## Who can I contact if I have a problem when I get home?

If you experience any problems related to your surgery or admission once you have been discharged home. Please feel free to contact Ward 4A, 4B or 4C for advice from the nurse in charge. They will assist you via the telephone, advise you return to your GP or ask you to make your way to the Emergency Department at Whiston Hospital depending upon the nature of your concern.

**Ward 4A– 0151 430 1420**

**Ward 4B– 0151 430 1637**

**Ward 4C– 0151 430 1643**

## Who can I contact for more help or information?

Best Health (prepared by the British Medical Association)

NHS Clinical Knowledge Summaries (formerly known as Prodigy)

NHS Direct

Patient UK

Royal College of Anaesthetists (for information about anaesthetics)

Royal College of Surgeons (patient information section)

Whiston Hospital
Warrington Road,
Prescot, Merseyside, L35 5DR
Telephone: 0151 426 1600

/sthknhs

@sthk.nhs

www.sthk.nhs.uk

NHS
St Helens and Knowsley Teaching Hospitals
NHS Trust

# Partial Removal of the Kidney

This leaflet can be made available
in alternative languages / formats on request.

如有需要，本传单可提供其他语言/版式

此單張的其他語言/格式版本可按要求提供

Na żądanie ta ulotka może zostać udostępniona
w innych językach/formatach.

**Author:** Urology Department
**Department:** Urology
**Document Number:** STHK0983
**Version:** 004
**Review date:** 01 / 09 / 2024

## 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 below and can be discussed in more detail with your Urologist or Specialist Nurse.

## What does the procedure involve?

This involves removal of part of the kidney +/- the adrenal gland with surrounding fat and lymph nodes for suspected cancer of the kidney, using an incision either in the abdomen or in the side.

## What are the alternatives to this procedure?

Observation, occasionally immunotherapy, total nephrectomy by open or laparoscopic (telescopic or minimally-invasive) approach, partial nephrectomy by laparoscopic (telescopic or minimally-invasive) approach, radiofrequency oblation, robotic surgery.



## 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 3 months after your surgery and may affect your ability to drive.

You should, however, check with your insurance company before returning to driving.

Your doctors will be happy to provide you with advice on request.

## Students

There may be students present during your consultation as part of their on-going training.

Please let the staff know if you wish to be seen by a doctor only.

## Are there any other important points?

This publication provides input from specialists, the British Association of Urological Surgeons, the Department of Health and evidence-based sources as a supplement to any advice you may already have been given by your GP.

Alternative treatments can be discussed in more detail with your urologist or specialist nurse.

## 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 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 4-6 weeks after the operation when we will be able to inform you of the results of pathology tests 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.

If a ureteric stent has been inserted, arrangements will be made for its removal approximately 6 weeks after discharge from hospital.

If you have not heard from us within 6 weeks about removing your stent, please contact us immediately.

Some patients who have a ureteric stent inserted need to go home with their catheter still in place to allow the kidney to heal completely.



## What should I expect before the procedure?

You will usually be admitted on the day before your surgery although some hospitals now prefer to admit patients on the day of surgery. You will normally receive an appointment for pre assessment to assess your general fitness, to screen for the carriage of MRSA and to perform some baseline investigations.

After admission, you will be seen by members of the medical team which may include the Consultant, Specialist Registrar, House Officer and your named nurse. You will be asked not to eat or drink for 6 hours before surgery and, immediately before the operation, you may be given a pre-medication by the anaesthetist which will make you dry-mouthed and pleasantly sleepy. You will be given an injection under the skin (Clexane) that, along with the help of elasticated stockings provided by the ward, will help prevent thrombosis (clots) in the veins.

Please be sure to inform your surgeon in advance of your surgery if you have any of the following:

- An artificial heart valve
- A 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 regular prescription for Warfarin, Aspirin or Clopidogrel (Plavix)
- 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)

At some stage during the admission process, you will be asked to sign the second part of the consent form 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, a full general anaesthetic will be used and you will be asleep throughout the procedure.

In some patients, the anaesthetist may also use an epidural anaesthetic which improves or minimises pain post-operatively.

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

The kidney is usually removed through an incision in your loin although, on occasions, the incision is made in the front of the abdomen or extended into the chest area.

A bladder catheter is normally inserted post-operatively, to monitor urine output, and a drainage tube is usually placed through the skin into the bed of the kidney.

Often, a small tube (or stent) is placed within the collecting system of the kidney to help with healing.

This will need to be removed by a second procedure, usually performed telescopically via the bladder under local anaesthetic.

Occasionally, it may be necessary to insert a stomach tube through your nose, if the operation was particularly difficult, to prevent distension of your stomach and bowel with air.



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.

It is usual for there to be bulging of the wound when an incision in the loin is used, due to the nerves supplying the abdominal muscles being weakened.

If a ureteric stent has been inserted, you may notice that you pass urine more frequently with pain in the bladder region or at the tip of the penis after passing urine.

## 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 immediately.

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

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 should I expect when I get home?

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 once you return home
- Ask when your follow-up will be and who will do this (the hospital or your GP)
- Ensure that you know when you will be told the results of any tests done on tissues or organs which have been removed

When you leave hospital, you will be given a 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.

It will be at least 14 days before healing of the wound occurs but it may take up to 6 weeks 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.



## What happens immediately after the procedure?

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
- Ask what you can and cannot do
- 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 fluids to drink from an early stage after the operation and you will start a light diet within 2-3 days.

You will be encouraged to mobilise early to prevent blood clots in the veins of your legs.

The wound drain will need to stay in place for 3-4 days in case urine leaks from the cut kidney surface.

In some patients, the drain needs to stay in place longer and you will then go home with the drain and catheter still in place to allow the kidney to heal fully.

The average hospital stay is 5 days.

## Are there any 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 bladder catheter and wound drain
- Urinary leak from kidney edge requiring further treatment or a stent
- 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
- Total nephrectomy will be performed if partial is thought not possible
- Entry into the lung cavity requiring insertion of a temporary drainage tube
- Need of further therapy for cancer control
- Infection, pain or bulging of the incision site requiring further treatment



### Rare (less than 1 in 50)

- Anaesthetic or cardiovascular problems possibly requiring intensive care admission (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack or death)
- Involvement or injury to nearby local structures (blood vessels, spleen, liver, lung, pancreas and bowel) requiring more extensive surgery
- The histological abnormality in the kidney may subsequently be shown not to be cancer
- Need for further treatment if histology suggests incomplete removal

### Hospital-acquired infection

- Colonisation with MRSA (0.9% - 1 in 10)
- Clostridium difficile bowel infection (0.2% - 1 in 500)
- MRSA bloodstream infection (0.08% - 1 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.