent of people with distal colitis and 35 percent of people with proctocolitis undergo colectomy within five years of diagnosis.

### **Does Ulcerative colitis affect fertility?**

In general, ulcerative colitis does not decrease fertility (the ability to become pregnant) in men and women with this disease, however, Sulfasalazine causes a low sperm count that is reversible off medication

### **Safety of drugs during pregnancy and Sulfasalazine**

- Ulcerative colitis has not been associated with an increased chance of birth defects or stillbirth.
- Sulfasalazine appears to be safe for the baby during both pregnancy and breastfeeding.
- Mesalazine—Both topical and oral Mesalazine appear to be safe during pregnancy.
- Steroids Azathioprine and 6-Mercaptopurine - appear to be safe during pregnancy and breastfeeding