The Christie
NHS Foundation Trust

Colorectal and peritoneal oncology centre

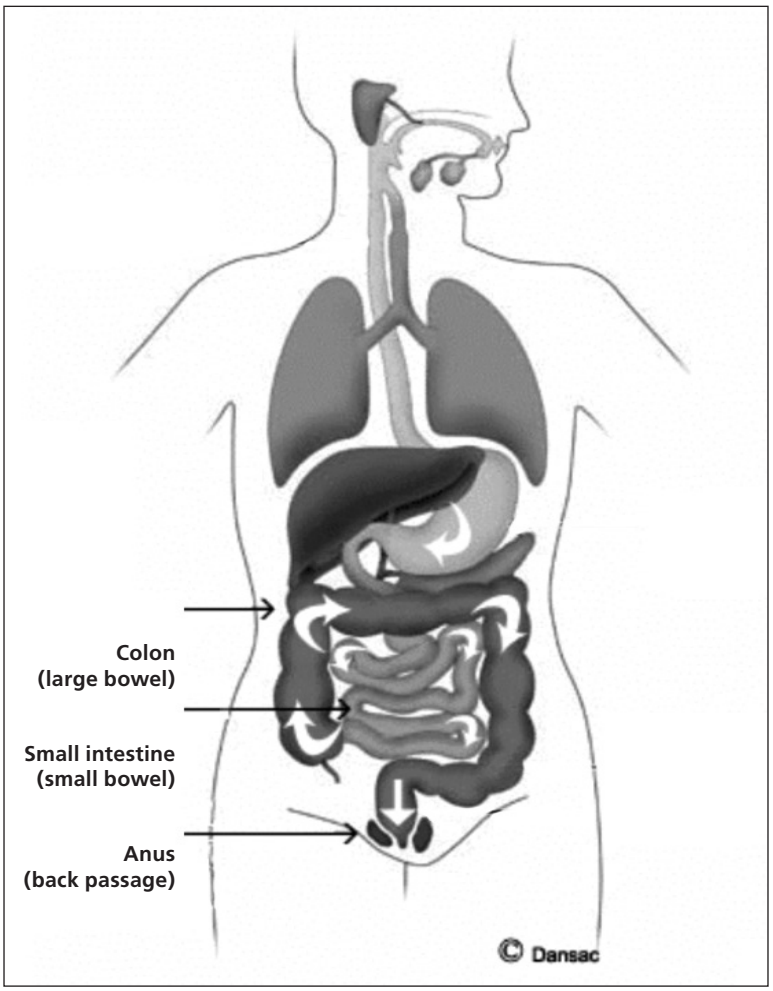
Abdominoperineal excision of the rectum (APER)

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. It is not meant to replace discussion between you and your surgeon, but is intended to be used as a guide in connection to what is discussed.

The digestive system:

To understand your operation it helps to have some knowledge of how your body works.



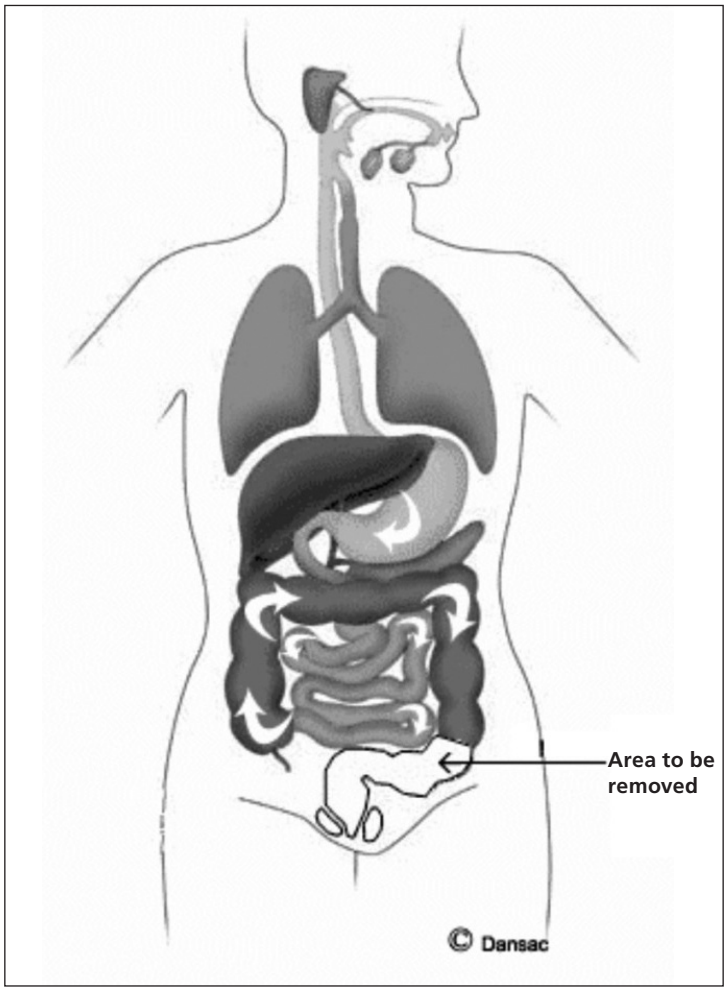
The bowel is part of our digestive system. It is divided into two parts: the small bowel and the large bowel. The large bowel is made up of the colon and the rectum.

