Abdominoperineal Excision of Rectum (APER)
Your Operation Explained
Introduction
This leaflet tells you about the procedure known as an AbdominoPerineal Excision of Rectum (APER). It explains what is involved and some of the common complications associated with this procedure that you need to be aware of. It does not replace the discussion between you and your surgeon but helps you to understand more about what is discussed.

The digestive system
To understand your operation it helps to have some knowledge of how your body works (see diagram below).
When food is eaten it passes from the mouth down the oesophagus (food pipe) into the stomach. Here it is broken down and becomes semi-liquid. It then continues through the small intestine (small bowel), a coiled tube many feet long where food is digested and nutrients are absorbed.

The semi-liquid food is then passed into the colon (large bowel), a wider, shorter tube, where it becomes faeces (stools). The main job of the colon is to absorb water into our bodies making the stools more solid.
The stools then enter a storage area called rectum. When the rectum is full, we get the urge to open our bowels. The stools are finally passed through the anus (back passage) when going to the toilet.

**What is an APER?**

This operation is necessary to remove the area of bowel that is diseased. The operation removes the rectum (last part of the large bowel) and anus (see the diagram below).

![Abdominoperineal Resection of Rectum](image)

Two cuts will be made – one in your abdomen (tummy) and one around the anus. The surgeon will remove the diseased area of bowel and anus and make a colostomy. A colostomy is the end of the colon brought to the surface and stitched to the skin through a small cut (stoma) in the abdomen. Stools are then passed through the stoma and collected in a bag that sticks to the skin. Your colorectal nurse will discuss your colostomy with you in more detail and answer any questions you may have.

The wound on the abdomen will be closed either with clips or stitches. The wound on your bottom will also be stitched. Any visible stitches or clips will be removed after about seven to 12 days.
Before your operation, your consultant surgeon and colorectal nurse will carefully explain the procedure involved, although details will vary according to each individual case. You will need to sign a consent form to confirm that you understand and agree to have surgery.

An APER may be offered as laparoscopic surgery. This is also known as keyhole surgery. The aim of this type of surgery is to:

- Reduce your hospital stay.
- Reduce discomfort following surgery.
- Minimise scarring.

The risks remain the same as that of open surgery.

**What risks are there in having this procedure?**
Removing part of the bowel is a major operation. As with any surgery there are risks with the operation which include:

- **Nerve damage**
  The piece of bowel operated on is very close to the bladder and the nerves responsible for sexual function. These may get damaged during the operation. Bladder function may also be disturbed. Men may have problems with erection or ejaculation.

  In women, sexual response may be affected and there may be discomfort during sexual intercourse.

  These complications may be temporary or permanent. Your surgeon or colorectal nurse will discuss any problems or queries you may have.

- **Possible stoma problems**
  - Necrotic stoma (reduced blood supply to the stoma). This may need further surgery.
  - Stoma prolapse (when the stoma comes out too far past the skin). In serious cases further surgery may be needed.
  - Parastomal hernia (when the bowel pushes through a weak point in the abdominal muscle wall). Small hernias can be treated with a support garment or belt. Surgery may be needed for larger hernias.

- **Ileus (paralysis of the bowel)**
  Sometimes the bowel is slow to start working after surgery which causes vomiting and delays you from eating and drinking normally in
hospital. If this happens the bowel may need to be rested and a drip (a tube into a vein in your arm) is used to replace fluids (instead of drinking). In addition, you may need a nasogastric tube (tube in your nose which passes into your stomach) so that fluid in your stomach can be drawn off. This helps to prevent nausea and vomiting and remains in place until the bowel recovers.

Sometimes further surgery is required but this will be discussed with you if it becomes necessary.

- **Slow wound healing**
  The wound on your bottom can take time to fully heal. This is more likely to happen if you have received radiotherapy to the pelvic area.

**After any major operation there is a risk of:**

- **Chest infection**
  You can help by practising deep breathing exercises and following the instructions of the physiotherapist. If you smoke, we strongly advise you to stop.

- **Wound infection**
  There is a risk that your wound becomes infected. Antibiotics are given to help reduce the risk of this happening.

- **Thrombosis (blood clot in the leg)**
  Major surgery carries a risk of clot formation in the leg. A small dose of a blood thinning medication will be given by injection until you go home. You can help by moving around as much as you are able and in particular regularly exercising your legs. You may also be fitted with some support stockings for the duration of your stay in hospital.

- **Pulmonary embolism (blood clot in the lungs)**
  Rarely a blood clot from the leg can break off and become lodged in the lungs.

