

[Home](#) > [Cancer information](#) > [Cancer treatment](#) > [Treatment types](#) > [Surgery](#)

## Surgery

Surgery means treating illness by cutting away body tissue. It's one of the main treatments for many cancers. The type of surgery you have and the details of its preparation, side effects and complications will vary according to the type of cancer you have.

For more detail about surgery in your particular case, you can ask your doctor or nurse at the hospital where you're having your treatment. You may also find it helpful to read our information about your type of cancer, which will include more specific information about surgery.



Watch Eileen's story

In our video Eileen talks about how she prepared for, and recovered from, surgery for colon cancer.

Content last reviewed: 1 January 2013

Next planned review: 2015



We make every effort to ensure that the information we provide is accurate and up-to-date but it should not be relied upon as a substitute for specialist professional advice tailored to your situation. So far as is permitted by law, Macmillan does not accept liability in relation to the use of any information contained in this publication or third party information or websites included or referred to in it.

Macmillan Cancer Support, registered charity in England and Wales (261017), Scotland (SC039907) and the Isle of Man (604). A company limited by guarantee, registered in England and Wales company number 2400969. Isle of Man company number 4694F. Registered office: 89 Albert Embankment, London SE1 7UQ.

## What surgery is used for

Surgery means treating illness by removing body tissue. Cancer surgery can be used for a number of purposes and it is one of the main treatments for cancer.

On this page

- Diagnosis
- Treatment
- Staging
- Reconstruction
- Controlling symptoms

### Diagnosis

Surgery may be used to help diagnose some cancers. The surgeon removes a small piece of tissue, which is used to confirm the diagnosis of cancer and to find out about the type of cancer. This is called a biopsy. The sample is then examined in the laboratory.

### Treatment

Where possible, surgery is used to remove the tumour and surrounding tissues that may contain cancer cells. This may still be done even if the cancer has spread to another part of the body.

Occasionally it's used to remove cancer cells that have spread from the original tumour into another part of the body, such as the lung or liver.

Sometimes treatment such as chemotherapy can be given before surgery to reduce the size of a cancer so that less surgery is needed.

### Staging

Staging is the process that doctors use to work out the size of the cancer, whether it's just in the place where it first started, or whether it may have spread to other parts of the body. Usually tests and scans are used to stage a cancer before surgery. However, occasionally doctors need to carry out small operations to find out the stage of the cancer. This might be because the tumour can't be seen on a scan.

An example of surgery used in staging is a laparoscopy. During a laparoscopy a surgeon will make a small cut in your abdomen (tummy). They will use a special instrument called a laparoscope (a thin tube with an eyepiece at one end and a light and magnifying glass at the other end) to look around and work out the size of the tumour and if it has spread.

Some people may have similar operations on other parts of the body. Information about the stage of the cancer is used to plan treatment. Sometimes, surgeons can get this information at the same time as removing a tumour.

### Reconstruction

Surgery can be used to restore:

- a part of the body - for example, to create a new bladder
- the appearance of a part of the body - for example, breast reconstruction after a mastectomy (an operation to remove the breast)

Reconstructive surgery is usually carried out by specialist surgeons.

## Controlling symptoms

If the cancer can't be completely removed or cured, surgery can sometimes still help to control symptoms. For example, removing or bypassing a tumour to reduce blockage, discomfort or other complications.

If the cancer has spread by the time you're diagnosed, you may not be offered surgery as your main treatment. This is because surgery alone will not cure you. Depending on the type of cancer you have, you may be offered a treatment that treats cancer cells throughout your body, such as chemotherapy or hormonal therapy. Radiotherapy may also be used to help control a cancer that cannot be treated surgically.

You can get more information about operations for specific types of cancer by reading more about your type of cancer.

Content last reviewed: 1 January 2013

Next planned review: 2015



We make every effort to ensure that the information we provide is accurate and up-to-date but it should not be relied upon as a substitute for specialist professional advice tailored to your situation. So far as is permitted by law, Macmillan does not accept liability in relation to the use of any information contained in this publication or third party information or websites included or referred to in it.