When food is eaten it passes from the mouth down the oesophagus (food pipe) into the stomach where digestion begins.

It then passes through the small bowel where essential nutrients are taken into the body.

The digested food then moves into the colon where water is absorbed. After the colon, the remaining waste matter – known as stools or faeces – is held in the rectum (back passage) until it is ready to be passed from the body through the anus as a bowel motion (stool).

What is an APER?



The above diagram shows the part of the bowel to be removed. The rectum and anus are removed. The reason surgery has been recommended is because you have one of the following:

- Locally advanced rectal cancers – those extending beyond the standard rectal area
- Locally recurrent rectal or extensive recurrent anal cancers
- Other cancers including neuroendocrine tumours and locally advanced anal and colon cancers and other rarer pelvic masses

This operation is necessary to remove the area of bowel that is diseased, usually in the lower end of the rectum. During your operation part of your large bowel will be brought to the surface of your abdomen to form a stoma (opening). This is called a colostomy.

APER may be offered as an open operation, laparoscopic (keyhole procedure) or robotically. Your surgeon will discuss the most appropriate way for you as not everyone is suitable for laparoscopic or robotic surgery.

Following open surgery there will be two wounds – one abdominal wound (tummy cut) and the second wound around the bottom so that the surgeon can completely remove the anus. Once the rectum and the anal canal are removed then this area will be closed completely. This may be surgically stitched or may have to be filled by a musculocutaneous flap (tissue transfer) to prevent or reduce the chance of future herniation (perineal hernia which is a weakness in the muscle surrounding the tissue wall, due to the operation).

A permanent colostomy is then made also called a stoma. This is the end of the colon (bowel) brought to the surface and stitched to the skin through a small cut in the abdomen.

Faecal waste/stool is then passed through the colostomy and collected in a stoma bag that sticks to the skin. After the operation 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 4 - 6 weeks of the operation and this will determine if you require further treatment in the form of chemotherapy or not.

If the tumour is invading any other organs these may also have to be removed during this operation, which can involve some of the following:

Part of your bladder, prostate, uterus (womb), ovaries, all or part of your vagina, as well as your bowel and back passage. This will be discussed with you at your clinic consultation.

Laparoscopic approach to surgery (keyhole surgery)

The advantages of keyhole surgery is to:

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

The risks remain the same as that of open surgery.

Robotically-assisted approach

This may or may not be a suitable approach for you, however if your surgeon feels this is suitable, this will be discussed with you and additional information leaflet will be given.

How will my bottom wound (perineal wound) be closed?

Your surgeon will use one of the following techniques:

- Direct closure (sewn together)
- Flap reconstruction (tissue/muscle rotated to fill gap)

Consent

The colorectal and peritoneal oncology team will discuss the treatment that is recommended for you and explain how it will affect you. If you are unsure about any aspect of the procedure or treatment proposed please do not hesitate to ask for more information.

We will ask you to sign a consent form agreeing to accept the treatment that you are being offered. The basis of the agreement is that you have had The Christie's written description of the proposed treatment and that you have been given an opportunity to discuss any concerns. You are entitled to request a second opinion from another doctor who specialises in treating this cancer. You can ask your own consultant or your GP to refer you.