- **Bleeding**
  A blood transfusion may be needed during or after surgery. Very rarely, further surgery may be required.

- **Risk to life**
  Surgery for bowel cancer is classified as major surgery. It can carry a risk to your life. Your surgeon will discuss this risk with you.
Most people will not experience any serious complications from their surgery. However, risks do increase with age and for those who already have heart, chest or other medical conditions such as diabetes or for those who are overweight or smoke.

**What are the benefits of this procedure?**
The operation aims to remove the diseased bowel. In most cases this will give you the best chance of a cure or significant improvement in your bowel problems. Your surgeon will discuss this with you in more detail.

**What are the alternatives?**
If the operation has been recommended by your surgeon as the best treatment, not having this surgery may lead to bleeding, discharge, pain and possibly a complete blockage of the bowel.

If you choose not to have surgery, radiotherapy and/or chemotherapy may be offered. This may control your symptoms but will not cure the disease.

Occasionally it is possible to remove a rectal cancer using surgery directly from within the back passage. This type of surgery is only suitable for a small number of patients. Very rarely, and only with small cancers of the rectum, cauterisation (electrical burning) is appropriate.

Another option is a stent (an internal splint in the bowel). This is inserted through the back passage into the rectum to keep the bowel open. This may help with symptoms but will not cure the disease. Your surgeon will discuss these options if appropriate.

**What are the consequences of this operation?**
The operation will leave you with a permanent stoma. Specific potential risks concerning bladder and sexual problems are outlined above.

**Before the operation**
While you are waiting for your operation it is important you try to prepare yourself physically. If you can, try and eat a well-balanced diet including meat, fruit and vegetables.
Take gentle exercise, such as walking and get plenty of fresh air. If you smoke, we strongly advise you to stop.

**Pre-admission clinic**
To plan your operation and stay in hospital, you may be asked to attend the hospital for a health check a week or two before your admission. This appointment can take around two hours. If you are taking any medications please bring them with you.
A doctor or nurse will listen to your chest, check your blood pressure, and may send you for other tests, for example, a chest X-ray and an ECG (electrocardiograph – a tracing of your heart). This information will help the anaesthetist plan the best general anaesthetic for you. Blood will also be taken to check for any abnormalities so that these can be corrected before your operation.

A nurse may also ask questions relating to your health and to your home circumstances. If you live alone, and have no friends or family to help you, please let us know and we will try and organise some help or care for you. A social worker may come and discuss these arrangements with you.

**Preparing for your operation**
There are a number of different ways to prepare your bowel for the operation. Your doctor will discuss which option is best for you:

- You may be asked to follow a special diet for a few days.
- You may need to take a mild laxative for a couple of days.
- You may need a stronger laxative the day before surgery.
- You may be given supplements drinks.
- You may be given an enema on the morning of your operation.
- You may not need any of the above.

It is important that you drink plenty during this time to prevent dehydration. Unless you are advised otherwise, you must stop eating six hours before your surgery and can then drink clear fluids (such as water or squash) until two hours before your surgery. This is to allow your stomach to empty and prevent vomiting during the operation. Any important medication needed within two hours of surgery may still be given with a small amount of water.

Pain relief will be discussed with you by your anaesthetist. You may be given analgesia (painkillers) through an epidural (tube in your back) or through a drip in your arm in the form of a PCA (patient controlled analgesia) hand held pump. This means you control the amount of painkiller you require. If you would like to talk about this further please ask the ward staff to contact one of the pain management nurses.

A nurse will take you to theatre. Your operation will usually take between two and four hours.
After your operation
Immediately after surgery you may have a number of tubes attached to your body. You may have:

- An intravenous infusion (drip tube), usually in your arm to feed you with fluids and often used to give drugs as well.
- A catheter (tube) in your bladder to drain urine.
- A tube, either in your arm (PCA) or in your back (epidural), slowly releasing painkillers.
- Drainage tubes at the site of the operation to clear away any oozing fluids around the operation site inside.
- Continuous oxygen by a face mask or small tube placed to your nose.

Most of the tubes are put in place while you are under anaesthetic. Over a period of two to three days many or all of these tubes will be removed. People recover from surgery at different rates. The average stay in hospital is four to eight days but you may need to stay in longer. This will be discussed with you by your surgeon or colorectal nurse.

About two to three weeks after your surgery a report from histopathology (examination under the microscope) on the piece of bowel removed during the operation will be sent to your surgeon. Depending on the results, further treatment may be offered, the details of which will be discussed with you. If there is an option for further treatment such as chemotherapy, an appointment will sometimes be made directly with an oncologist (cancer specialist).

