Scott M. Tenner, M.D., M.P.H., F.A.C.P.
Director of Gastroenterology, Maimonides Medical Center
Assistant Professor of Medicine, State University of New York – Health Sciences Center
Gastroenterology, Liver and Pancreatic Disease
Ocean Avenue Medical, P.C.
2700 Ocean Ave
Brooklyn, N.Y. 11229

Phone (718) 368-2960 **Fax (718) 368-2249**

ULCERATIVE COLITIS

Inflammatory bowel disease (IBD) is a group of chronic disorders that cause inflammation or ulceration in the small and large intestines. Most often IBD is classified as ulcerative colitis or Crohn's disease but may be referred to as colitis, enteritis, ileitis, and proctitis.

Ulcerative colitis causes ulceration and inflammation of the inner lining of the colon and rectum, while Crohn's disease is an inflammation that extends into the deeper layers of the intestinal wall. Crohn's disease also may affect other parts of the digestive tract, including the mouth, esophagus, stomach, and small intestine.

Ulcerative colitis and Crohn's disease cause similar symptoms that often resemble other conditions, such as irritable bowel syndrome (spastic colitis). The correct diagnosis may take some time.

In ulcerative colitis, the inner lining of the large intestine (colon or bowel) and rectum becomes inflamed. The inflammation usually begins in the rectum and lower (sigmoid) intestine and spreads upward to the entire colon. Ulcerative colitis rarely affects the small intestine except for the lower section, the ileum. The inflammation causes the colon to empty frequently, resulting in diarrhea. As cells on the surface of the lining of the colon die and slough off, ulcers (tiny open sores) form, causing pus, mucus, and bleeding.

An estimated 250,000 Americans have ulcerative colitis. It occurs most often in young people ages 15 to 40, although children and older people sometimes develop the disease. Ulcerative colitis affects males and females equally and appears to run in some families.

WHAT ARE THE SYMPTOMS OF ULCERATIVE COLITIS?

The most common symptoms of ulcerative colitis are abdominal pain and bloody diarrhea. Patients also may suffer fatigue, weight loss, loss of appetite, rectal bleeding, and loss of body fluids and nutrients. Severe bleeding can lead to anemia. Sometimes patients also have skin lesions, joint pain, inflammation of the eyes, or liver disorders. No one knows for sure why problems outside the bowel are linked with colitis. Scientists think these complications may occur when the immune system triggers inflammation in other parts of the body. These disorders are usually mild and go away when the colitis is treated.

WHAT CAUSES ULCERATIVE COLITIS?

The cause of ulcerative colitis is not known, and currently there is no cure, except through surgical removal of the colon. Many theories about what causes ulcerative colitis exist, but none has been proven. The current leading theory suggests that some agent, possibly a virus or an atypical bacterium, interacts with the body's immune system to trigger an inflammatory reaction in the intestinal wall.

Although much scientific evidence shows that people with ulcerative colitis have abnormalities of the immune system, doctors do not know whether these abnormalities are a cause or result of the disease. Doctors believe, however, that there is little proof that ulcerative colitis is caused by emotional distress or sensitivity to certain foods or food products or is the result of an unhappy childhood.

HOW IS ULCERATIVE COLITIS DIAGNOSED?

If you have symptoms that suggest ulcerative colitis, the doctor will look inside your rectum and colon through a flexible tube (endoscope) inserted through the anus. During the exam, the doctor may take a sample of tissue (biopsy) from the lining of the colon to view under the microscope. You also may receive a barium enema X-ray of the colon to determine the nature and extent of disease. This procedure involves putting a chalky solution (barium) into the colon. The barium shows up white on X-ray film, revealing growths and other abnormalities in the colon.

The doctor will give you a thorough physical exam, including blood tests to see if you are anemic (as a result of blood loss), or if your white blood cell count is elevated (a sign of inflammation). Examination of a stool sample can tell the doctor if an infection, such as by amoebae or bacteria, is causing the symptoms.

If you have ulcerative colitis, you may need medical care for some time. Your doctor also will want to see you regularly to check on the condition.

HOW SERIOUS IS THIS DISEASE?

About half of patients have only mild symptoms. Others suffer frequent fever, bloody diarrhea, nausea, and severe abdominal cramps. Only in rare cases, when complications occur, is the disease fatal. There may be remissions – periods when the symptoms go away – that last for months or even years. However, most patients' symptoms eventually return. This changing pattern of the disease can make it hard for the doctor to tell when treatment has helped.

