Surgery for kidney cancer

This information is an extract from the booklet *Understanding kidney cancer*. You may find the full booklet helpful. We can send you a free copy – see page 5.

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Surgery may be the only treatment that is needed. The most appropriate operation for your situation will depend on the size of the cancer, whether or not it has spread, as well as your general health. It’s important to discuss any operation fully with your surgeon and specialist nurse before you have it.

Removing part of the kidney (partial nephrectomy)

The surgeon removes only the part of the kidney containing the tumour. This is called a partial nephrectomy or kidney-sparing surgery. It’s usually only possible if the tumour is smaller than 4cm but may occasionally be done with larger tumours.

The aim is to remove the whole tumour while keeping as much normal kidney tissue as possible so the remaining kidney is still able to work.

A partial nephrectomy may also be carried out if it’s important to try to keep the affected kidney. This could be when you have only one working kidney or have kidney disease. People with an inherited type of kidney cancer, which increases the risk of cancer in the other kidney, may also be offered this operation.
Removing the whole kidney (nephrectomy)

This is when the surgeon removes the whole kidney and some surrounding tissue. This operation usually involves making a cut (incision) between the lower ribs on the side of the tumour. Your surgeon may also remove some of the lymph nodes close to the kidney to check if they contain any cancer cells.

You can live a completely normal life with just one kidney; it will do the work usually shared by both kidneys. Removing a kidney is a big operation, and you’ll need to be reasonably fit. This means that this type of surgery isn’t suitable for everyone.

A nephrectomy can be done using keyhole surgery (see below), which means a faster recovery.

Keyhole (laparoscopic) surgery

Keyhole or laparoscopic surgery can be used to remove a kidney (nephrectomy). It can also be used to do a partial nephrectomy.

In this type of surgery only small openings are made instead of one large cut (incision). The surgeon uses a special instrument called a laparoscope to see and work inside the tummy (abdomen).

The laparoscope is a thin tube with an eyepiece at one end, a light and a magnifying lens at the other. It’s put into the abdomen through a small cut in the skin. Generally two to three small cuts and one larger cut are needed for the operation. The larger cut is usually made close to the belly button and is used to remove the kidney.

Sometimes the surgeon may use a highly specialised machine to help with keyhole surgery. Instruments attached to the machine are controlled by the surgeon. This allows them to carry out very precise surgery and is sometimes called robotic surgery.

The main advantage of keyhole surgery is that it leaves a small wound so recovery is usually quick. It may be used for people who aren’t fit enough to have an open operation. It appears to be as effective as removing the kidney using open surgery.
Keyhole surgery should 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 the operation.

**Nephrectomy when the cancer has spread**

If the cancer has already spread to other places in the body (metastatic or secondary cancer), it may still be worth having the affected kidney removed. If the tumour in the kidney is causing symptoms such as pain or bleeding, or is affecting the balance of chemicals in your blood, taking it out may relieve this.

You may be given treatment with a targeted therapy or biological therapy drug to try to shrink the cancer. After this, it may be possible to have an operation to remove the kidney.

Although this operation won’t usually cure the cancer, it may help other treatments to work better and help to prolong your life.

However, these possible advantages need to be weighed up against the effects of having a major operation. Deciding whether to go ahead with an operation in these circumstances can be very difficult. It’s important that you discuss the benefits and disadvantages with your doctors when making up your mind.

**Surgery to remove a secondary cancer**

Rarely, surgery may be used to remove a small secondary cancer in another part of the body, for example the lungs. This is very specialised surgery. It’s generally only possible if the cancer has spread to a limited area – usually just to one place in the body.

It’s also important that you’re fit enough to cope with the operation. Removing a secondary cancer may help to control the cancer for longer. Occasionally, it may be used to try to cure the cancer.
After your operation

You’ll be encouraged to start moving about as soon as possible. This is an important part of your recovery and helps to reduce the risk of complications. If you have to stay in bed, the nurses or physiotherapist will encourage you to do regular leg movements and deep-breathing exercises.

Drips and drains

When you get back to the ward, you’ll have a drip of fluid going into your vein until you’re able to eat and drink normally.

You’ll probably have drainage tubes from the wound to stop any excess fluid collecting; this helps the wound to heal. The tubes will only be needed for a short time and will be taken out before you go home.

Usually you will have a small tube (catheter) draining urine from your bladder into a collecting bag. This will save you having to get up to pass urine. The catheter is usually removed after a couple of days.

Pain

You’ll have some pain and discomfort after your operation, but this can be controlled well with painkilling drugs.

At first, you’ll probably need a strong painkiller such as morphine. This can be given to you by the nurses as injections or through a pump attached to a needle in your arm, which you control yourself. This is called Patient Controlled Analgesia (PCA), and you’ll be shown how to use this.

Some people may have a different method of pain relief called an epidural. A fine tube is inserted into your back to the area just outside the membranes around your spinal cord, called the epidural space. A local anaesthetic can be continuously given into this space to numb the nerves in the operation area.

Your wound

You’ll have a dressing covering your wound or wounds. This may be left undisturbed for the first few days. After this, you’ll usually have the dressings changed if there’s some leakage from the wound. How long the wound takes to heal will depend on the type of operation you had.
Going home

How long you need to stay in hospital depends on the type of operation you had, how fit you are and how quickly you recover. It can range from 4–10 days.

Many people like to know how soon they’ll be able to get back to doing normal things, like shopping, gardening, driving, playing sport or going to work. Your surgeon or nurse will be able to advise you.

Before you leave hospital, you’ll be given an appointment to attend an outpatient clinic for a check-up about six weeks after your surgery. This is a good time to discuss any problems you may have after your operation.

More information and support

Cancer is the toughest fight most of us will ever face. But you don’t have to go through it alone. The Macmillan team is with you every step of the way, from the nurses and therapists helping you through treatment to the campaigners improving cancer care. We are Macmillan Cancer Support.

To order a copy of Understanding kidney cancer, visit be.macmillan.org.uk or call 0808 808 00 00.

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