This leaflet is produced by the Department of Colorectal Surgery at Beaumont Hospital supported by an unrestricted grant to better Beaumont from the Beaumont Hospital Cancer Research and Development Trust.

This information leaflet has been designed to give you general guidelines and advice regarding your surgery. Not all of this information may be relevant to your circumstances. Please discuss any queries with your doctor or nurse.

YOUR OPERATION EXPLAINED
Introduction

This leaflet has been designed to help you understand what to expect when you are having an Abdominal Perineal Resection which is the surgical removal of your anus (back passage), your rectum and/or part of the left side of your large bowel.

**What are the benefits of this operation?**

The operation is to remove the diseased part of your bowel. You have been recommended to have this surgery on your bowel as it is the most effective way of successfully treating your condition. Not having this surgery is likely to lead to further worsening of your health. If you wish to discuss alternative medical treatment further please talk to your colorectal nurse specialist or colorectal surgeon.

**What does the bowel do?**

The large bowel is the lowest part of the digestive system. The food that we eat moves into the stomach and passes through the small bowel where nutrients are absorbed. What remains moves into the large bowel as waste. The large bowel is like a hollow tube, it runs up the right side of the abdomen, across to the left side and down, ending in a wider portion called the rectum. You can live a normal life with part or all of your large bowel removed. The functions of the large bowel are to absorb water from the waste material to gradually form faeces or stools and to then store the faeces until it is ready to be passed out through the anus (back passage).
What does the operation involve?

This operation involves the removal of your anus (back passage), your rectum and /or part of the left side of your large bowel. This surgery can be performed by either an ‘open’ operation where a long incision is made in your abdomen or by ‘keyhole’ (laparoscopic) surgery involving a few small incisions. Not everyone is suitable for laparoscopic surgery. Your surgeon will discuss which is the best option for you. This operation will result in two wounds, an abdominal wound and also a perineal wound on your bottom which is where your back passage used to be. Your back passage will be completely removed and sewn together with stitches. Some patients need additional procedures to improve the healing of their bottom after this surgery. If this is necessary for you your surgeon will discuss the options with you. The segment of bowel removed will be sent to the laboratory for detailed examination, the results of which are usually available within two weeks.

Will I have a stoma? (Colostomy)

As this surgery involves the permanent removal of your back passage you will need a permanent colostomy (stoma formation) which cannot be reversed. A stoma is when part of the bowel is brought to the surface of the abdominal wall which allows faecal matter to pass out into a stoma bag. You will be seen by a stoma clinical nurse specialist prior to your operation. They will teach you how to look after your stoma, offer advice, education and support. The ward nurses will help you look after your stoma immediately following your operation until you are able to look after your stoma yourself.

What are the risks?

As with any surgery there are risks involved which include:

Potential short term/immediate risks or complications

Ileus (Paralysis of the bowel) and bowel obstruction:

At times the bowel is slow to start working after surgery (ileus) or can become obstructed. If this happens the bowel may need to be rested. You will not be allowed to eat or drink, you will receive fluids through a drip (a tube into a vein in your arm) and you may need a nasogastric tube (a tube which passes through your nose into your stomach). Usually this treatment is adequate but a small number of people require further surgery.

Injury to other important organs:

Accidental injury can occur to other vital organs during the surgery such as the small bowel, bladder, ureters and liver or major blood vessels. This type of injury is rare. If it occurs there may be a need for further urgent or delayed surgery. Your surgeon will discuss this with you.
Retention:
Following your operation you will have a urinary catheter (a tube inserted into the bladder) to drain away urine. This will remain in place overnight but sometimes longer. Following removal of this catheter some patients are unable to pass urine. If this occurs you may need a catheter re inserted.

Blood clot (thrombosis):
There is a risk following any surgery of developing a deep vein thrombosis, a blood clot in the leg or a pulmonary embolism, a clot in the lung. To help prevent this you will receive a daily injection and be asked to wear support stockings. You should stay as active as possible and drink plenty of fluids as tolerated to prevent dehydration.

Atelectasis:
This is one of the most common breathing complications after surgery. It is a condition in which one or more areas of your lungs collapse or do not inflate properly. Deep breathing exercises and early mobilisation can help prevent this occurring after your operation.

Infection:
After your operation there is an increased risk of infection

- **Chest infection**
  Following surgery and an anaesthetic it can be difficult to clear secretions from your lungs which can increase the risk of infection. Deep breathing exercises will reduce this risk. If you smoke we strongly advise you to stop.

