Low anterior resection

Introduction / procedure

This leaflet tells you about the procedure known as a low anterior resection. It explains what is involved, and some of the common complications associated with this procedure that you need to be aware of. It is not meant to replace discussion between you and your surgeon, but as a guide to be used in connection with what is discussed.

What is a low anterior resection

This operation is necessary to remove the area of bowel that is diseased. The operation involves removing a piece of your bowel shown in the diagram below.

During this operation, part of the sigmoid colon and part of the rectum are removed. A cut will be made in your abdomen (tummy). The surgeon will remove the diseased area of bowel and a length of normal bowel either side of the disease. The end of the large bowel is then re-attached to the rectum. The wound on the abdomen will be closed either with clips or stitches. Any visible stitches or clips will need to be removed in about 7 to 10 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 agree to have surgery.

A low anterior resection may be offered as laparoscopic surgery (minimally invasive 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 are the benefits of this procedure?**

The operation is 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 risks of this procedure?**

Removing part of the bowel is a major operation. As with any surgery there are risks with the operation. Risks with this operation include:

**Stoma formation**

It will be necessary to form a stoma, which is an opening of the bowel onto the abdomen, your bowel motions are then emptied into a bag. Your specialist nurse will give you more information on this.

**Anastomotic leak**

In a small number of patients, (4%), the join in the bowel can leak where it has been stitched together.

Your ileostomy (stoma) will not be reversed until the leak has healed.

**Ileus (paralysis of the bowel) and small bowel obstruction**

Sometimes the bowel is slow to start working after surgery (ileus) or can be obstructed.
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) which in most cases will prevent vomiting. These will remain in place until the bowel recovers.

Sometimes if the bowel is obstructed an operation may be required.

**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**

The risk of this is increased with bowel surgery. Antibiotics will usually be given through a drip 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. As long as the clots remain in the legs they are a relatively minor problem. Occasionally, they dislodge and travel through the heart to the lungs, this is known as a **Pulmonary Embolism**. A small dose of a blood thinning medication will be injected once or twice daily until you go home. You can help by moving around as much as you are able and in particular regularly exercising your legs. You will also be fitted with some support stockings for the duration of your stay in hospital. If you smoke, we strongly advise you to stop.

**Bleeding**

A blood transfusion may be needed. Very rarely, further surgery may be required.

**Risk of life**

Bowel surgery 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 if you are overweight or smoke.
What are the alternatives?

Doing nothing is very likely to lead to further worsening of your health. Depending upon what is wrong, you may develop a blockage of the bowel, leakage from the bowel into the abdomen or an abscess, all of which can be life threatening. If you have cancer, the longer it remains, it is more likely to spread and become incurable.

For most of the conditions where this surgery is advised the only alternative is medical treatment with drugs. Where there is a cancer of bowel, drug treatment alone will not cure the disease. For other conditions surgery is usually advised when medical treatment has failed to control the symptoms. Your surgeon will discuss any queries you may have.

Treatment/surgery

Before the operation

While you are waiting for your operation, it is important you try to prepare yourself physically. If you are able, 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 can take about two hours. If you are taking any medications please bring all of 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 – 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.
When you come into hospital

In preparation for the operation you will be given a strong laxative (Picolax) which will help to clear the bowel. This may be given to you to take at home if you are coming into hospital on the day of your operation.

You will be given fluids only during this time. It is important that you drink plenty to reduce the risk of dehydration.

You will not be allowed anything to eat for 6 hours before surgery. You will be advised when to stop drinking water (2 to 6 hours before surgery). This is to allow the stomach to empty to prevent vomiting during the operation. However, any important medication will 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, or require information in another language, 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 2 and 4 hours.

Complications

What are the consequences of treatment?

After any major bowel operation the function of the bowel can change. You may experience:

- Urgency
- Diarrhoea
- Loose stools

In most people, these improve with time but can take several months to settle down. You may sometimes need medication to help control your bowel.

Please do not hesitate to contact your colorectal nurse for advice.

Recovering from your operation

After your operation you will be encouraged to start moving about as soon as possible – usually you will be sitting up the following day. This is an important part of your recovery. It is important to maintain regular leg movements and
deep-breathing exercises. It is also important that you wear the special stockings that have been provided for you, to help reduce the possible risk of blood clots.

An intravenous infusion (drip) will replace your body fluids until you are able to eat and drink again. Sometimes, a nasogastric tube (a fine tube that passes down your nose into your stomach) may be in place. This allows any fluid to be drained to help reduce sickness. It is usually removed within 48 hours.