Your consent may be withdrawn at any time before or during this treatment. Should you decide to withdraw your consent then a member of your treating team will discuss the possible consequences with you.

What is shared decision making?

The choice about which treatment is best for you will be made together with your doctor. This will be based on the risks and benefits of the treatment and your individual circumstances.

Are there any risks involved in having this treatment?

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

- **Ileus (paralysis of the bowel) and small bowel obstruction:** Sometimes the bowel is slow to start working after surgery 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.
- **Stoma (colostomy) complications:** Rarely there may be problems with the stoma. Your surgeon and colorectal/stoma nurse will review your stoma regularly.
- **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. You will be given a special machine at pre-op called a spirometer, which is important to use prior to your operation and during your stay in hospital. Please bring this with you.
- **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. Sometimes the wound needs to be opened up and dressed regularly.
- **Bottom wound (perineal wound):** The wound can sometimes open up and drain fluid. If this happens it will need to be packed with a dressing and continue to be dressed for some time once at home. This will eventually heal, however a small proportion of patients can be left with a sinus, small track which can drain fluid from time to time but lessens over time. Occasionally there can be a build-up of fluid in the pelvis which may need a drain inserting to remove the fluid collection.
- **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 injected normally once a day and this will be continued at home for a short period of time. You can help by moving around as much as you are able and, in particularly, regularly exercising your legs. You will be supplied 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:** You may need a blood transfusion. Very rarely, further surgery may be required.
- **Sexual function:** Occasionally, operations on the anus or rectum can cause damage to nerves connected to the sexual organs. If there is any damage, men may not be able to maintain an erection and may have problems with ejaculation. Some women may also suffer problems, such as pain when having sex. If you do have problems, talk to your doctor or specialist nurse.
- **Nerve damage:** Occasionally the surgery can affect the passing of urine in both men and women if the nerves to this area are damaged or bruised; this usually improves over a period of time.
- **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 if you are overweight or smoke.

What are the alternatives if I don't have an operation?

Doing nothing is very likely to lead to further worsening of your health. 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. You will develop symptoms from your bowel and more than likely bladder, which can be difficult to manage. Your cancer will eventually 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 the bowel, drug treatment alone will not cure the disease.

Treatment/surgery what to expect before the operation:

Pre-operative assessment clinic

Following your outpatient visits, a date for surgery has been arranged and you will attend a pre-operative assessment clinic. We will send you an appointment to this clinic which is run by specialist nurses who will talk to you about your condition, previous medical history, any tablets/treatment you are taking and they will examine you. They will then organise a number of routine tests.

The nursing care relating to your operation will be explained and they will give you any relevant information. The nurses will give important advice on:

- exercising before your operation
- stopping smoking
- coughing and deep breathing
- decreasing or stopping your alcohol intake
- healthy diet.

Please bring a list of ALL your current medications.

The clinic nurse will also discuss your plans for going home. You will need to make arrangements for family and/or friends to support you when you leave hospital. If this is something you feel you will need assistance with, it is important you let the nurse know at the assessment clinic.

If you don't already have a stoma you will be seen by a stoma nurse and they will explain what this is and how it works in order to ensure you are prepared both physically and psychologically. If you already have a stoma then you will still see the stoma nurse in pre-op.

What will happen when you come into hospital?

Day of admission

- **If you need bowel preparation,** you may need to be admitted to the ward the day before your surgery to have your bowel preparation but this will be discussed with you.

  If you don't need to be admitted the day before and need bowel preparation then you will be given a prescription for some bowel preparation with instructions on how and when to take this the day before your operation
- Be sure to bring comfortable nightwear/clothes, dressing gown and sensible slippers. You will also need a wash bag. Please do not bring any valuables such as jewellery or large amounts of money as The Christie cannot accept responsibility for personal belongings. You are welcome to bring in laptops, iPads. Space is limited so a small case is best.

Bowel preparation

- If you have been told that you **don't need** any bowel preparation you can eat and drink the day before your operation as normal.
- If you need to have bowel preparation on the ward, this will be given to you soon after you arrive on the ward. This is a drink to clear your bowel before your surgery and will make you go to the toilet several times. Once you have had this drink we encourage you to drink fluids only.
- In the afternoon, you will be given a second drink as part of the bowel preparation. Continue to drink clear fluids only, as in the list section on clear fluids below.
- If you have had bowel prep the night before your operation you may be given intravenous (into a vein) fluids to prevent dehydration. You can also sip water throughout the night until 6am. If you take tablets in the morning, check with the nurse looking after you before taking them.

