
Partial Removal of the Kidney

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

This patient information leaflet is drawn from the consensus panels of many worldwide urological societies, as a supplement to any advice that you may already have been given. Alternative treatments are outlined below and can be discussed in more detail with Dr Campbell.

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.

Before the procedure

Please be sure to inform Dr Campbell in advance of your procedure if you have any of the following:

- ~ An artificial heart valve
- ~ A coronary artery stent
- ~ A heart pacemaker or defibrillator
- ~ An artificial blood vessel graft
- ~ A neurosurgical shunt
- ~ Any other implanted foreign body
- ~ Blood thinning medications, particularly
 - ~ Asasantin
 - ~ Aspirin
 - ~ Fish oil
 - ~ Iscover
 - ~ Persantin
 - ~ Plavix
 - ~ Warfarin
- ~ Angina
- ~ Diabetes
- ~ Hypertension
- ~ Mesh hernia repair
- ~ Previous abdominal surgery
- ~ Recent heart attack

You will usually be admitted on the day of surgery. You may be asked to attend a pre-admission clinic 5–10 days before the procedure to assess your general fitness and to perform some baseline investigations.

If you are taking warfarin, Clopidogrel, iscover, asaantin, or persantin on a regular basis, you must discuss this with Dr Campbell because these drugs can cause increased bleeding after surgery. There may be a balance of risk where stopping them will reduce the chances of bleeding but this can result in increased clotting, which may also carry a risk to your health. This will, therefore, need careful discussion with regard to risks and benefits.

You will be asked not to eat or drink for 6 hours before surgery. 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 (heparin), that along with the help of elasticated stockings fitted on admission, will help prevent thrombosis (clots) in the veins of the legs.

After admission, you will be seen by other members of the urological team which may include not only Dr Campbell, but the specialist registrar, the intern, your named nurse, and the physiotherapist. The specialist registrar may perform the procedure in conjunction with Dr Campbell and with your permission.

Partial Removal of the Kidney continued...

Where do I go for my procedure?

The admissions section of the hospital at the appointed time, on the appointed day. The admissions section of the particular hospital will give you instructions well in advance of the operation.

If no contact has been made please telephone Dr Campbell's secretary on (07) 3367 1608, and the problem will be addressed.

Do I need to do anything special before my procedure?

You will need to not drink or eat anything for 6 hours prior to the procedure.

During the procedure

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.

The operation takes approximately 3–4 hours to complete.

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 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 several days in case urine leaks from the cut kidney surface. In some patients, the drain needs to stay in place longer and the patients then go home with the drain and catheter still in place to allow the kidney to heal fully.

The average hospital stay is 7 days.

Are there any side-effects?

Most procedures have a potential for side-effects and these are outlined below. Please use the check circles 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 & 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

Partial Removal of the Kidney continued...

General side-effects of any procedure

Any operative procedure that involves regional (spinal) or general anaesthetic can have side-effects. These are explained in the leaflet on anaesthesia.

Hospital-acquired infection

- ~ Colonisation with MRSA (0.9%, 1 in 110)
- ~ Clostridium difficile bowel infection (0.2%; 1 in 500)
- ~ MRSA bloodstream infection (0.08%; 1 in 1,250)

(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?

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 family doctor 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.

When you leave hospital, a discharge summary of your admission will be sent to your family doctor. This holds important information about your inpatient stay and your operation.

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 Dr Campbell or your family doctor.

Any other post-operative problems should also be reported to Dr Campbell or your family doctor, 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.

For after hours emergencies Dr Campbell can be contacted on (07) 3367 1608.

The Wesley Hospital Emergency Centre (07) 3232 7333, and The Greenslopes Private Hospital Emergency Centre (07) 3394 7111 are other resources that are also available.

Are there any other specific points?

It will be at least 5 days before the pathology results on your kidney are available. You and your family doctor will be informed of the results prior to your discharge.

Once the results have been discussed, it may be necessary for further treatment but this will be discussed with you.

An appointment will be required 4–6 weeks after the operation and at that point further plans for follow-up will be reviewed.

If you need further information about kidney cancer, please refer to the patient information section (FAQ section and urology conditions section) of our website — www.campbellurology.com.au

Is there any research being carried out in this field?

There is no specific research in this area at the moment but all operative procedures performed are subject to rigorous audit at monthly Audit & Clinical Governance meetings.

Partial Removal of the Kidney continued...

Who can I contact for more help or information?

Dr Peter Campbell

Suite 9, level 9, Evan Thomson Building, The Wesley Hospital,
Chasely St,
Auchenflower, QLD 4066
(07) 3367 1608,
www.campbellurology.com.au

The Wesley Hospital, Urology Ward

451 Coronation Drive,
Auchenflower, QLD 4066
(07) 3232 7168
www.uhc.com.au/wesley

The Wesley Emergency Centre

451 coronation Drive,
Auchenflower, QLD 4066
(07) 3232 7333

Greenslopes Private Hospital, Continence Advisor

Newdgate St,
Greenslopes, QLD 4120
(07) 3394 7978
www.greenslopesprivate.com.au

Greenslopes Private Hospital Urology Ward

Newdgate St,
Greenslopes, QLD 4120
(07) 3394 7261
www.greenslopesprivate.com.au

Greenslopes Private Hospital Emergency Centre

Newdgate St,
Greenslopes, QLD 4120
(07) 3394 6777
www.greenslopesprivate.com.au

**The Queen Elizabeth II Jubilee Hospital,
Urodynamics Department**

Kessels Rd,
Coopers plains, QLD 4108
(07) 3275 6346

American Urological Association Foundation

1000 Corporate Blvd, Suite 410,
Linthicum, MD 21090
1800 828 7866
www.UrologyHealth.org

Thank you for taking the trouble to read this information sheet. If you are satisfied with the explanation of the test, please sign below and this leaflet will be filed in your chart.

If you wish to retain a copy for you own records, one will be provided.

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

Signature

Date