A catheter, which is like a small tube, is usually put into your bladder and urine is drained into a collecting bag to accurately monitor your urine and save you from having to get up to pass urine. This is usually removed within a week. It may sometimes be necessary to have a drainage tube near to your wound.

**Bowel movements**

Due to your bowel being handled during your operation, it may be slow to start working, however, you will be offered fluids if tolerated, shortly after your surgery. Following this you should then be able to eat and drink normally within 2-3 days.

Your bowel will usually start to make sounds after 2 or 3 days and you may have a bowel movement after 4 to 5 days. However, if this does not happen you should not be too worried. Bowel movements are different from one person to another.

Your specialist nurse can talk to you about this.

**Pain control**

Pain control will have been discussed with you before your operation. There are different types of pain-relieving drugs that are very effective.

If you still suffer from pain, it is important to let a doctor or nurse looking after you know as soon as possible so that they can review your medication. After some types of bowel surgery, it may be uncomfortable to sit down for a long time, but this should ease gradually as your wound begins to heal. Your specialist team will do everything they can to make your recovery as pain-free as possible.

**Results**

A piece of your bowel will have been removed during your operation and sent to the laboratory for testing. The results of these tests should be available before you leave hospital – usually within 7 – 10 days of your operation. A member of
your specialist team will talk to you about your results and any other treatment that you may need.

After care/discharge advice

Discharge home

Following your operation you will feel tired and weak, but as a full recovery may take several months, there is no need to stay in hospital. In fact many people report that they feel better sooner in their 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 you may find that you tire easily. Try to alternate short bursts of light activity with periods of rest. A short sleep in the day is often helpful during the first 2 to 3 weeks after discharge 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 6 weeks you are advised not to lift anything heavy such as shopping or wet washing, and not to do anything strenuous like digging the garden or mowing the lawn.

You should not drive until you can do an emergency stop, and you must be able to do this without hesitation caused by fear that your wound will hurt. You may wish to consult your own doctor 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 to see your surgeon or colorectal nurse.

**Wound infection**

Wound infection is an uncommon complication of surgery. Do avoid touching the wound site to reduce the risk of a wound infection. After the operation your wound may be a bit red and sore initially but should quickly improve. If it becomes increasingly red, swollen, hot and painful or discharges fluid, you may have developed an infection. You will then need to contact your GP for advice as to whether you need antibiotics.

**More information**

We have listed the main support associations, together with other useful sources of information. Remember that, although the Internet carries a lot of material, not all of it is particularly helpful. For the correct information, you should speak to your specialist nurse, who could also give you information about any local support groups.

**Useful addresses**

**Digestive Disorders Foundation (CORE)**  
3 St Andrews Place  
London, NW1 4LB  
(please send an SAE)  
Website: [www.digestivedisorders.org.uk](http://www.digestivedisorders.org.uk)

**Colostomy Association**  
PO Box 8017  
Reading  
RG6 9DF  
Phone: 0800 587 6744  
E-mail: cass@colostomyassociation.org.uk  
Website: [www.colostomyassociation.org.uk](http://www.colostomyassociation.org.uk)

**National Association for Colitis & Crohn’s Disease (NACC)**  
4 Beaumont House, Sutton Road  
St Albans, Herts, AL1 5HH  
Phone: 0845 130 2233 / 01727 844296  
Fax: 01727 862550  
E-mail: nacc@nacc.org.uk  
Website: [www.nacc.org.uk](http://www.nacc.org.uk)

**Macmillan Cancer Relief**  
89 Albert Embankment, London SE1 7UQ  
Cancerline: 0808 808 2020  
Website: [www.macmillan.org.uk](http://www.macmillan.org.uk)

**Cancerbackup**  
3 Bath Place, Rivington Street  
London EC2A 3JR  
Website: [www.cancerbackup.org.uk](http://www.cancerbackup.org.uk)

**Bowel Cancer UK**  
7 Rickett Street, London SW6 1RU  
Phone: 08708 506050
Cancerbackup have produced the following Booklets which you may find useful

- Large bowel (colon & rectum)
- Chemotherapy
- Radiotherapy
- Sexuality
- Diet

**Questions you would like to ask**

Please use this page to make any notes that you think will help you when you speak to your specialist team. You may also want to keep a notebook for when you think of any extra questions.

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**For further information please contact**

Senior Colorectal Nurse Specialist
Colorectal Nurse Specialist
Colorectal/Stoma Nurse Specialist

Telephone: 01284 712697

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