Macmillan Cancer Support, registered charity in England and Wales (261017), Scotland (SC039907) and the Isle of Man (604). A company limited by guarantee, registered in England and Wales company number 2400969. Isle of Man company number 4694F. Registered office: 89 Albert Embankment, London SE1 7UQ.

Home > Cancer information > Cancer treatment > Treatment types > Surgery > General information > The right surgeon for the job

## The right surgeon for the job

To diagnose your cancer you may be seen by a surgeon at your local hospital. For example, you'll see a breast surgeon for suspected breast cancer or a gastrointestinal surgeon for suspected colon cancer.

Rarer cancers require more specialised surgeons who are skilled at particular surgical techniques. This may mean that you have to be referred to a specialist cancer hospital, possibly some distance from where you live.

If you want to know about the referral process planned for you, you can talk to your GP. They can explain the procedure and, if necessary, refer you for another surgical opinion. You can also ask your surgeon if they specialise in surgery for your particular type of cancer and what experience they have.

Content last reviewed: 1 January 2013

Next planned review: 2015



We make every effort to ensure that the information we provide is accurate and up-to-date but it should not be relied upon as a substitute for specialist professional advice tailored to your situation. So far as is permitted by law, Macmillan does not accept liability in relation to the use of any information contained in this publication or third party information or websites included or referred to in it.

Macmillan Cancer Support, registered charity in England and Wales (261017), Scotland (SC039907) and the Isle of Man (604). A company limited by guarantee, registered in England and Wales company number 2400969. Isle of Man company number 4694F. Registered office: 89 Albert Embankment, London SE1 7UQ.

[Home](#) > [Cancer information](#) > [Cancer treatment](#) > [Treatment types](#) > [Surgery](#) > [General information](#) > [Can surgery cure the cancer?](#)

## Can surgery cure the cancer?

Although surgery cures many cancers, it's not always possible to know at the time of surgery whether any cancer cells could have broken away and spread to tissues around the main tumour.

To try to ensure all the cancer cells are removed the surgeon will remove the tumour and a surrounding area (margin) of normal tissue. A specialist known as a pathologist will examine the tissue that's been removed and check the margin to see if it's clear of cancer cells.

Removing all the cancer cells is important because this helps to reduce the risk of the cancer coming back. If the margin of tissue is not clear, the cancer specialists who are involved in your care will discuss with you the best way to manage this. For some people a further operation to take more tissue from the surrounding area may be recommended.

There's also a risk that cancer cells may have spread from the main tumour to another part of the body. These are known as micrometastases. Micrometastases are too small to be seen on scans. If there is a potential risk of micrometastases, your cancer specialists may recommend that you have other treatments such as chemotherapy and radiotherapy as part of your treatment.

Occasionally scans that are taken before surgery don't show up the true extent of the cancer and, during the operation, the surgeon finds that it isn't possible to remove the cancer completely. If this is the case, your cancer specialists will discuss with you the best treatment possible for your situation.

Content last reviewed: 1 January 2013

Next planned review: 2015



We make every effort to ensure that the information we provide is accurate and up-to-date but it should not be relied upon as a substitute for specialist professional advice tailored to your situation. So far as is permitted by law, Macmillan does not accept liability in relation to the use of any information contained in this publication or third party information or websites included or referred to in it.

Macmillan Cancer Support, registered charity in England and Wales (261017), Scotland (SC039907) and the Isle of Man (604). A company limited by guarantee, registered in England and Wales company number 2400969. Isle of Man company number 4694F. Registered office: 89 Albert Embankment, London SE1 7UQ.

Home > Cancer information > Cancer treatment > Treatment types > Surgery > General information > How the surgery is carried out

## How the surgery is carried out

There are different types of surgery that can be used to treat cancer.

During the surgery the surgeon will aim to remove the tumour and a margin of healthy tissue from around the tumour.

Your surgeon will also often remove some of the lymph nodes (lymph glands) that are close to your tumour as this is a common place for cancer cells to spread to. The number of lymph nodes removed varies with the type of cancer.