- **Wound infection**
  There is a risk following surgery that your wound could become infected. Wound infections can present with localised pain, redness and a discharge of fluid. Antibiotics can be given to treat an infection. You may require daily dressings to your wound while you are in hospital or when you are home. The wound on your bottom can take some time to fully heal. This is more likely if you have had radiotherapy prior to your operation.

- **Urinary tract infection**
  Following your surgery you will have a urinary catheter (a tube placed into your bladder to drain away urine) in place. Having a catheter in place even for a short while increases the risk of developing a urinary tract infection. An infection can be treated with antibiotics.

Stoma retraction:
This is where the stoma sinks below the level of the skin after the initial swelling has gone down. This can result in leakages as a good seal can be difficult to obtain. Different stoma appliances can help ease this problem although further surgery may be required.
Stoma perfusion:
This is where the blood supply to the stoma may become reduced after your operation. The stoma which is usually red, moist and shiny may be discoloured in appearance and dry. Further surgery may be required to correct this.

Risk to life:
Major surgery can carry a risk to your life. Your surgeon will discuss this risk with you.

Potential long term/late risks or complications

Damage to nerves:
During this operation damage can occur to the nerves which affect your bladder and sexual function. This can cause problems with control and bladder emptying. In men there is a risk of impotence (failure to get an erection) and in women vaginal dryness or tightness can occur. The risk is greater if you have radiotherapy treatment prior to your operation. These problems can sometimes recover with time and treatments are also available. If you have further questions please ask your doctor or colorectal nurse specialist.

Incisional hernia:
A hernia occurs when an internal part of the body pushes through a weakness in the muscle or surrounding wall. An incisional hernia presents as a bulge in the abdominal wall, close to the wound site. This may increase in size over time and may cause some pain or discomfort.

Parastomal hernia:
This is the bulging of bowel under the skin, through the muscles around the stoma. This bulging may distort the position of your stoma making pouch appliance difficult. The use of a support belt/underwear or a change in appliance may help improve circumstances.

If you are concerned regarding any of these possible risks or have any further questions please speak to your colorectal nurse specialist or colorectal surgeon. Your doctor will discuss other less common risks with you before you have your surgery.
How do you prepare for surgery?

You will have a discussion with your Doctor regarding your surgery. The operation will be fully explained to you. Patients requiring bowel surgery are usually treated using an Enhanced Recovery Programme. This programme is about improving patient outcomes and experience, providing early rehabilitation after surgery and allowing an earlier return to everyday activities, while always receiving evidence based best practice in care. During your hospital stay there will be daily goals which you will be encouraged to achieve. A team of Doctors, nurses and other health care professionals will be monitoring your progress and will support you in reaching your goals. You will meet with an Enhanced Recovery Nurse who will discuss and explain the programme with you.

Before you come into hospital you should try to eat a healthy, varied diet to keep up your calorie intake. You should stay as active as your health allows eg. short walks, 20-30 minutes every day. If you smoke, we strongly advise you to stop. If you need assistance to stop smoking you can speak with your colorectal nurse specialist or doctor who can refer you to a smoking cessation service or alternatively you can contact our smoking cessation officer on ph. 01-8092941. All of this preparation will aid your post-operative recovery.

As part of the preparation for surgery a series of tests will be carried out to determine that you are fit for a general anaesthetic and a major operation. These routine tests might include bloods, ECG (tracing of the heart) and possible cardiac tests and lung function tests. These will be organised as an out patient. Some patients will need to see an anaesthetist before they are admitted to hospital for surgery.

You may be asked to take some medicine to help empty your bowels (bowel preparation) before surgery. If you are asked to take this preparation, which involves drinking a special laxative medicine, your bowels will open several times very urgently. This is not always necessary. Some patients are also given an enema directly into your back passage (rectum) to clear out/empty your bowel on the morning of their surgery.

On the evening before or the morning of your surgery you will also need to have a small injection, which helps to reduce the risk of blood clots (thrombosis). You or a family member will be shown how to administer the injection prior to your admission.

As part of the Enhanced Recovery Programme you will be given 4 cartons of a clear carbohydrate drink to take the day before surgery and a further 2 cartons on the morning of your operation (unless you are diabetic). These carbohydrate drinks help improve your well-being, reduce loss of lean body mass, improve muscle function and reduce rehabilitation time. They do not affect your bowel function.
You will be admitted on the morning of your operation to our Day of Surgery Admissions unit (DOSA). At this point you will meet a doctor and a nurse who will prepare you for theatre. From there you will be brought to theatre, where you will meet theatre staff including your anaesthetist. Please leave all valuables at home and arrange to have anything you need brought to you later in the day. You will be in hospital for approximately 5-7 days. After surgery you will be assigned a bed in one of our surgical wards where you will be brought after your operation.