WHAT IS THE TREATMENT?

DIET:

While no special diet for ulcerative colitis is given, patients may be able to control mild symptoms simply by avoiding foods that seem to upset their intestine. In some cases, the doctor may advise avoiding highly seasoned foods or milk sugar (lactose) for a while. When treatment is necessary, it must be tailored for each case, since what may help one patient may not help another. The patient also should be given needed emotional and psychological support.

DRUGS:
Patients with either mild or severe colitis are usually treated with the drug sulfasalazine. This drug can be used for as long as needed, and it can be used along with other drugs. Side effects, such as nausea, vomiting, weight loss, heartburn, diarrhea, and headache, occur in a small percentage of cases. Patients who do not do well on sulfasalazine often do very well on related drugs known as 5-ASA agents.

In some cases, patients with severe disease, or those who cannot take sulfasalazine-type drugs, are given adrenal steroids (drugs that help control inflammation and affect the immune system) such as prednisone or hydrocortisone. All of these drugs can be used in oral, enema, or suppository forms. Other drugs may be given to relax the patient or to relieve pain, diarrhea, or infection.

HOSPITAL:
Patients with ulcerative colitis occasionally have symptoms severe enough to require hospitalizations. In these cases, the doctor will try to correct malnutrition and to stop diarrhea and loss of blood, fluids, and mineral salts. To accomplish this, the patient may need a special diet, feeding through a vein, medications, or sometimes surgery.

RISKS:
The risk of colon cancer is greater than normal in patients with widespread ulcerative colitis. The risk may be as high as 32 times the normal rate in patients whose entire colon is involved, especially if the colitis exists for many years. However, if only the rectum and lower colon are involved, the risk of cancer is not higher than normal.

Sometimes pre-cancerous changes occur in the cells lining the colon. These changes in the cells are called dysplasia. If the doctor finds evidence of dysplasia through endoscopic exam and biopsy, it means the patient is more likely to develop cancer. Patients with dysplasia, or whose colitis affects the entire colon, should receive regular follow up exams, which may involve colonoscopy (examination of the entire colon using a flexible endoscope) and biopsies.

SURGERY:
About 20 to 25 percent of ulcerative colitis patients eventually require surgery for removal of the colon because of massive bleeding, chronic debilitating illness, perforation of the colon, or risk of cancer. Sometimes the doctor will recommend removing the colon when medical treatment fails or the side effects of steroids or other drugs threaten the patient's health.

Patients have several surgical options, each of which has advantages and disadvantages. The surgeon and patient must decide on the best individual option.

The most common surgery is the proctocolectomy, the removal of the entire colon and rectum, with ileostomy, creation of a small opening in the abdominal wall where the tip of the lower small intestine, the ileum, is brought to the skin's surface to allow drainage of waste. The opening (stoma) is about the size of a quarter and is usually located in the right lower corner of the abdomen in the are of the belt line. A pouch is worn over the opening to collect waste and the patient empties the pouch periodically.

The proctocolectomy with continent ileostomy is an alternative to the standard ileostomy. In this operation, the surgeon creates a pouch out of the ileum inside the wall of the lower abdomen. The patient is able to empty the pouch by inserting a tube through a small leak-proof opening in his or her side. Creation of this natural valve eliminates the need for an external appliance. However, the patient must wear an external pouch for the first few months after the operation.

Sometimes an operation that avoids the use of a pouch can be performed. In the ileoanal anastomosis ("pull through operation") the disease portion of the colon is removed and the outer muscles of the rectum are preserved. The surgeon attaches the ileum inside the rectum, forming a pouch, or reservoir, that holds the waste.

This allows the patient to pass stool through the anus in a normal manner, although the bowel movements may be more frequent and watery than usual.

The decision about which surgery to have is made according to each patient's needs, expectations, and lifestyle. If you are very faced with this decision, remember that getting as much information as possible is important. Talk to your doctor, to nurses who work with patients who have had colon surgery (enterostomal therapists), and to other patients.

Most people with ulcerative colitis will never need to have surgery. If surgery ever does become necessary, however, you may find comfort in knowing that after the surgery, the colitis is cured and most people go on to live normal, active lives.