

Having an open radical nephrectomy

Your doctor has recommended that you have a nephrectomy – an operation to remove your kidney. This leaflet aims to answer your questions and explains the benefits, risks and alternatives of the operation. It also tells you what you can expect when you come to hospital and when you go home to recover. If you have any further questions, please speak to a doctor or nurse caring for you.

What is a radical open nephrectomy?

Radical nephrectomy means that this is a treatment for suspected cancer where we remove the whole of your kidney including the surrounding fatty tissue and where necessary, lymph nodes, adrenal gland and upper end of your ureter (tube carrying urine from the kidney to the bladder). These are all taken out to increase the likelihood of removing all the cancer cells.

'Open' means that the kidney is usually removed via an incision (cut) which is made on either the front or the side of your abdomen (tummy). The type of incision made will depend on the nature of your tumour. Your surgeon will discuss this with you before your operation.

The operation is performed under a general anaesthetic. This means that you will be asleep for the whole of the operation. The anaesthetic is given through a small injection in the back of your hand. Occasionally an epidural (a local anaesthetic given into a very small tube in your back) is used in addition to the general anaesthetic. Our leaflet, **Having an anaesthetic**, offers more information – please tell us if you do not have a copy.

Can I live with just one kidney?

Yes. Your remaining kidney will take over the function of your removed kidney to filter your blood and to produce urine. Most people live a normal life without any need for special dietary changes.

What is the difference between keyhole and open surgery?

The main difference between the two procedures is how your surgeon gains access to your kidney. Open surgery involves making a large incision in your body (about 10cm to 20cm long). Keyhole surgery means that the surgeon makes several small cuts in your body to allow the surgical instruments to be introduced, before a larger incision 7cm – 10cms is made through which the kidney is retrieved. This type of surgery is also known as laparoscopic surgery.

Why should I have a radical open nephrectomy?

Open nephrectomy is used when keyhole surgery is not felt to be appropriate, possible or safe. Open surgery is often used for more complex tumours. Radical nephrectomy is the most common type of surgery for the treatment of kidney cancer that has not spread beyond the kidney. However, it is also sometimes carried out even if the cancer has spread to other organs. In this situation the operation is called a cytoreductive radical nephrectomy.

Are there any alternatives?

- Keyhole (laparoscopic or robotic) surgery.
- Partial nephrectomy, also called nephron sparing surgery – where only the part of the kidney containing the tumour is removed.
- Observation alone – this means we don't give you any treatment, but wait to see how your condition progresses.

Your surgeon will discuss with you the best method of treating your tumour.

What are the possible risks?

An open radical nephrectomy is a major operation. Your consultant will discuss the risks below with you in more detail, but please ask questions if you are uncertain. Below is a list of possible side effects from this type of surgery:

Common (experienced by more than one in 10 patients)

- Pain from the incision. This is very common immediately after the operation. It gradually settles over a few weeks.
- Bulging of the wound due to damage to the nerves serving the abdominal wall muscles. This is more common if the incision is in your side.
- The need for drug treatments in addition to surgery to control your cancer.

Occasional (experienced by between one in 10 and one in 50 patients)

- Bleeding requiring further surgery or blood transfusions.
- Infection of the incision site requiring further treatment, usually antibiotics.
- Damage to the lung cavity requiring insertion of a temporary drainage tube.

Rare (experienced by less than one in 50 patients)

- Anaesthetic, surgical or cardiovascular problems during your recovery which might require a more prolonged stay on intensive care (including chest infection, pulmonary embolus (blood clot in the lung), stroke, deep vein thrombosis (DVT) (blood clot in the leg) and heart attack).
- Removal of other organs in addition to your kidney (spleen, parts of the pancreas, bowel or liver) as part of a more extensive operation.
- The abnormality of the kidney may subsequently be shown not to be cancer.
- If your remaining kidney function is poor you may need to have dialysis.

Very rare

- Death – under one in 1,000 patients having this operation die from complications.

It is important to note that you may need further treatment for your cancer, such as biological treatments, targeted treatments or radiotherapy. If we find that the cancer has spread outside of your kidney, you will see an oncologist (a doctor specialising in cancer) in the kidney cancer clinic at Guy's who will discuss further treatment options with you.

How can I prepare for my surgery?

You will attend a pre-assessment clinic before your surgery. It is very important that you come to this appointment, as this is when we will assess your suitability and fitness for surgery and anaesthetic. We will carry out a number of tests to make sure that your heart, lungs and kidneys are working properly. You may have a chest x-ray, or electrocardiogram (ECG, which records the electrical activity of your heart) and some blood tests. Your doctor will explain any other tests you need. If you do not attend, we may have to cancel your surgery.

