

# Open Nephrectomy

Information for patients, relatives and carers about having an open operation to remove a kidney.

## Department of Urology

① For more information, please contact the hospital where you are being treated:

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# **What is a nephrectomy?**

A nephrectomy is an operation to remove a kidney. Your doctor will have discussed with you the reason for removing one of your kidneys.

This leaflet explains a little about what will happen before, during and after your operation. It tries to answer some of the questions you may have.

The doctors and nurses are there to help you. They will always make time to listen to you and answer your questions. If you do not fully understand anything about your operation, please ask.

# **What happens before the operation?**

Please bring with you:

- Your completed admission form,
- Your usual medication,
- Nightwear, slippers and toiletries
- Reading material,
- Do bring essential personal items only. You will be asked to take responsibility for your property at all times

If you become ill or are unable to keep your admission date for any reason, please let us know by telephoning 01904 725542. We will rearrange your date.

## **What is the evidence base for this information?**

This publication includes advice from consensus panels, the British Association of Urological Surgeons, the Department of Health and evidence-based sources. It is, therefore, a reflection of best urological practice in the UK. It is intended to supplement any advice you may already have been given by your GP or other healthcare professionals. Alternative treatments are outlined and can be discussed in more detail with your Urologist or Specialist Nurse.

## **What does the procedure involve?**

This involves removal of the kidney. The adrenal gland, surrounding fat and lymph nodes may or may not be removed at the same time, depending upon the case. An incision, with resulting scar, is made either in the abdomen or in the side.

## **What are the benefits of this procedure?**

Nephrectomy, or kidney removal, may provide the treatment for kidney cancer, suspected kidney cancer, or where the kidney has stopped working.

## **What are the alternatives to this procedure?**

Observation alone or embolisation (stopping the blood supply to the kidney). Small tumours in the kidney may sometimes be removed (partial nephrectomy) or destroyed without losing the whole kidney. Laparoscopic (keyhole) approaches to either radical (total) or partial nephrectomy are feasible for some patients.

# What happens before the procedure?

You will normally receive appointments for pre-assessment to assess your general fitness, to screen for the carriage of MRSA and to perform some baseline investigations. This will often include an exercise test to help predict your needs during the operation.

Please be sure to inform the team if you have any of the following:

- an artificial heart valve or coronary artery stent
- a heart pacemaker or defibrillator
- an artificial joint
- an artificial blood vessel graft
- a neurosurgical shunt
- any other implanted foreign body
- a prescription for warfarin or clopidogrel
- a previous or current MRSA infection
- a high risk of variant-CJD (if you have received a corneal transplant, a neurosurgical dural transplant or previous injections of human-derived growth hormone)

You will usually be admitted on the day of your operation. You are encouraged to shower or bathe before coming to hospital, but it is not necessary to shave the area of the operation.

You may know that it is risky to eat or drink before you have a general anaesthetic. **But** it can also be undesirable to have your procedure when you are thirsty. Please follow the three rules below:

1. You should have no food or cloudy drinks during the **six** hours before your admission.
2. You should drink plenty of clear fluids (those you can see through), preferably water until **two** hours before your admission).
3. You should not have anything to eat or drink during the **two** hours prior to your admission.

After admission, you will be seen by the nursing staff and the consultant or registrar from both surgical and anaesthetic teams.

You will be asked to sign the consent form (FYCON79-1 Open Nephrectomy) giving permission for your operation to take place, showing you understand what is to be done and confirming that you wish to proceed. Make sure that you are given the opportunity to discuss any concerns and to ask any questions you may still have before signing the form.

## **What happens during the procedure?**

Normally, you will have a full general anaesthetic and will be asleep throughout the procedure. The anaesthetist will place a drip in your arm to administer the anaesthetic. In some patients, the anaesthetist may also use an epidural anaesthetic, which minimises pain after the operation.

You will usually be given injectable antibiotics before the procedure, after checking for any allergies.

The kidney is usually removed through a cut (incision) in your abdomen although, on occasions, the incision is made in the side (loin) or extended into the chest area.

During the operation, a urinary catheter is inserted, and a drainage tube is usually placed through the skin to the bed of the kidney. Occasionally, it may be necessary to insert a nasogastric tube (stomach tube through your nose) to prevent distension of your stomach, or a further drip into a larger vein in the neck for monitoring and the administration of drugs.

Following the operation, you will be moved to the recovery area, where you will be monitored until you are ready to be returned to the ward.



# What happens immediately after the procedure?

When ready, you will be moved to a ward. In many cases, a period of observation in the High Dependency Unit will be recommended.

In general terms, you should expect to be told how the procedure went and you should:

- ask if what was planned to be done was achieved
- let the medical staff know if you are in any discomfort
- feel free to ask any questions or discuss any concerns with the ward staff and members of the surgical team
- ensure that you are clear about what has been done and what is the next move

You will be given an injection under the skin of a drug (dalteparin or enoxaparin), that, along with the help of elasticated stockings provided by the ward, will help prevent thrombosis (clots) in the veins.