Clear fluids

- Below are some examples of clear fluids. Fluid is considered clear if when you hold it up to the light, you can see through it. Whilst on a clear fluids diet, it is important that you keep hydrated and provide yourself with some nutrition.

Options:

- Apple juice
- Squash/cordials
- Carbonated or electrolyte drinks (e.g. Sprite, 7UP, Powerade)
- Bovril/Marmite - mixed with hot water
- Clear soup/consommé/bouillon (no chunks)
- Black tea or coffee (no dairy products)
- Herbal/fruit tea infusions

You may add sugar or honey to your clear liquids

Example meal:

- 1 glass apple juice or soda
- 1 bowl consommé
- 1 bowl jelly
- 1 cup of coffee or tea (without dairy products)
- Sugar or honey if desired

Oncology critical care unit (OCCU)

After your operation you will likely go to the oncology critical care unit (OCCU). This is a standard process and you will be there for close observation. The length of time spent on the unit varies up to a few days depending on your needs. If you would like to visit the OCCU before your operation please ask a member of the Ward nursing staff to arrange this.

When you are on the OCCU you will be closely observed. You will see equipment that delivers drugs and monitors that display information about your blood pressure, heart rate and rhythm. The machines can be noisy. Please do not be worried as you are being continually observed. The length of time spent on the unit varies from overnight to a few days depending on your needs.

Activity/physiotherapy

You will be encouraged to start moving about as soon as possible –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.

- A physiotherapist will see you, listen to your chest and ask you to carry out your deep breathing and coughing exercises. This will help to prevent any chest complications. They will then go through the 10 exercises given to you in the booklet you received in clinic. Throughout the day it is important you continue to carry out as many of the exercises given to you by the physiotherapist as you can. These exercises can help to maintain and improve your muscle strength as well as your general mobility and function.
- The physiotherapist will help you to get out of bed, march up and down on the spot and transfer you into a comfortable chair depending on how your bottom has been closed. If you are advised to sit in a chair you will remain in the chair for a few hours and then transfer back into bed with nursing assistance. Weight-bearing exercises are also useful at this time.
- While you are in bed the nurses will help you to change position and do their best to keep you comfortable.

After the operation

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 but it may need to be kept for longer. This will be discussed with you.

A catheter, which is a small soft tube, is usually put into your bladder at the time of surgery and urine is drained into a collecting bag to accurately monitor your urine. This is usually removed within a week. It may sometimes be necessary to have a drainage tube near to your wound.

Wound

There will be a dressing over your incision (wound) on return to the ward. You will also have a dressing over your rectal (bottom) wound. It can take some time before you can feel comfortable siting down. At first you may only be able to sit for short periods and you may need a pressure relieving cushion to sit on following surgery and also when you go home.

Colostomy

There will be a large bag over your new stoma which may contain some blood stained fluid. This is quite normal and the nursing staff will be able to observe your stoma through the bag.

Due to your bowel being handled during your operation it may be slow to start working again. You are likely to be told to start taking fluids slowly as tolerated. This will gradually increase until you are able to eat a light diet. You should then be able to eat and drink normally.

Your stoma 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.

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. We work very closely with our specialised pain team.

How long will I be in hospital?

You are likely to be in hospital for approximately 7 to 10 days but this will depend on the speed of your recovery and your home circumstances. It is important that you are able to manage the care of your stoma before you go home.

Recuperating when you go home

You will be given painkillers to take home from hospital. It will also help if you support your wound when coughing.

With regards to your wound, it is safe to have a bath/shower when you go home and it is important to keep your rectal wound clean. If your wounds need dressing or you need help with your injections then you will be referred to the district nurses. Please ask the ward staff if you are not informed of this.

The stoma nurses will give you detailed information about how to care for your stoma and will be able to advise you on diet and assessing further supplies of bags, etc. They will refer you to your local stoma nurse service who will continue to support you.