A doctor who specialises in diagnosing disease by examining tissues under a microscope (a pathologist) will test the lymph nodes for cancer cells. If the nodes contain cancer cells, there may be an increased risk of the cancer coming back in the future. So you may need to have treatment such as radiotherapy, chemotherapy or hormonal therapy after your operation.

### Keyhole surgery

In some situations it may be possible to have keyhole surgery (sometimes called laparoscopic surgery) to remove some or all of a tumour from a part of the body.

In this type of surgery, small openings are made instead of one large cut (incision). The surgeon uses a laparoscope to work inside the body and remove the tumour through a small cut in the skin.

The main advantage of keyhole surgery is that it leaves a much smaller wound in the chest or tummy wall, and this means that recovery time is shorter. Sometimes people who are not fit enough to have an open operation may be able to have keyhole surgery.

Keyhole surgery can produce equally good results as conventional surgery. However, it needs to be carried out by surgeons with specialist training and experience in using laparoscopic techniques. So, if it's suitable for you - and you choose to have this type of surgery - you may need to travel to another hospital to have it.

Content last reviewed: 1 January 2013

Next planned review: 2015



We make every effort to ensure that the information we provide is accurate and up-to-date but it should not be relied upon as a substitute for specialist professional advice tailored to your situation. So far as is permitted by law, Macmillan does not accept liability in relation to the use of any information contained in this publication or third party information or websites included or referred to in it.

Macmillan Cancer Support, registered charity in England and Wales (261017), Scotland (SC039907) and the

Isle of Man (604). A company limited by guarantee, registered in England and Wales company number 2400969. Isle of Man company number 4694F. Registered office: 89 Albert Embankment, London SE1 7UQ.

## Before your operation

Your operation will be carefully planned. There may be more specific information in the section about your cancer type.

On this page

- Pre-assessment clinic
- Preparation for an operation

### Pre-assessment clinic

Your surgeon and anaesthetist are responsible for your well-being during and after your surgery. They must be sure that you are fit enough to undergo the operation. This means you may have to attend a hospital appointment before your operation to have some tests. This is known as a **pre-assessment clinic**.

At a pre-assessment clinic you will usually be seen by a nurse and occasionally by an anaesthetist. The nurse will ask you about your medical history and if you have any allergies. They will also check your blood pressure, pulse, height and weight. It's important that you bring any medicines you are currently taking including herbal medicines or supplements.

You may have some tests done, which usually include the following:

- blood tests
- a chest x-ray to check how well your lungs are working
- an ECG (electrocardiogram), to check the rhythm and rate of the heart. It's painless and usually only takes 5-10 minutes.

Some people may have other tests as well. Don't worry if you have more tests than someone else. This might be because of the type of operation you're having or because you have other health conditions.

If you aren't able to have a general anaesthetic, it may still be possible for you to have surgery. Some operations can be done under local anaesthetic or regional anaesthetic (such as an epidural or spinal anaesthetic). With these techniques you'll be awake during the operation but won't feel any pain.

It's important that you understand everything about the operation you are having. You should be given an opportunity to discuss the operation with your surgeon. This might happen at the pre-assessment clinic. You will need to sign a consent form to say that you agree to the operation. No operation will be done without your consent.

### Preparation for an operation

Before any operation you'll be asked not to eat or drink anything for a few hours. This is known as being 'nil-by-mouth'.

You may also need to bathe and shave body hair from the area of the operation. The nurse looking after you will give you more details about this. Body hair is only shaved if it's essential. It's done using a disposable razor and the hair will begin to grow back after the operation.

Having an operation can put you at risk of developing a blood clot in the leg. Compression stockings (also known as **anti-embolic stockings**) help to reduce this risk. You might be asked to wear a pair of

compression stockings during your operation and for a short period afterwards. A nurse will assess your individual risk and take your measurements. You will then be shown how to put the stockings on properly.

