

## Surgery

This fact sheet is about surgery for cancer.

This is when someone has an operation to remove part of the body where the cancer is growing. It is also used to help diagnose cancer.

Cancer surgery may not be the only treatment you need. Sometimes you will also need chemotherapy or radiotherapy. The doctors at the hospital will decide about this. We also have fact sheets in your language about these treatments.

We hope this fact sheet answers your questions. If you have any more questions, you can ask the doctor or nurse at your hospital.

We've listed other information from Macmillan below, and most of this is only in English. If you would like to talk about this information with our cancer support specialists, we have interpreters for non-English speakers.

You can call the Macmillan Support Line free on **0808 808 00 00**, Monday–Friday, 9am–8pm. If you have problems hearing you can use textphone 0808 808 0121, or Text Relay. Or you can visit [macmillan.org.uk](http://macmillan.org.uk)

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### What is cancer?

The organs and tissues of the body are made up of tiny building blocks called cells. Cancer is a disease of these cells.

Cells in each part of the body may look and work differently but most repair and divide themselves in the same way. Normally, cells divide in a controlled way. But if for some reason the process gets out of control, the cells carry on dividing. They can then grow into a lump called a tumour.

In a **benign tumour**, the cells do not spread to other parts of the body and so are not called cancer. However, the tumour may carry on growing where it is. This can cause a problem by pressing on other parts of the body.

In a **malignant tumour**, the cells are able to spread to other parts of the body. The cancer will begin to grow in one part of the body. This is called primary cancer. If the cancer is not treated it may spread. If it spreads and grows in another part of the body, it is called secondary or metastatic cancer.

## Why do you need surgery?

You may have cancer surgery for many reasons:

### Diagnosis

The surgeon may remove a small piece of the body where the cancer is growing. This is called a biopsy. It will help them find out what type of cancer it is.

### Treatment

Surgery is used to try to remove the tumour and the area around it, which might contain cancer cells. Sometimes, surgery is used to remove cancer cells that have spread into another part of the body, such as the lung or liver (secondary cancer).

You may need chemotherapy before surgery to make the tumour smaller. This may mean that less surgery is needed.

### Staging

Staging is when doctors work out how big a cancer is. They can also find out if it is only in the place where it started to grow or if it has spread to other parts of the body. You will usually have an x-ray or a scan to find out the stage of the cancer.

If your surgeon cannot easily see the tumour on a scan, you may need a small operation. An example of this is a laparoscopy. During this, the surgeon will make a small cut in your tummy. They will use an instrument called a laparoscope to look around and see the size of the tumour and if it has spread. Some people may have this type of operation on other parts of the body.

Surgeons use details about the stage of the cancer to plan your treatment. Sometimes they can get this information at the same time as removing a tumour.

### Reconstruction

Surgery can be used to remove part of the body. Reconstruction means to have a new body part made. This may help to make some part of the body work better. An example is to make a new bladder if it has been removed. Surgery can also make someone look better. For example, you may have breast reconstruction after a mastectomy (an operation to remove a breast).

### **Controlling symptoms**

Sometimes a cancer cannot be completely removed or cured. In this case, surgery can often still help to control symptoms or make someone feel better. For example, a tumour may be removed or bypassed to reduce blockage, discomfort or other problems.

If the cancer has spread, surgery may not always be offered. This is because surgery alone will not always cure someone with secondary cancer. Other treatments that may be used are chemotherapy and radiotherapy, targeted treatments or hormonal therapy.

### **Your surgeon**

The doctor who operates on you is called a cancer surgeon. If you need surgery, you will be referred to a surgeon. It is important to see the right sort of surgeon for your type of cancer. For example, someone with breast cancer will see a breast surgeon and someone with mouth cancer will see a head and neck surgeon. These types of surgeons are usually at a local hospital. You can always ask the surgeon about their experience.