If you smoke, you may be asked to stop smoking. Smoking increases the risk of developing a chest infection or DVT. Smoking can also delay wound healing because it reduces the amount of oxygen that reaches the tissues in your body. If you would like to give up smoking, please speak to your nurse or call the NHS Smoking Helpline on 0800 169 0 169.

Please let us know if you are taking any regular medicines (including anything you buy over the counter or any herbal or homeopathic medicines) and if you have any allergies to any medicines.

If you are taking any medicines, these may need to be temporarily stopped or adjusted around the time of your surgery or treatment, you will be given information on how to do this at your pre-assessment appointment. Do not make any changes to your usual medicines and continue to take them unless you have been advised to do so. Please remember to bring them into hospital with you.

If you are taking any medicines that thin your blood, such as antiplatelet medicines (for example aspirin or clopidogrel) or anticoagulant medicines (for examples warfarin or rivaroxaban), please tell your doctor or nurse as you may need to stop them temporarily before your surgery. Also tell your doctor or nurse if you have diabetes as you may need to alter the dose of your diabetes medicines, as you will need to fast before the procedure. Further information on stopping any medicines will be given to you when you come for pre-assessment. Please ask us if you have any questions.

Eat a healthy normal diet in the weeks running up to your operation. It is also a good idea to take some exercise, as this can prepare your heart and lungs for the challenges of the operation. Brisk walking for 20 – 30 minutes every day is best.

We will send you information about fasting. Fasting means that you cannot eat or drink anything (except water) for six hours before surgery. We will give you clear instructions about when to start fasting. It is important to follow the instructions. If there is food or liquid in your stomach during the anaesthetic, it could come up to the back of your throat and damage your lungs.

Coming into hospital

Before coming into hospital you should receive a leaflet about preparing you for your hospital stay. If you have not, please ask for one.

You will be admitted to hospital the day before, or on the day of, your surgery. The admissions coordinator will ring you on the same day to tell you which ward to come to.

When you arrive in hospital, you will be seen by a nurse who will take some of your details and prepare you for your surgery. Your surgeon will see you to obtain your consent (see below). Your surgeon will also mark the site of surgery (to ensure the correct kidney is removed).

The anaesthetist will see you the evening before, or morning of, your surgery, to discuss the anaesthetic. Your specialist nurse will also be available to make sure that you have no further questions or concerns.

To make sure you don't become dehydrated while you are not allowed to drink, you may have a drip given to you overnight. This is a bag of fluid connected to a small tube in one of your arms.

Giving my consent (permission)

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

If you would like more information about our consent process, please speak to a member of staff caring for you.

On the day of your surgery

You will be asked to have a shower on the morning of your surgery and to put on a clean gown and anti-thrombus stockings. These help to prevent you developing DVT during or after your surgery. You may take them off to shower during your hospital stay, but you must keep them on at all other times to help reduce the risk of clots. You will be able to remove them when you leave hospital.

You will be given a daily blood thinning (anticoagulant) injection. This also reduces the risk of you developing a DVT. These need to be continued for 28 days in total. You, a family member or friend will be taught how to give the injections before you leave the ward. You will need to be ready for surgery at least one hour before the operation.

You will be taken on your bed to the anaesthetic room, where you will be seen by the anaesthetic team. They may put another drip into your arm or neck. Once anaesthetised, you will be taken through to the operating theatre.

The operation generally takes between two and three hours.

What can I expect after my surgery?

After the surgery is finished, you will be taken to the recovery room and remain there until you come round from the anaesthetic. This may take an hour or two.

You may be taken to the high dependency or intensive care unit while you recover for the first 24 hours. This will depend on the nature of your surgery and your general health prior to your operation.

You will then be taken back to your ward. On the day of the procedure, friends and family members can wait in the ward day room and visit you afterwards.

Your consultant will see you after you have returned to the ward and your nurse has settled you in.

You will wake up with the following

- **A catheter.** This is a hollow tube inserted into your bladder. This will collect your urine so you will not need to leave your bed to pass urine. This also allows nurses to carefully monitor your urine output. This will stay in place for one or two days.
- **Dressings.** A dressing will be placed over the wound site. This will be checked by your nurse for signs of bleeding, and changed as needed. The wound is normally closed with either sutures (stitches) or special surgical clips.
- **Drains.** You will have a small tube placed around the wound site to drain any remaining fluid that can collect after your operation. A small bag will be attached to it which the nurses will empty. This will be removed one to two days after your operation or when there is minimal fluid collecting in the bag.

