

## COMPLICATIONS OF ILEAL POUCH-ANAL ANASTOMOSIS

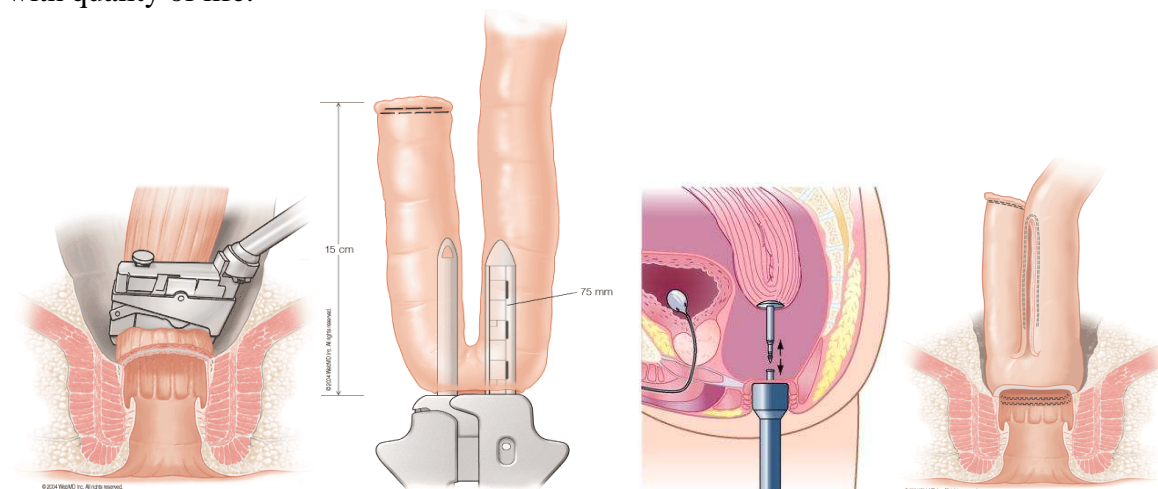
Indications for elective surgery in Ulcerative Colitis:

- intractability despite maximal medical therapy
- high-risk development of major complications of medical treatment
- significant risk of developing colorectal carcinoma.
- extra-intestinal manifestations of CUC
- children with growth retardation.

Comparison of operations for ulcerative colitis

Procedure	Faecal continence preserved	Permanent stoma	Intubation required	Residual diseased mucosa	Disadvantages
Ileal pouch-anal anastomosis	yes	no	no	no	frequent bowel motions occasional faecal leak pouchitis
Kock pouch	yes	yes	yes	no	valve dysfunction, pouchitis
Ileorectal anastomosis	yes	no	no	yes	proctitis risk of rectal Ca
Brooke ileostomy	no	yes	no	no	ileostomy bag

Proctocolectomy with IPAA is the preferred operation for most patients because it removes the diseased colon while preserving fecal continence and nearly normal defecation through the anus. The majority of IPAA patients report good functional results and a high degree of satisfaction with quality of life.



The decision to proceed with operations other than IPAA is based on individual patient circumstances that are contraindications to this type of restorative procedure.

- Patients less than 60 years of age are preferred

- Short obese patients (anastomosis is compromised by the limited mobility of a short thick small bowel mesentery).
- Low rectal cancer.
- When there is serious concern that the underlying diagnosis might be Crohn's
- Anal sphincter needs to be of good quality.
- Patients who have psychological problems, emotional instability, poor motivation or are non-compliant may have difficulty adjusting to the psychological stress associated with an ileo-anal pouch, and should be carefully evaluated before surgery.

### **Complications:**

- small bowel obstruction,
- pouch leakage,
- pelvic abscess,
- anastomotic stricture,
- pouch fistula,
- pouchitis.

### **Small bowel obstruction**

- Most common short-term and long-term complication after IPAA.
- Incidence in the perioperative period 15% (24% early re-operation)
- The annual risk is 1 in 25
- Long-term incidence 18% at 1 year, 27% at 5 years, and 31% at 10 years.
- Mechanical obstruction due to dietary indiscretion. This condition usually resolves with bowel rest and a clear liquid diet.
- The majority of patients respond to conservative management, 5% require re-operation.
- Rate of operative treatment: 2.7% at 1 year to 7.5% at 10 years.

### **Pouch leakage** and associated **pelvic sepsis**: incidence 5% to 14%.

- Predisposing factors: Poor nutritional status and immunosuppressive medications (prednisone, cyclosporin and azathioprine)
- Treatment by CT guided catheter drainage and antibiotics.
- The functional outcome after IPAA complicated by pelvic sepsis is poor.

### **Anastomotic stricture**:

- 15% of patients may have symptoms secondary to this problem.
- Predisposing factors: pelvic sepsis, anastomotic tension and ischemia
- Symptoms: Incomplete evacuation, diarrhea, and anal pain.
- The majority respond to dilatation, in 60% this may have to be repeated.
- Intermittent dilatation can often be performed by the patient after an initial operative dilatation.
- A stricture of 5 mm or less should be dilated with the aid of an anesthetic.

### **Fistulas**: (Pouch-vaginal fistulas and, more rarely, pouch-perineal fistulas)

- Incidence of pouch-vaginal fistulas ranges from 4% to 12%.
- Most fistulas are low and originate at the level of the anastomosis.

- An early pouch fistula is generally the result of a technical error or a complication of a pouch leak or pelvic abscess.
- A late pouch fistula raises the possibility of Crohn's disease.
- biopsies to rule out the presence of Crohn's disease
- local control of any septic process
- repair of the fistula
- Rates of successful closure ranging from 10% to 78%
- Severely symptomatic patients may eventually require pouch diversion or complete pouch excision with end ileostomy.

### **Pouchitis**

- Incidence between 12% and 50%.
- Acute inflammatory process of the pouch.
- Chronic pouchitis < 10%. (about half of these require pouch excision)
- Cumulative risk of acute pouchitis: 15% at one year, 36% at five years, and 46% at 10 years.
- Clinical manifestations: abdominal cramps, increased stool frequency, watery or bloody diarrhea, incontinence, abdominal pain, and flu-like symptoms.
- More frequent in patients who have extraintestinal manifestations of UC.
- Highest risk during the first 2 years after intestinal continuity is restored.
- Diagnosis is based on combined clinical, endoscopic, and histologic examination of the pouch.
- Exact cause unknown
  - bacterial proliferation, bacterial stasis, and by-products of bacterial breakdown such as release of endotoxin. Clinical improvement usually occurs within 24 to 48 hours of antibiotic therapy.
  - In cases of chronic pouchitis, immunosuppressive agents may have to be added to achieve control of symptoms.

**Pouch failure** is infrequent (2-9% over 10 years) .The most common reasons for pouch failure are pelvic sepsis, gross fecal incontinence, Crohn's Disease, and chronic pouchitis.

**Mortality** from the operation is less than 1%.

### **References:**

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