Content last reviewed: 1 January 2013

Next planned review: 2015



We make every effort to ensure that the information we provide is accurate and up-to-date but it should not be relied upon as a substitute for specialist professional advice tailored to your situation. So far as is permitted by law, Macmillan does not accept liability in relation to the use of any information contained in this publication or third party information or websites included or referred to in it.

Macmillan Cancer Support, registered charity in England and Wales (261017), Scotland (SC039907) and the Isle of Man (604). A company limited by guarantee, registered in England and Wales company number 2400969. Isle of Man company number 4694F. Registered office: 89 Albert Embankment, London SE1 7UQ.

Home > Cancer information > Cancer treatment > Treatment types > Surgery > Having surgery > After your surgery

## After your surgery

Waking up after your operation can sometimes feel frightening, so it can help to know a little about what to expect. It may also prepare your family and friends if they decide to visit you after the operation.

On this page

- When you wake up
- Recovering

### When you wake up

Initially you will probably feel quite drowsy. Later on you may not remember much about the first hour or two after you woke up. A nurse will take your blood pressure regularly and you might be aware of the blood pressure cuff tightening on your arm every so often.

You may also have some tubes attached to your body. Below is a list of the most common types of tubes to have following an operation, but not everyone will need all of these:

- A drip (intravenous infusion) will be used to give you fluids until you are able to eat and drink normally. This may only be for a few hours or a few days, depending on the operation you've had.
- You may have a drainage tube in your wound to drain excess fluid into a small bottle. This is usually removed after a few days.
- A small tube (catheter) may be put into your bladder so that urine is drained into a collection bag. The catheter will be removed when you become more mobile.

### Recovering

#### Pain

You may have some pain after surgery, but you will be given painkillers to reduce this. Good pain control will help you to get up and about as soon as possible.

#### Feeling sick (nausea) and being sick (vomiting)

You may feel sick and should be given anti-sickness (anti-emetic) drugs to help control this. If you still have pain or feel sick, tell the nurse looking after you.

#### Moving around

You should be able to get up and about fairly soon after your operation and the ward staff will help you with this. Moving around will help you recover more quickly and help reduce the risk of complications. Breathing and leg exercises can also help reduce the risk of problems that can happen after surgery, such as chest infections and blood clots. Your nurse or physiotherapist will teach you these exercises. You may also be given medication to help prevent blood clots forming in the first few days after your surgery. This is known as an anti-coagulant. It is given as an injection into the tissues just under the skin; usually in your tummy.

#### Wound care

The wound is closed using clips or stitches. These are usually removed after you go home by a practice nurse at your GP surgery. Some surgeons use dissolving stitches that don't need to be removed. These will dissolve completely when the area is healed. You may be given antibiotics to help prevent wound infection.

## Scars

Your scar may feel itchy at first. It will look like a red line, which may feel a bit lumpy. This will gradually fade over time. It's important to let your doctor know straight away if your wound becomes hot, painful or begins to bleed or leak any fluids.

In the first few days after your operation, you may need some help to wash and go to the toilet. Once you are moving about freely, you'll probably be able to manage these activities for yourself.

Your recovery period will vary depending on the extent of your surgery. You'll find more specific information about recovery by reading more about your type of cancer.

Content last reviewed: 1 January 2013

Next planned review: 2015



We make every effort to ensure that the information we provide is accurate and up-to-date but it should not be relied upon as a substitute for specialist professional advice tailored to your situation. So far as is permitted by law, Macmillan does not accept liability in relation to the use of any information contained in this publication or third party information or websites included or referred to in it.

Macmillan Cancer Support, registered charity in England and Wales (261017), Scotland (SC039907) and the Isle of Man (604). A company limited by guarantee, registered in England and Wales company number 2400969. Isle of Man company number 4694F. Registered office: 89 Albert Embankment, London SE1 7UQ.

Home > Cancer information > Cancer treatment > Treatment types > Surgery > Having surgery > Possible long-term complications after surgery

## Possible long-term complications after surgery

Many people do not have long-term complications after cancer surgery. However, some people do and your surgeon should fully discuss with you the possible long-term complications of your type of surgery (and how likely they are to occur) before your operation.

