
Partial removal of the kidney: procedure-specific information

What is the evidence base for this information?

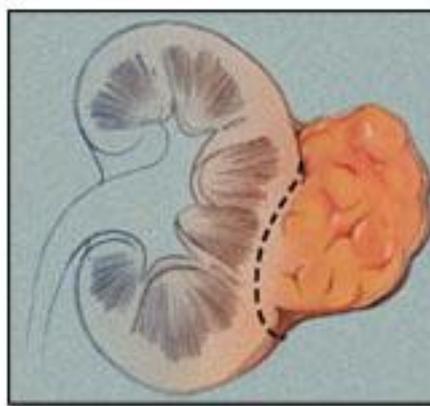
This leaflet includes advice from consensus panels, the British Association of Urological Surgeons, the Department of Health and evidence-based sources; it is, therefore, a reflection of best practice in the UK. It is intended to supplement any advice you may already have been given by your GP or other 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 with surrounding fat with or without the adrenal gland or suspected cancer of the kidney, using an incision either in the side or abdomen.

What are the alternatives to this procedure?

Observation, total nephrectomy by open or laparoscopic (telescopic or minimally-invasive) approach, partial nephrectomy by laparoscopic (telescopic or minimally-invasive) approach, radiofrequency ablation



What should I expect before the procedure?

You will usually be admitted the day of your surgery. You will normally receive an appointment for pre-assessment, approximately 14 days before your admission, 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 surgical 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 of a drug (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 Urologist 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 prescription for Warfarin, Aspirin or Clopidogrel (Plavix®)
- a previous or current MRSA infection
- high risk of variant CJD (if you have received a corneal transplant, a neurosurgical dural transplant or previous injections of human-derived growth hormone)

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 accessed 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 to sit beside the cut kidney surface. Occasionally, a small tube (or stent) is placed internally from the collecting system of the kidney to the bladder to help with healing. If placed, this will need to be removed by a second procedure, usually performed telescopically via the bladder under local anaesthetic a few weeks after surgery.

Occasionally, it may be necessary to insert a stomach tube through your nose to prevent distension of your stomach and bowel with air.

What happens immediately after the procedure?

You will be given fluids to drink from an early stage after the operation and you will start a light diet within 1-2 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 a few 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.

We would expect your hospital stay to be 3 to 4 days but some patients go home sooner.

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.

Please use the check boxes to tick off individual items when you are happy that they have been discussed to your satisfaction:

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 and 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 (overall risk for Addenbrooke's)

- Colonisation with MRSA (0.02%, 1 in 5,000)
- Clostridium difficile bowel infection (0.04%; 1 in 2,500)
- MRSA bloodstream infection (0.01%; 1 in 10,000)

(These rates 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)

What should I expect when I get home?

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, in the first few weeks after your discharge, 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 skin 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.

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 an 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.

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.

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 4-6 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.

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.

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.

Is there any research being carried out in this field at Addenbrooke's Hospital?

Yes. As part of your operation, various specimens of tissue will be sent to the Pathology department so that we can find out details of the disease and whether it has affected other areas. This information sheet has already described to you what tissue will be removed.

We would also like your agreement to carry out research on that tissue which will be left over when the pathologist has finished making a full diagnosis. Normally, this tissue is disposed of or simply stored. What we would like to do is to store samples of the tissue, both frozen and after it has been processed. Please note that we are not asking you to provide any tissue apart from that which would normally be removed during the operation.

We are carrying out a series of research projects which involve studying the genes and proteins produced by normal and diseased tissues. The reason for doing this is to try to discover differences between diseased and normal tissue to help develop new tests or treatments that might benefit future generations. This research is being carried out here in Cambridge but we sometimes work with other universities or with industry to move our research forwards more quickly than it would if we did everything here.

The consent form you will sign from the hospital allows you to indicate whether you are prepared to provide this tissue. If you would like any further information, please ask the ward to contact your Consultant.

Who can I contact for more help or information?

Oncology Nurses

- Uro-Oncology Nurse Specialist
01223 586748
- Bladder cancer Nurse Practitioner (haematuria, chemotherapy & BCG)

01223 274608

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- Prostate cancer Nurse Practitioner
01223 247608 or 216897 or bleep 154-548
 - Surgical Care Practitioner
01223 348590 or 256157 or bleep 154-134

Non-Oncology Nurses

- Urology Nurse Practitioner (incontinence, urodynamics, catheter patients)
01223 274608 or 586748
- Urology Nurse Practitioner (stoma care)
01223 349800

Patient Advice & Liaison Centre (PALS)

- Telephone
+44 (0)1223 216756 or 257257
+44 (0)1223 274432 or 274431
- PatientLine
*801 (*from patient bedside telephones only*)
- E mail
pals@addenbrookes.nhs.uk
- Mail
PALS, Box No 53
Addenbrooke's Hospital
Hills Road, Cambridge, CB2 2QQ

Chaplaincy and Multi-Faith Community

- Telephone
+44 (0)1223 217769
- E mail
derek.fraser@addenbrookes.nhs.uk
- Mail
The Chaplaincy, Box No 105
Addenbrooke's Hospital
Hills Road, Cambridge, CB2 2QQ

MINICOM System ("type" system for the hard of hearing)

- Telephone
+44 (0)1223 274604

Access Office (travel, parking & security information)

- Telephone
+44 (0)1223 586969

What should I do with this form?

Thank you for taking the trouble to read this information sheet. If you wish to sign it and retain a copy for your own records, please do so below.

If you would like a copy of this form to be filed in your hospital records for future reference, please let your Urologist or Specialist Nurse know. If you do, however, decide to proceed with the scheduled procedure, you will be asked to sign a separate consent form which will be filed in your hospital notes and you will, in addition, be provided with a copy of the form if you wish.

I have read this information sheet and I accept the information it provides.

Signature.....Date.....

How can I get information in alternative formats?

Please ask if you require this information in other languages, large print or audio format: 01223 216032 or patient.information@addenbrookes.nhs.uk

Polish Informacje te można otrzymać w innych językach, w wersji dużym drukiem lub audio. Zamówienia prosimy składać pod numerem: 01223 216032 lub wysyłając e-mail: patient.information@addenbrookes.nhs.uk

Portuguese Se precisar desta informação num outro idioma, em impressão de letras grandes ou formato áudio por favor telefone para o 01223 216032 ou envie uma mensagem para: patient.information@addenbrookes.nhs.uk

Russian Если вам требуется эта информация на другом языке, крупным шрифтом или в аудиоформате, пожалуйста, обращайтесь по телефону 01223 216032 или на вебсайт patient.information@addenbrookes.nhs.uk

Cantonese 若你需要此信息的其他語言版本、大字體版或音頻格式，請致電 01223 216032 或發郵件到: patient.information@addenbrookes.nhs.uk

Turkish Bu bilgiyi diğer dillerde veya büyük baskılı ya da sesli formatta isterseniz lütfen su numaradan kontak kurun: 01223 216032 veya aşağıdaki adrese e-posta gönderin: patient.information@addenbrookes.nhs.uk

Bengali এই তথ্য বাংলায়, বড় অক্ষরে বা অডিও টেপে পেতে চাইলে দয়া করে 01223 216032 নম্বরে ফোন করুন বা patient.information@addenbrookes.nhs.uk ঠিকানায় ই-মেইল করুন।



Addenbrooke's is smoke-free. You cannot smoke anywhere on the site. Smoking increases the severity of some urological diseases and increases the risk of post-operative complications. For advice on quitting, contact your GP or the NHS smoking helpline free on 0800 169 0 169

Document history

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