- **A drip.** This delivers fluids into your body to prevent you getting dehydrated. It is usually removed one to two days after your surgery when you are able to drink freely.
- **Nasogastric tube.** This is a fine plastic tube inserted through your nose to your stomach, to stop you from feeling sick. Not everyone requires a nasogastric tube.
- **An oxygen mask or nasal prongs.** These give you extra oxygen in the first day or two after your operation if required.

Will I feel any pain?

To reduce the pain after your operation, the anaesthetist will discuss three options with you before your surgery. You will have either

- a device that you control, that releases painkillers into your blood stream via a drip (patient controlled analgesia (PCA)).
- an epidural, which allows painkillers and local anaesthetic to be given directly into your spinal nerve system. This involves inserting a very fine plastic tube into your back.
- a tube running alongside the edge of the wound called a wound infiltration catheter through which local anaesthetic can be administered. This is usually left in for two-three days.

After two to three days, you should not usually need this level of pain relief and the ward staff will give you tablets or injections instead. Please tell the staff looking after you if you are still in pain or discomfort.

It is important with all forms of pain relief to inform your nurse if they are not controlling your pain, as other painkillers can be given.

You will be able to drink clear fluids immediately after your operation. Your bowel often becomes quite sluggish after a big operation. You should be able to start eating a very light diet the following day as your bowel starts to function normally.

You will be encouraged to start moving around as early as possible and take fluids and food as soon as you are able to. The average stay in hospital is seven nights.

What can I expect after getting home?

You will be discharged from hospital when

- you have opened your bowels
- you can move around freely
- your pain is well-controlled with painkillers taken orally (by mouth).

Your stitches or clips will be removed between 10 and 14 days after the operation. This may be done by the nurse at your GP surgery or by a district nurse.

You will also have

- an outpatient appointment for you to see your consultant's team two weeks after your operation.
- contact details of the nurse specialist and ward should you have any concerns when you are home.

The most common complaint after surgery is tiredness. It is important to remember that you have had major surgery and that you need to rest at home. You may be restless at night and may find sleep difficult. Recovery time from abdominal surgery varies but you should generally be feeling a lot better within six weeks and fully recovered by 12 weeks after your surgery. You will need to

- take it easy. Do not lift anything heavy or do anything too energetic (such as shopping, vacuuming, mowing the lawn, lifting weights or running) for at least two to four weeks after your surgery. Doing these things may put too much strain on your stitches and may make your recovery take longer. Build up your activities slowly and only do as much as you feel able to. Walking is best.
- give yourself at least four weeks of rest before returning to work. If your work involves heavy lifting or exercise, please speak to your consultant.

Only start driving again when you are able to perform an emergency stop without feeling hesitant. Check with your insurance company to make sure you are covered to start driving again.

When can I have sex again?

You may begin sexual activity again two weeks after your operation, as long as you feel comfortable.

Will I have a follow-up appointment?

You will be seen by your surgeon, or a member of their team, two weeks after your surgery to check the outcome of the nephrectomy. If you have not received an appointment please call 020 7188 7823.

Further information

The James Whale Fund provides support and information for people with kidney cancer.

t: 0845 300 8383 **w:** www.jameswhalefund.org

Macmillan Cancer Support provides information and support to anyone affected by cancer.

t: 0808 800 1234 **w:** www.macmillan.org.uk

South East London Cancer Network provides information for people affected by cancer in South East London.

w: www.patientinfo.selcn.nhs.uk

Cancer Research UK has a patient information website, with information on all types of cancer and treatment options, as well as a booklist for further information.

w: www.cancerhelp.org.uk

Contact us

If you have any further questions concerning this procedure, please contact the clinical nurse specialists on 020 7188 7823, Monday to Friday, 9am to 5pm. alternatively, call the hospital switchboard on 020 7188 7188 and ask for bleep 2841.

The Dimbleby Cancer Information Support Service at Guy's and St Thomas' hospitals, offers information and support for patients with cancer, their relatives and friends. For more information **t:** 020 7188 5918 **e:** RichardDimblebyCentre@gstt.nhs.uk or visit one of the drop-in centres:

- Guy's Hospital – Outpatient Department, Ground Floor, Tabard Annexe (next to the Minor Injuries Unit)
- St Thomas' Hospital – 2nd Floor, Lambeth Wing.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk

t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch:

t: 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member:

t: 0800 731 0319 **e:** members@gstt.nhs.uk

w: www.guysandstthomas.nhs.uk/membership

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