Dr David A Clark

MBBS(Qld) FRACS FRCSEd
General & Colorectal Surgery
Upper GI Endoscopy & Colonoscopy

ABN: 68 676 182 920

Phone: 3350 2088 Fax: 3350 2333

All correspondence to:
Holy Spirit Northside
Medical Centre
627 Rode Road
Chermside 4032

SURGICAL OPTIONS FOR THE TREATMENT OF ULCERATIVE COLITIS

What is ulcerative colitis?

Wesley Medical Centre

40 Chasely Street

Auchenflower 4066

Provider No: 2029033W

Ulcerative colitis is an inflammation of the lining of the large bowel (colon and rectum). Symptoms include rectal bleeding, diarrhoea and weight loss. 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 antiinflammatory medications (drugs such as Salazopyrine, Imuran, Prednisone, etc.). These are usually necessary on a long-term

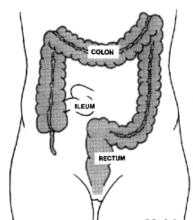
basis. Prednisone has significant side effects, and, therefore, it is usually used for short periods. "Flare-ups" of the disease can often be treated by increasing the dosage of medications or adding new ones. Hospitalisation may be necessary to rest the bowel and to give intravenous medications and fluids.

When is surgery necessary?

Surgery is indicated for patients who have (1) life-threatening complications of inflammatory bowel diseases, such as massive bleeding, perforation, or toxic megacolon. It may also be necessary for those who have the (2) chronic form of the disease, which fails medical therapy. It is important the patient be comfortable that all reasonable medical therapy has been attempted prior to considering surgical therapy. In addition, patients who have (3) long-standing ulcerative colitis and show cancer signs may be candidates for removal of the colon, because of the increased 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?

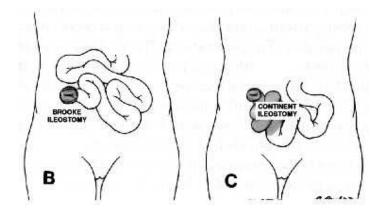
Historically, the standard operation for ulcerative colitis has been removal of the entire colon, rectum, and anus. This operation is called a proctocolectomy (Illustration A) and may be performed in one or more stages. It cures the disease and removes all risk of developing cancer in the colon or rectum. However, this operation requires creation of a Brooke ileostomy (bringing the end of the remaining bowel through the



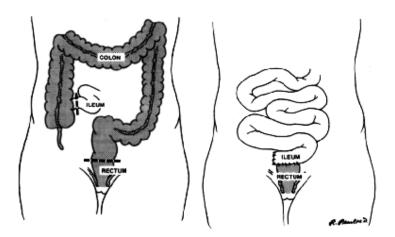
www.davidclark.net.au

abdomen wall, Illustration B) and permanent use of an appliance on the abdominal wall to collect waste from the bowel.

The continent ileostomy (Illustration C) 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. This operation is not commonly performed anymore.

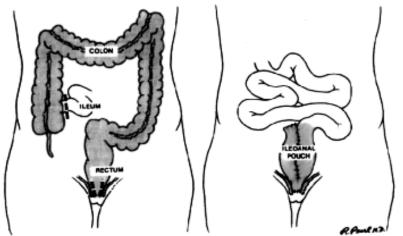


Some patients may be treated by removal of the colon, with preservation of the rectum and anus. The small bowel can then be reconnected to the rectum and continence preserved. This avoids an ileostomy, but the risks of ongoing active colitis, increased stool frequency, urgency, and cancer in the retained rectum remain. This is not a common procedure anymore.



Restorative Proctectomy or Pouch Procedure

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 of the pouch (pouchitis). This usually responds to antibiotics. A small portion of mucosa called the "transitional zone" is usually retained in order to improve pouch function. This must be monitored as it can develop inflammation. 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 be necessary. More patients these days are opting for the pouch procedure.

What about "keyhole surgery"?

In recent years a great deal of this type of surgery can be performed as a laparoscopic procedure. The benefits are of a smaller incision and quicker recovery. There are only a small number of colorectal surgeons performing this operation.

Which alternative is preferred?

It is important to recognise 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. Surgery is individualised and wide discussion is encouraged.