You will be able to drink clear fluids soon after your operation and start a light diet within the next day or so. We will encourage you to mobilise as early as possible and to take fluids or food as soon as you are able.

## **Are there any risks or side effects?**

Most procedures have a potential for side effects. You should be reassured that, although all these complications are well recognised, the majority of patients do not suffer any problems after a urological procedure.

### **Common (greater than 1 in 10)**

- Temporary insertion of a wound drain
- Bulging of the wound due to damage to the nerves serving the abdominal wall muscles

### **Occasional (between 1 in 10 and 1 in 50)**

- Bleeding requiring further surgery or transfusions
- Infection, pain or bulging of the incision site requiring further treatment
- Entry into the lung cavity requiring insertion of a temporary chest drainage tube
- Need of further therapy for cancer

## **Rare (less than one in 50)**

- Anaesthetic or cardiovascular problems possibly requiring intensive care admission (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack and death)
- Involvement or injury to nearby local structures (blood vessels, spleen, liver, lung, pancreas and bowel) requiring more extensive surgery. This may include removal of the spleen or formation of a stoma
- The histological abnormality of a suspected kidney cancer may subsequently be shown not to be cancer
- Dialysis may be required to improve your kidney function if your other kidney functions poorly

## **Hospital-acquired infection**

- Colonisation with MRSA (0.9% or one in 110)
- Clostridium difficile bowel infection (0.2% or one in 500)
- MRSA bloodstream infection (0.08% or one in 1250)

The rates for hospital-acquired infection may be greater in high-risk patients e.g., with long-term drainage tubes, after removal of the bladder for cancer, after previous infections, after prolonged hospitalisation or after multiple admissions.

## **When can I go home?**

You will usually stay in hospital for three to seven days depending upon your progress after the operation. The average hospital stay is five days.

Once you are eating and drinking and able to walk around without too much discomfort, you will generally be ready to be discharged home to recover further there.

## **What happens before I leave the ward?**

A nurse will go through the discharge instructions with you and tell you about the care you need at home. The nurse will give you the necessary follow-up papers and appointments. Please ask if you are unsure of any of the instructions.

If you have metal clips closing the wound, these need to be removed 10-14 days after the operation. The practice nurse at your GP surgery will normally perform this; this should be planned before discharge.

You will be given a daily injection of a blood thinning drug called Fragmin (or Clexane) until you are discharged from hospital. Unless you take warfarin, you (and / or your carer) will be instructed on how to administer this before you leave hospital, as you will need to continue this treatment for a period of four weeks from the date of your operation.

By the time of your discharge from hospital, you should:

- be given advice about your recovery at home
- ask when to resume normal activities such as work, exercise, driving, housework and sexual intimacy
- ask for a contact number if you have any concerns
- ask when your follow-up will be and who will do this, including when you will be given pathology results

When you leave hospital, you will be given a “draft” discharge summary of your admission. This holds important information about your inpatient stay and your operation. If you need to call your GP for any reason or to attend another hospital, please take this summary with you to allow the doctors to see details of your treatment. This is particularly important if you need to consult another doctor within a few days of your discharge.

## **What should I expect when I get home?**

It will be at least six weeks before your wound heals but it may take up to two months before you feel fully recovered from the surgery. You may return to work when you are comfortable enough and your GP is satisfied with your progress.

It is advisable that you continue to wear your elasticated stockings for 14 days after you are discharged from hospital.

Many patients have persistent twinges of discomfort in the loin wound, which can go on for several months.

After surgery through the loin, the wall of the abdomen around the scar will bulge due to nerve damage. This is not a hernia but can be helped by strengthening up the muscles of the abdominal wall by exercises.

# What happens with my wound?

The nurse will explain how your wound was closed and will discuss with you the arrangements for having your staples or stitches removed. Before you leave hospital, the nurse will check your wound. If it looks dry, you will usually not require another dressing, but the nurse will apply another dressing if necessary.

If there is some leakage from your wound, you should cover it with a sterile dressing and change the dressing every day. Your nurse will show you how to do this. Once your wound is dry, leave the dressing off.

Your wound may become hard along its scar. This is due to the formation of scar tissue, which eventually disappears. Some patients experience tingling, numbness, pulling and itching as their wound heals. These sensations are part of the healing process.

Obtain advice from your own doctor (GP) or practice nurse if you experience any of the following:

- Increased redness or swelling around the wound which feels hard when you touch it
- A cloudy or smelly discharge from your wound
- You feel generally unwell or feverish
- After one week, your wound does not appear to be healing

## **What should I do if I have any problems or worries about my nephrectomy after I have gone home?**

If you have any problems in the first 24 hrs after you leave, please contact the ward from where you were discharged. You should have been provided with a telephone number by the nurse at the time of your discharge. If it is after 24 hours, please contact your GP.