When can I start to eat and drink?
Most patients should be able to have a drink when they wake and should be allowed to eat soon after. Your stoma function should start to function within a day or so.

If you have any questions about your diet, please ask your colorectal nurse who can advise you. Eating a balanced healthy diet after your surgery will help your recovery. You will be given additional supplement drinks to make sure you are getting all the energy and nutrients you need.

Discharge home
Following your operation you may feel tired and weak, but as full recovery may take several weeks, there is no need to stay in hospital. Many people report that they feel better sooner at home. However, it will be necessary to make sure that there is someone to help with getting meals, cleaning your home and shopping.
For the first week or so at home you may find that you tire easily. Try to alternate light activity with periods of rest. A short rest in the day is often helpful during the first two to three weeks after being home. It is unwise to stay in bed for too long though as this slows down the circulation of the blood and increases the risk of developing a thrombosis.

Try to take some gentle exercise, like walking around the home or garden.

For the first six weeks do not lift anything heavy such as shopping or wet washing, or do anything strenuous like digging the garden or mowing the lawn.

You should not drive until you can safely do an emergency stop. You may wish to consult your GP before driving again. It is also advisable to check your car insurance policy, as there may be a clause in it about driving after operations.

You may feel some pain and ‘twinges’ around your wound for several months. This is normal as it takes a while for full healing to take place. Taking a mild painkiller regularly will help you feel better and aid your recovery. If the pain does not seem to improve or you are worried, contact your GP or colorectal nurse.

The length of time between your return to work following this type of surgery will depend upon the type of work you do. Ask your GP or surgeon for advice.

You may resume sexual activity when it is comfortable for you. If you are unsure, please speak to your GP, surgeon or colorectal nurse.

Within a few weeks you will normally be sent an appointment to see your surgeon. If the results on the piece of bowel removed during the operation are not available to give to you before you go home, an earlier outpatient appointment may be arranged.

Support groups:

B Friend Walsall Bowel Cancer Support Group
The Crossing at St Pauls
Darwall Street
Walsall, WS11DA

This group meets bi-monthly. For more information contact the colorectal nursing service on 01922 656300 (answer machine service) or bleep the colorectal nurse specialists via the switchboard on 01922
Beating Bowel Cancer
Beating Bowel cancer provide medical advice to patients through a specialist nurse advisor line on 08450 719301 or email nurse@beatingbowelcancer.org

Website: http://www.beatingbowelcancer.org/

Patient Voices
The Patient Voices Group is part of Beating Bowel Cancer and is the only UK national patient-to-patient network for people with bowel cancer. The group has also expanded to include close relatives of bowel cancer patients. Members of the group are willing to help in a number of ways including patient to patient support, raising awareness, and fundraising. General enquiries: 08450 719301

Local sources of further information
You can visit any of the health/cancer information centres listed below:

Heart of England NHS Foundation Trust
Health Information Centre
Birmingham Heartlands Hospital
Bordesley Green
Birmingham B9 5SS
Telephone: 0121 424 2280

Cancer Information and Support Centre
Good Hope Hospital
Rectory Road
Sutton Coldfield B75 7RR
Telephone: 0121 424 9486

Sandwell and West Birmingham Hospitals NHS Trust
The Courtyard Centre
Sandwell General Hospital (Main Reception)
Lyndon
West Bromwich B71 4HJ
Telephone: 0121 507 3792
Fax: 0121 507 3816

University Hospital Birmingham NHS Foundation Trust
The Patrick Room
Cancer Centre
Queen Elizabeth Hospital
Walsall Primary Care Trust
Cancer Information & Support Services
Challenge Building
Hatherton Street
Walsall WS1 1YB
Freephone: 0800 783 9050

About this information
This guide is provided for general information only and is not a substitute for professional medical advice. Every effort is taken to ensure that this information is accurate and consistent with current knowledge and practice at the time of publication. We are constantly striving to improve the quality of our information. If you have a suggestion about how this information can be improved, please contact us via our website:

http://www.birminghamcancer.nhs.uk.

This information was produced by Pan Birmingham Cancer Network and was written by Consultant Surgeons, Clinical Nurse Specialists, Allied Health Professionals, Patients and Carers from the following Trusts:

Heart of England NHS Foundation Trust
Sandwell and West Birmingham NHS Trust
University Hospital Birmingham Foundation Trust
Walsall Hospital NHS Trust

We acknowledge the support of Macmillan in producing this information.

© Pan Birmingham Cancer Network 2010

Publication Date: June 2010

Review Date: June 2013

The diagrams were provided courtesy of Northern Ireland Cancer Network.