You are advised not to drive for 6 weeks. After this you may drive when you can safely perform an emergency stop and turn round and reverse safely with your seat belt on, please inform your insurance company.

You should avoid any heavy lifting for at least 6 weeks due to the risk of hernias. Getting back to normal activities and exercise will depend on you. It is safe to gently increase your levels of physical activity providing it is comfortable to do so.

Getting back to work will depend on what type of job you do. Please ask if you are unsure. The ward should provide you with a sick note, please ask before you go home. Your GP can then supply you with further sick notes.

Normal sexual relations can be resumed whenever you feel comfortable. If you have any concerns please discuss with your specialist nurse.

Follow up after surgery

Your CNS will contact you once you are discharged home to check you are recovering well. We will then arrange an appointment 4 - 6 weeks after being discharged from the ward. This will be one of the following a face to face, telephone or virtual appointment, you will then be reviewed at regular intervals.

Your results

A piece of your bowel will have been removed during your operation and sent to the laboratory for testing. The results can take 4 - 6 weeks before they are available. A member of your specialist team will discuss this with you in your post-operative outpatient appointment and inform you of any further treatment you may require.

If you know the name of your consultant, please contact their secretary directly.

Consultant	**Secretary**
Professor S T O'Dwyer	0161 446 8311
Mr M S Wilson	0161 446 3366
Professor A G Renehan	0161 918 2189
Mr C R Selvasekar	0161 918 2310
Mr O Aziz	0161 918 2057
Mr H W Clouston	0161 918 2391
Mr J Wild	0161 918 7352
Miss R Fish	0161 918 2391
Mr P Sutton	0161 918 2057

Clinical nurse specialists:

Rebecca Halstead (lead)
0161 918 7096 or **07766 780952 rebecca.halstead@nhs.net**

Rachel Connolly
0161 918 7001 or **07785 725629 rachel.connolly@nhs.net**

Lisa Wardlow
0161 918 7183 or **07826 892213 lisa.wardlow@nhs.net**

Amanda Coop
0161 918 2097 – **07824 373785 amanda.coop@nhs.net**

There will be a CNS available between the hours of 08:00am to 4:00pm.
Clinical nurse specialist secretary – **0161 918 7859**

Further information

For information about the colorectal and peritoneal oncology centre visit **www.christie.nhs.uk/cpoc**

Christie information

The cancer information centre stocks a wide range of booklets free to patients, their families and carers and offers a free confidential service for anyone affected by cancer.

Telephone **0161 446 8100**.

Complementary therapy and smoking cessation

There is an outpatient drop-in service at The Christie on Tuesday and Thursday from 4:00pm. Contact complementary therapy directly by calling **0161 446 8236**.

For smoking cessation – telephone **0161 956 1215** or **07392 278408**

Maggie's centres

The centres provide a full programme of practical and emotional support, including psychological support, benefits advice, nutrition and head care workshops, relaxation and stress management.

Maggie's Manchester:

Tel: 0161 641 4848 or email **manchester@maggiescentres.org**
The Robert Parfett Building, The Christie NHS Foundation Trust,15 Kinnaird Road, Manchester M20 4QL

Maggie's Oldham:

Tel: **0161 989 0550** or **email oldham@maggiescentres.org**
The Sir Norman Stoller Building, The Royal Oldham Hospital, Rochdale Road, Oldham OL2 2JH

Macmillan Cancer Support

This is a national charity offering advice and support. Call the freephone helpline **0808 808 0000** (Monday to Friday, 9:00am - 8:00pm) or if you are hard of hearing, use the text phone **0808 808 0121**.

Macmillan publish booklets which are free and available on their website **www.macmillan.org.uk**

Psycho-oncology at The Christie

Ask your doctor or nurse to make a referral on your behalf.

If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

The Christie is committed to producing high quality, evidence based information for patients. Our patient information adheres to the principles and quality statements of the Information Standard. If you would like to have details about the sources used please contact **the-christie.patient.information@nhs.net**

For information and advice visit the cancer information centres at Withington, Oldham or Salford. Opening times can vary, please check before making a special journey.

Contact The Christie Hotline for urgent support and specialist advice
The Christie Hotline: 0161 446 3658
Open 24 hours a day, 7 days a week

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The Christie Patient Information Service
Tel: 0161 446 3000 www.christie.nhs.uk