

Anterior Resection

This is an operation to remove part or all of the rectum. It is most usually performed for patients with rectal cancer. Many patients with rectal cancer will have radiotherapy before the operation. Anterior resection is sometimes performed for patients with diverticular disease. In many cases the operation can be performed via a laparoscopic (keyhole) surgical technique.

What does the operation involve?

This operation can be performed as an open or laparoscopic (keyhole procedure). During the operation the part, or all of the rectum is removed, usually with part of the sigmoid colon. This involves taking away the blood vessels and lymph nodes to this part of the bowel. The surgeon then re-makes the join (anastomosis) between the remaining colon and the remaining part of the rectum.

The surgeon may use either sutures or special staples to make this join. If there are any special circumstances that mean that a stoma (usually an ileostomy) may be required the surgeon will discuss these issues beforehand.

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 is 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.

Occasionally the join that the surgeon makes in the bowel can leak. This is known as an anastomotic leak. The risk of leakage is greater in patients who have had radiotherapy. If a leak occurs sometimes this can be managed with antibiotics and/or a drain placed through the abdominal wall usually in the x-ray department. If the leak is larger and peritonitis develops another operation will be necessary and the surgeon will need to create a stoma (ileostomy) or even take apart the join completely and create a colostomy.

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.

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.

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. Patients who have had radiotherapy are at higher risk of pelvic nerve dysfunction after surgery.

What happens after 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 hours. Occasionally an abdominal drain is used (small tube passing through the abdominal wall). This is normally removed after a few days.

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.

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.

Some patients will not notice much change in bowel habit after an anterior resection. Particularly if most of the rectum has been removed and/or the patient has had radiotherapy bowel function may be very different. Some patients complain of increased bowel frequency, looseness and sometimes difficulty evacuating their bowels. Occasionally bowel control is not good and patients may experience leakage. Many of these symptoms will improve over time or with treatment, but some may be permanent.

Hospital stay is usually 2-5 days for keyhole surgery and 5-7 days for open surgery although this may vary.

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.

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