

## Surgical Options for the Treatment of Ulcerative Colitis

### **What is Ulcerative Colitis?**

Ulcerative colitis is an inflammation of the lining of the large bowel (colon). Symptoms include rectal bleeding, diarrhea abdominal cramps, weight loss and fever. In addition, patients who have had extensive ulcerative colitis for many years are at an increased risk to develop large bowel cancer. The cause of ulcerative colitis remains unknown.

### **How is Ulcerative Colitis Treated?**

Initial treatment of ulcerative colitis is medical, using antibiotics and anti-inflammatory medications (drugs such as Azulfidine, Prednisone, etc.). These are usually necessary on a long-term basis. Prednisone has significant side effects, and therefore it is usually used for short periods. "Flare-ups" of the disease can often be treated by increasing the dosage of medications or adding new medications such as 6-Mercaptopurine. Hospitalization may be necessary to put the bowel to rest.

### **When is Surgery Necessary?**

Surgery is indicated for patients who have life-threatening complications of inflammatory bowel disease, such as massive bleeding, perforation or infection. It may also be necessary for those who have the chronic form of the disease, which fails medical therapy. It is important the patient be comfortable and that all reasonable medical therapy has been attempted prior to considering surgical therapy. In addition, patients who have long-standing ulcerative colitis and show cancer signs may be candidates for removal of the colon, because of the increase risk of developing cancer. More often, these patients are followed carefully with repeated colonoscopy and biopsy, and only if precancerous signs are identified is surgery recommended.

### **What Operations Are Available?**

Historically, the standard operation for ulcerative colitis has been removal of the entire colon, rectum, and anus. This operation is called a proctocolectomy and may be performed in one or more stages. It cures the disease and removes all risk of developing cancer in the colon or rectum. However, this operation requires creation of a Brooke ileostomy (bringing the end of the remaining bowel through the abdomen wall) and chronic use of an appliance on the abdominal wall to collect waste from the bowel.

The continent ileostomy is similar to a Brooke ileostomy, but an internal reservoir is created. The bowel still comes through the abdominal wall, but an external appliance is not required. The internal reservoir is drained three to four times a day by inserting a tube into the reservoir. This option eliminates the risks of cancer and risks of recurrent persistent colitis, but the internal reservoir may begin to leak and require another surgical procedure to revise the reservoir.

Some patients may be treated by removal of the colon, with preservation of the rectum and anus. The small bowel can then be reconnected to the rectum and continence preserved. This avoids ileostomy, but the risks of ongoing active colitis, increased stool frequency, urgency, and cancer in the retained rectum remain.

### **Are There Other Surgical Alternatives?**

The ileoanal procedure is the newest alternative for the management of ulcerative colitis. This procedure removes all of the colon and rectum, but preserves the anal canal. The rectum is replaced with small bowel, which is refashioned to form a small pouch. Usually, a temporary ileostomy is created, but this is closed in several months. The pouch acts as a reservoir to help decrease the stool frequency. This maintains a normal route of defecation, but most patients experience five to ten bowel movements per day. This operation all but eliminates the risk of recurrent ulcerative colitis and allows the patient to have a normal route of evacuation. Patients can develop inflammation in the pouch, which requires antibiotic treatment. In a small percentage of patients, the pouch fails to function properly and may have to be removed. If the pouch is removed, a permanent ileostomy will likely be necessary.

### **Which Alternative is Preferred?**

It is important to recognize that none of these alternatives makes a patient with ulcerative colitis normal. Each alternative has perceivable advantages and disadvantages, which must be carefully understood by the patient prior to selecting the alternative which will allow the patient to pursue the highest quality of life.

### **What is a Colorectal Surgeon?**

Colon and rectal surgeons are experts in the surgical and non-surgical treatment of colon and rectal problems. They have completed advanced training in the treatment of colon and rectal problems in addition to full training in general surgery. Colon and rectal surgeons treat benign and malignant conditions, perform routine screening examinations and surgically treat problems when necessary.

The executive office of the 2,600 member American Society of Colon and Rectal Surgeons is located in the Chicago suburb of Arlington Heights. Board-certified colon and rectal surgeons complete a residency in general surgery, plus an additional year in colon and rectal surgery, and pass an intensive examination conducted by the American Board of Colon and Rectal Surgery.