## **How much pain will I have?**

Patients usually have some pain and bruising following this operation. The bruising often spreads out and changes colour before it disappears.

You will be given some painkillers to take home with you. Please ensure that you read the instructions carefully and use them as directed. You are advised to take painkillers regularly over the first few days following your operation so that your pain is under control, and you recover more quickly. As you begin to feel better, you will not need as many painkillers. You should reduce the amount you take gradually rather than stopping abruptly.



## **Will my bowels be affected?**

Due to the change in your usual routine and if you are taking painkillers containing codeine, you may experience a change in your bowel habit. This could take several days to return to normal. Drink plenty of fluids and try to eat a high fibre breakfast cereal and wholemeal bread every day. If you feel constipated and the problem is not improving, ask your local pharmacist or GP for advice.

## **Can I bath or shower?**

You may bath or shower as usual. The first time you bath or shower at home, you may feel light-headed or faint. You should, therefore, leave the bathroom door unlocked and arrange for someone to check periodically that you are safe. You may use any safety equipment that you usually use. Use your usual toiletries but do not soak your wound or apply talcum powder and deodorants directly to it. Adding salt to your bath water is unnecessary. Pat your wound dry with a clean towel.

## **When can I resume my usual activities?**

This will depend upon your usual level of activities and your general health. If you try to do something that gives you pain, stop and try again in a few days.

Moderate activity following your nephrectomy will help your recovery. In particular, it will help to prevent blood clots forming in your legs. Walking is good exercise. Try a short distance at first and then increase it day by day. Rest when you feel tired. There are no restrictions on your leisure, sporting or domestic activities as long as you feel well enough to do them.

## **Driving after surgery**

It is your responsibility to ensure that you are fit to drive following your surgery. You do not normally need to notify the DVLA unless you have a medical condition that will last for longer than three months after your surgery and may affect your ability to drive. However, you should check with your insurance company before returning to driving. Your doctors will be happy to provide you with advice on request.

## **What else should I look out for?**

If you develop a temperature, increased redness, throbbing or drainage at the site of the operation, please contact your GP.

Any other post-operative problems should also be reported to your GP, especially if they involve chest symptoms.

## **Are there any other important points?**

It will be at least 14-21 days before the pathology results on your kidney are available. It is normal practice for the results of all biopsies to be discussed in detail at a multi-disciplinary meeting before any further treatment decisions are made. You and your GP will be informed of the results after this discussion.

An outpatient appointment will be made for you four to six weeks after the operation when we will be able to inform you of the pathology results and give you a plan for follow-up.

Once the results have been discussed, it may be necessary for further treatment, but this will be discussed with you by your consultant or specialist nurse.

After removal of one kidney, there is no need for any dietary or fluid restrictions since your remaining kidney can handle fluids and waste products with no difficulty.

After removal of the kidney through the loin, the wall of the abdomen around the scar will bulge due to nerve damage. This is not a hernia but can be helped by strengthening up the muscles of the abdominal wall by exercises.

## **Is there any research being carried out in this area?**

Before your operation, your surgeon or specialist nurse will inform you about any relevant research studies taking place, and, in particular, if any surgically removed tissue may be stored for future study. If this is the case, you will be asked if you wish to participate and, if you agree, to sign a special form to consent to this.

All surgical procedures, even those not currently the subject of active research, are subjected to rigorous clinical audit so that we can analyse our results and compare them with those of other surgeons. In this way, we can learn how to improve our techniques and our results; this means that our patients will get the best treatment available.

# Who can I contact for more help or information?

For further information on the internet, here are some useful sites to explore:

## **NHS Website**

<http://www.nhs.uk/>

(Having an operation:

<http://www.nhs.uk/conditions/surgery/>)

## **British Association of Urological Surgeons**

<http://www.baus.org.uk/patients>

## **Royal College of Anaesthetists**

<https://www.rcoa.ac.uk/patientinfo>

## **Royal College of Surgeons of England**

<https://www.rcseng.ac.uk/patient-care/having-surgery/>

## **For Kidney Cancer:**

### **Macmillan Cancer Support**

<https://www.macmillan.org.uk/cancer-information-and-support/kidney-cancer>

### **Cancer Research UK**

<https://www.cancerresearchuk.org/about-cancer/kidney-cancer>

[Websites Accessed April 2023]

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## **Tell us what you think of this leaflet**

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact:  
Urology Nurse Specialist, Department of Urology, York Hospital, Wigginton Road, York, YO31 8HE or telephone 01904 725848.

## **Teaching, training and research**

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

## **Patient Advice and Liaison Service (PALS)**

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email [yhs-tr.patientexperienceteam@nhs.net](mailto:yhs-tr.patientexperienceteam@nhs.net).

An answer phone is available out of hours.

# Leaflets in alternative languages or formats

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website:  
[www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/](http://www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/)

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