**What happens after surgery?**

Immediately after your operation you will be brought into a recovery room attached to the theatre. You will be monitored closely by the nursing staff until you are ready to be brought to the ward. On return to the ward you may feel quite sleepy following the anaesthetic. The nurses on the ward will help to make you feel comfortable and regularly check on you. They will monitor your stoma after the operation, they will be checking the colour and size. The nurses will also be checking if the bag is inflating with wind and then stool. This may take a couple days. They will help you look after your stoma immediately following your operation although you will need to be able to look after your stoma independently before you can be discharged home. You will be seen regularly by your surgical team throughout your stay.

During your operation a tube (catheter) will be placed into your bladder to drain away urine. This will remain in place at least overnight but sometimes longer. You will have a drip in a vein in one of your arms to give you fluids. This will be removed when you are drinking enough oral fluids. On the evening of your surgery you can usually start taking sips of water as tolerated. The following morning you can usually start taking some light diet e.g. tea, toast, soup, jelly and ice-cream. You may experience some nausea (sickness) or potentially vomit. This can be caused by the anaesthetic agents or drugs used in the operation. You will be given some anti-sickness medicine if needed. You will usually start to pass wind and stool after 2-3 days. During your operation you may have wound drains inserted, these are drainage tubes which placed at the site of your operation which drains away any excess fluid or blood. You may have a drain alongside your abdominal wound and the wound on your bottom. This will usually be easily removed after a couple of days.

It is important that your pain is controlled and that you are as pain free as possible so that you can move around, breath deeply, feel relaxed, sleep well, eat and drink. Some discomfort is to be expected. Your anaesthetist will discuss with you the treatments which may be used for controlling your pain after your surgery. This may include a PCA which is a patient controlled analgesia pump. This allows you to give yourself pain relief as needed, by pushing a button pain medication is administered from a pump into a drip in your arm. It has a lock-out mechanism which prevents you from getting too much medicine. It is important that you use this as and when you need it in order to remain comfortable in the post-operative period. Another alternative is an infusion in your back (epidural) which will provide a continuous supply of pain relief by numbing the surgical site. You will
also be given regular pain relieving tablets and if needed you can be given pain relieving injections. If you are concerned about pain after your surgery please talk to the nurse looking after you on the ward.

Mobilising after your surgery is an important part of your recovery. You should aim to go for short walks on the day after your surgery. This helps to improve your circulation, reduce the risk of chest infections and reduce the risk of blood clots. It also helps to stimulate the return of bowel function. Initially your nurse will assist you to mobilise after your operation. Each day after your operation you will be encouraged to mobilise more frequently. You will need to protect the wound on your bottom to allow the wound to heal, this would include not sitting for long periods and maybe the use of a special cushion to prevent excess pressure being put on the healing wound.

If you are concerned about your recovery or have any questions, please feel free to speak to your doctors or nurses.

What happens after you go home?

Before you leave the hospital an appointment will be arranged for you to attend out patients for a check up and to receive your results. You will receive a prescription for any medications required eg. Pain killers. A discharge summary letter will be sent directly to your GP outlining your care while in hospital. A referral to your local community nurse may be sent if you require ongoing wound care and dressings.

It is important to take a well balanced diet to help healing and to enable you to regain any weight lost before/after surgery. You may not have much of an appetite at first and small frequent meals may be better than large meals.

Following discharge from hospital it is important to gradually increase your level of activity. You should avoid heavy lifting for 6-8 weeks as your abdominal muscles have weakened from surgery and you are risk of developing a hernia. It is recommended that you do not drive for 6 weeks following your surgery for insurance purposes.
Useful Contact Numbers

If you have a query before you come into hospital for your operation, contact:

   Enhanced Recovery Nurse
   Phone: 01 8528450 / 01 8093222

If you have a query regarding your OPD appointment, contact:

   Colorectal Secretaries:
   Phone: 01 8093092 / 01 8093170

If you have a query regarding your stoma, contact:

   Stoma Care Clinical Nurse Specialists
   Phone: 01 8092396 or
   01 8528602

If you have a query regarding your follow up or need support, contact:

   Colorectal Clinical Nurse Specialist
   Phone: 01 8093222

If you have an urgent query outside of normal working hours, contact:

   Phoenix Ward
   Phone: 01 8092329 / 01 8092331

   Hardwicke Ward
   Phone: 01 8092825 / 01 8092350

You can also contact your GP regarding any medical queries.

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