On this page

- Nerve pain
- Nerve damage
- Impotence
- Lymphoedema
- Physical and emotional changes

The type of long-term problem and how likely it is to happen will largely depend on the type of operation you have and will vary from person to person.

You should be given the opportunity to ask your surgeon questions before your surgery so that you understand the potential risks of a permanent complication. It's natural to be anxious about surgical operations. However, surgery can be one of the most successful treatments for cancer.

Operations are usually carried out by surgeons with a great deal of experience in treating the particular type of cancer. You may also have a specialist nurse looking after you. Before the operation, the nurse or surgeon will explain to you what scarring and other effects are likely. They'll also explain what procedures will be followed to make sure that you get the best possible care.

Some examples of long-term complications include the following.

### Nerve pain

Occasionally, people may have nerve pain, which is more common after certain operations such as the opening of the rib cage (thoracotomy).

### Nerve damage

Some operations can occasionally cause permanent side effects due to nerve damage. For example, removal of the prostate gland (radical prostatectomy) can result in impotence (inability to get an erection) and loss of bladder control in some people. This is because the nerves controlling these functions may have to be removed to clear the cancer.

### Impotence

This may also sometimes occur after operations for cancers in the lower part of the bowel (rectum).

### Lymphoedema

Occasionally, if most or all of the lymph nodes in an area of the body have to be removed, you may get swelling called lymphoedema. This is more common in the limbs near to where the lymph nodes have been

removed, or if you've had radiotherapy to that area too.

The lymph nodes drain fluids in the lymphatic system, so removing lymph nodes can cause fluid to build-up. It's more likely to affect an arm or leg, although it can happen to other parts of the body. The earlier lymphoedema is picked up, the easier it is to control. Contact your doctor if you notice swelling in your hands (after surgery to the armpit) or feet (after surgery to the groin).

## Physical and emotional changes

Some operations change the way your body looks. This may affect the way you feel about yourself physically and emotionally. There is a lot of support available, so please talk to your nurse or doctor if you have any concerns. They should be able to help you or arrange for you to see a counsellor. You can also talk to our cancer support specialists.

Content last reviewed: 1 January 2013

Next planned review: 2015



We make every effort to ensure that the information we provide is accurate and up-to-date but it should not be relied upon as a substitute for specialist professional advice tailored to your situation. So far as is permitted by law, Macmillan does not accept liability in relation to the use of any information contained in this publication or third party information or websites included or referred to in it.

Macmillan Cancer Support, registered charity in England and Wales (261017), Scotland (SC039907) and the Isle of Man (604). A company limited by guarantee, registered in England and Wales company number 2400969. Isle of Man company number 4694F. Registered office: 89 Albert Embankment, London SE1 7UQ.

Home > Cancer information > Cancer treatment > Treatment types > Surgery > General information > References for the surgery section

## References for the surgery section

This information in the surgery section has been compiled using information from a number of reliable sources, including:

- Tobias, Hochauer. Cancer and its management. 6th edition. 2010. Wiley-Blackwell.
- Dougherty L, Lister S. The Royal Marsden Hospital Manual of Clinical Nursing Procedures. 7th edition. 2008. Wiley-Blackwell.

### Thanks

Thanks to Mr M Hallissey, Consultant Surgeon, and the people affected by cancer who reviewed this edition. Reviewing information is just one of the ways you could help when you join our Cancer Voices network.

Content last reviewed: 1 January 2013

Next planned review: 2015



We make every effort to ensure that the information we provide is accurate and up-to-date but it should not be relied upon as a substitute for specialist professional advice tailored to your situation. So far as is permitted by law, Macmillan does not accept liability in relation to the use of any information contained in this publication or third party information or websites included or referred to in it.

Macmillan Cancer Support, registered charity in England and Wales (261017), Scotland (SC039907) and the Isle of Man (604). A company limited by guarantee, registered in England and Wales company number 2400969. Isle of Man company number 4694F. Registered office: 89 Albert Embankment, London SE1 7UQ.