If someone has a less common cancer, they may need to see a surgeon at a specialist cancer hospital. This may be further away from where you live.

### **Can the surgeon cure your cancer?**

The surgeon will remove the tumour and some of the area around it. Usually, if a cancer is just in one area it can all be removed. Your surgeon won't always know if an operation will cure a cancer. Although scans may look clear, cells could have broken away from the main tumour before surgery and spread to another part of the body. Very small groups of cells don't always show up on scans. Sometimes a surgeon will find that they cannot remove the whole cancer.

### **What happens during surgery?**

Your surgeon will want to know that they have removed all of the tumour and the area around it with all the cancer cells. This is known as getting clear margins. They will examine the area removed during the operation under a microscope to make sure this has been done. It is important because a clear margin means it is less likely that any cancer cells are left behind. This helps to reduce the risk of the cancer coming back.

### **Lymph nodes**

The surgeon may also remove the lymph nodes that are close to a tumour. This is because cancer cells may spread to lymph nodes. A pathologist is a doctor who specialises in diagnosing disease by examining tissues under a microscope. They will test the lymph nodes for cancer cells. If the nodes contain cancer cells, this may mean the cancer could come back in the future. If this happens, you will be referred

to a doctor called an oncologist. They will decide if you need other types of treatment.

### **Keyhole surgery**

You may have **keyhole** or **laparoscopic surgery**. This is 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. The surgeon uses an instrument called a **laparoscope** to remove the tumour through a small cut in the skin.

Keyhole surgery leaves a much smaller wound, and so people recover more quickly. Sometimes people who are not well enough for a big operation may be able to have keyhole surgery.

Keyhole surgery is as good as other types of surgery. It needs to be done by surgeons with specialist training who have experience using a laparoscope. You may need to go to another hospital further away.

### **Before your operation**

The surgeon and anaesthetist will look after you during and after surgery. The surgeon will operate on you and the anaesthetist will put you to sleep. They must be sure you are fit enough to have the operation. You may have a hospital appointment before the operation to have some tests. This is called a **pre-assessment clinic**.

At the pre-assessment clinic a nurse will ask about your medical history and if you have any allergies. They will also check your blood pressure, pulse, height and weight. It is important to tell them about any medicines you are taking. This includes herbal remedies or supplements.

Other tests may include:

- blood tests
- a chest x-ray
- an electrocardiogram (ECG) to check the rhythm and rate of your heart. This doesn't hurt and usually takes 5–10 minutes.

Some people may have more tests than others. This might be because of the type of operation they are having or because they have other health conditions.

If you cannot have a general anaesthetic, you may still be able to have surgery. You may be given a different type of anaesthetic that takes away any feeling or pain to the area, but you will stay awake.

It is important that you understand everything about your operation. You should be able to talk to your surgeon before your operation. This might happen at the pre-assessment clinic. When you speak to the surgeon, it's a good idea to take someone with you who speaks both your language and English. Interpreters may be available if you need one, but try to let the hospital know if you would like one before your appointment.

You will need to sign a form to say that you agree to the operation. This is called giving consent. Consent forms should be available in your language. You cannot have an operation without a signed form.

### **On the day of your operation**

You will be asked to remove any jewellery or metal objects before your surgery. Sometimes you may be able to wear your jewellery during the operation. You will need to ask a nurse about this. You will also be asked to remove any nail varnish or make-up.

Before any operation you cannot 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 tell you what you need to do. Body hair is only shaved if it is needed. It's done using a disposable razor. The hair will grow back after the operation.

Having an operation can put you at risk of developing a blood clot in your leg. This is sometimes known as a DVT. Compression or **anti-embolic** stockings help to reduce this risk. You might need to wear a pair of compression stockings during and after your operation. Your nurse will measure your legs and help you put them on.

### **After your operation**

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

When you first wake you will feel sleepy. Later, you may not remember much about the first hour or two after you woke up. A nurse will take your blood pressure and you might be aware of the blood pressure cuff feeling tight on your arm.

