**Ileo-anal Pouch Procedure**

This is an operation to remove all of the colon and rectum. It is most usually performed for patients with ulcerative colitis. Sometimes it is performed for patients with familial adenomatous polyposis and occasionally for patients with more than one bowel cancer. In most cases the operation can be performed via a laparoscopic (keyhole) surgical technique.

Ileo-anal pouch surgery can be undertaken as a one, two or three stage procedure. Your surgeon will discuss this with you. The decision is usually based on the severity of the disease in cases of ulcerative colitis and any medications being taken, particularly steroids.

In a one stage procedure the whole of the colon and rectum are removed and a pouch is formed without an ileostomy.

A two-stage procedure may involve removal of the colon and rectum, formation of a pouch with a loop ileostomy. The loop ileostomy is then closed at a second operation.

In a three-stage procedure, the first stage involves removal of the colon (subtotal colectomy with formation of an end ileostomy), in the second stage the rectum is removed, a pouch formed with a loop ileostomy, the third stage involves closing the ileostomy.

**What does the operation involve?**

This operation can be performed as an open or laparoscopic (keyhole procedure). During the operation the whole of the colon and rectum are removed. The small intestine is used to create a ‘pouch’ or sac that is then joined to the anus usually using special staples. If a loop ileostomy is required this is usually placed on the right side of the abdomen.

The operation time may vary for this type of surgery but is usually around 3-4 hours. The piece of bowel that is removed is sent to the pathology department where the pathologist carefully examines it. The results are usually available within two weeks of the operation.

**What are the risks?**

There are risks associated with any abdominal operation. Pre-operative assessment of heart and lung conditions are made, as well as any coexisting medical conditions. During the hospital admission patients wear stockings and are given a regular tiny injections to prevent thrombosis (blood clots).

Bleeding if very rare in this type of surgery, blood is always available if a transfusion is required.

Wound infections can occur in any form of intestinal surgery, open or laparoscopic. Wound infections rarely cause serious problems but may require treatment with antibiotics.

Sometimes the bowel may take longer than normal to start working, this is known as ileus. Patients may develop abdominal distension and vomiting. If this happens the surgeon will normally recommend a period of bowel rest with continued intravenous fluids and sometimes a tube passed via the nose to the stomach (nasogastric tube). When the bowel doesn’t start working properly, there may be a kink, twist or an adhesion.
causing a blockage. This is known as obstruction. Patients may develop colicky abdominal pains, abdominal distension and vomiting. If this happens the surgeon will normally recommend a period of bowel rest with continued intravenous fluids and sometimes a tube passed via the nose to the stomach (nasogastric tube). In most cases the obstruction settles spontaneously occasionally an operation is required to relieve the blockage.

There are important nerves in the pelvis and whilst the surgeon will make every effort to avoid damaging these it is recognised that they can sometimes be involved in this type of surgery. These nerves are important as they control erections and ejaculation in men and influence bladder emptying in men and women. The effects may improve with time but sometimes these can be permanent.

Sometimes during the operation the surgeon discovers that it is not possible to carry out the procedure using a wholly keyhole approach. In this situation a cut is made and the operation is done as an open procedure. This is known as conversion.

What happens after the operation?
An epidural is often used in keyhole and open surgery to provide pain relief after the operation and is usually continued at least until the next day. Your anaesthetist will be able to discuss this with you before the operation. After the operation patients will have an intravenous drip, which is normally in place for 24 hours, or until, a normal fluid intake is resumed.

A catheter (tube inserted to drain the bladder) is normally kept in place for 48-72 hours. An abdominal drain is often used (small tube passing through the abdominal wall). This is normally removed after a few days. A small tube is also passed through the anus into the pouch. This is normally removed after a few days. Patients are allowed to eat and drink as soon as they feel able after the operation (usually the same day).

Patients are encouraged to mobilise as soon as possible after the operation. Hospital stay is usually 5-7 days for keyhole surgery and 7-10 days for open surgery although this may vary.

For patients who have an ileostomy, the colorectal nurse specialist will show patients how to empty and change their ileostomy bags so that they can do this independently before they leave hospital. The consultant and colorectal nurse specialist will continue to provide back up care after discharge from the hospital. For more information see patient information section on stomas.

Following discharge from hospital, patients are encouraged to keep mobile. They should avoid heavy lifting or increased physical activities for about 6 weeks. Patients can normally resume driving after about 2 weeks but this may vary particularly if the operation is done as an open procedure.

A follow up consultation is usually arranged after about two weeks. Patients can always be seen sooner if there are problems.
Once the bowel is connected and the pouch is working bowel habits will be quite different. It can take several weeks for a stable bowel habit to be achieved. Eventually most patients will open their bowels 4-6 times a day and once or twice at night. Many patients will use loperamide (Immodium) to slow down the pouch and changes in diet can also be effective.

Only very few patients experience episodes of urgency or leakage (anal incontinence). Patients can develop inflammation of the pouch (pouchitis), which usually responds to antibiotic treatment.

In a small percentage of patients, the pouch fails to function normally and may have to be removed. In some cases a new pouch can be created but in most a permanent end ileostomy will be necessary.

Birmingham Bowel Clinic 2011