You may also have some tubes connected to your body. These could include a:

- drip or intravenous infusion to give you fluids until you can eat and drink normally – this may be for a few hours or a few days.
- tube in your wound to help drain away fluid into a small bottle – this is usually removed after a few days
- small tube called a catheter, which may be put into your bladder to drain urine into a collection bag – this will be removed when you are more able to move around.

**Pain** It is normal to have some pain after surgery. You will be given painkillers to help this. If you have any pain, tell the nurse looking after you. Good pain control will help you become mobile as soon as possible.

**Feeling sick (nausea) and being sick (vomiting)** You may feel sick and should be given anti-sickness drugs to help stop this. If you still have pain or feel sick, tell the nurse looking after you.

**Moving around** You should be able to get out of bed soon after your operation. The ward staff will help you. Moving around will help you recover more quickly and help reduce the risk of developing problems. Sometimes after a big operation you may have to stay in bed for a longer time. Breathing and leg exercises can help reduce the risk of problems after surgery, such as chest infections and blood clots. Your nurse or physiotherapist will teach you these exercises.

**Wound care** The wound is closed using clips or stitches. These will be removed in hospital, or when you go home. A district nurse may come to your home, or a practice nurse at your GP surgery will remove them. You may also have a dressing to cover your wound. Some surgeons use dissolving stitches that don't need to be removed. These will disappear when the area heals. You may be given antibiotics to help prevent the wound getting infected.

**Scars** Your scar may feel itchy at first. It will look like a red line, which may feel a bit lumpy. This will become less red, until it looks like a thin white line. It is important to tell your doctor 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. Speak to your nurse if you would prefer to be helped by a nurse of the same sex. Once you can move about, you may be able to manage these on your own.

Everyone recovers from an operation in a different way. Some people feel better quickly, while others take much longer. This will depend on the type of operation you have had.

## Long-term problems

Some people have long-term problems after cancer surgery, although not everyone will get these. The hospital staff should talk to you about them before your operation so you know what to expect.

Some examples of long-term effects include the following:

**Nerve pain** This is more common after some types of operation, such as opening the rib cage. Painkillers will help.

**Nerve damage** If your nerves are removed or damaged during an operation, this can cause lasting side effects. You may notice that you feel different around the operation site and that the way part of your body works has changed. An example of this is when the prostate gland is removed. Your bladder control may be less good, or you may have to pass urine more often.

**Impotence or an inability to get an erection** This may sometimes happen after operations for cancers in the lower part of the bowel or the prostate gland.

**Lymphoedema** If your lymph glands have been removed you may get swelling called lymphoedema. This is more common in arms or legs near to where the lymph nodes have been removed, or if you have had radiotherapy to that area.

The lymph nodes drain fluid away. Removing them can cause fluid to build up and cause a swelling. Contact your doctor if you notice swelling in your hands, arms or legs. It is important to treat it quickly.

## Physical and emotional changes

Some operations change the way your body looks. This may affect the way you feel about yourself and you may feel upset about this. There is a lot of support available, so please talk to your nurse or doctor if you feel this way. They should be able to help you or arrange for you to see a counsellor. You can also call our cancer support specialists free on **0808 808 00 00**.

This fact sheet has been written, revised and edited by Macmillan Cancer Support's Cancer Information Development team. It has been approved by our medical editor, Dr Tim Iveson, Consultant Clinical Oncologist.

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This fact sheet has been compiled using information from a number of reliable sources, including:

- Dougherty L, Lister S. The Royal Marsden Hospital Manual of Clinical Nursing Procedures. 7th edition. 2008. Wiley-Blackwell.
- Poston G, et al. Textbook of Surgical Oncology. 2007. Informa Healthcare.
- Tobias, Hochauser. Cancer and its management. 6th edition. 2010. Wiley-Blackwell.

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