

Procedure information

Laparoscopic or robotic nephrectomy

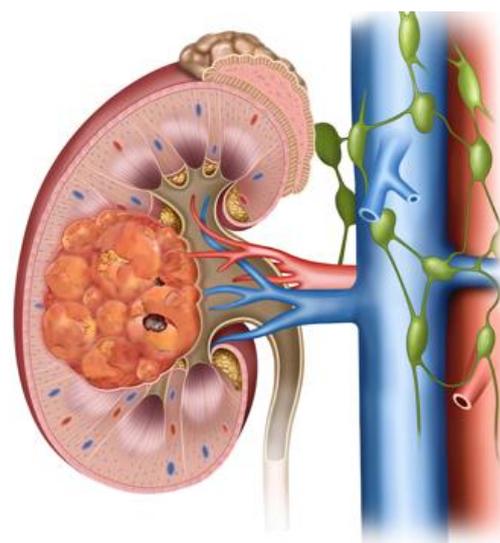
What is a nephrectomy?

A nephrectomy is an operation to remove a kidney. Nephrectomy is usually performed as a minimally invasive surgery by using laparoscopic (keyhole) or robotic surgical instruments.

Why is a nephrectomy required?

The most common reasons for needing to have one of your kidneys removed include:

- The kidney contains a mass/tumour which could be a cancer. Removing a kidney for suspected cancer is known as a *radical nephrectomy*.
- The kidney does not work normally and/or is causing pain, recurrent infections, bleeding, severe kidney stone disease, or dangerously high blood pressure. Removing a kidney for a non-cancerous condition is known as a *simple nephrectomy*.



A tumour in the right kidney

What does a laparoscopic/robotic nephrectomy involve?

Laparoscopic/robotic nephrectomy is performed in hospital under general anaesthetic (completely asleep).

We inflate your abdominal cavity with carbon dioxide gas to create space to perform the operation.

We make 4 – 6 keyhole incisions in your abdomen through which we can insert the laparoscopic/robotic surgical instruments.

We separate your kidney from surrounding structures such as the bowel, liver, spleen, muscle, and fat. We then staple or clamp off the blood supply to your kidney.

Sometimes the adrenal gland (a small hormone producing gland which sits on top of the kidney) is removed at the same time.

Your kidney is removed via one larger (10-15cm) incision in the lower abdomen.

The incisions are closed with dissolvable stitches or staples.

You will have a catheter (a tube draining urine from the bladder) for 1 – 2 days after the operation.

You may have a drain (a plastic tube coming out of the abdomen) for a few days after the operation.

What is the recovery after a laparoscopic/robotic nephrectomy?

You will usually be in hospital for 2 – 4 days after the operation.

You will have mild pain for several weeks after the operation. You will be given pain relief medication in hospital and at home to help control the pain.

Depending on your job, you can usually return to work 2 – 4 weeks after the operation.

You will usually be able to return to driving 2 – 4 weeks after the operation.

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Procedure information

Laparoscopic or robotic nephrectomy

You won't be able to do vigorous exercise or heavy lifting for 6 – 8 weeks after the operation.

Are there side effects from having only one kidney?

Provided your other kidney works normally, there usually aren't any long-term effects from having only one kidney.

After the operation, you may need to make diet and lifestyle changes to reduce the risk of damage to your remaining kidney.

Your urologist and/or GP will monitor the function of your remaining kidney for several years after the operation. They will also check for other conditions, such as high blood pressure or diabetes, which can damage your remaining kidney.

Very rarely, you may need renal dialysis or a kidney transplant if your remaining kidney stops working normally.

What are the risks of a laparoscopic/robotic nephrectomy?

The risks of this procedure include (but are not limited to):

Common risks (1/2 to 1/10):

- Bloating and abdominal discomfort for several days after the operation.
- The bowels being slow to work after the operation.

Occasional risks (1/10 to 1/50):

- Wound infection, urine infection, or chest infection requiring antibiotics.
- Conversion from a keyhole operation to an open operation via a larger incision. This will prolong your recovery.
- Problems with wound healing, or a wound hernia.
- Scarring inside the abdomen (adhesions) which can cause blockage of the bowel.
- The mass in the kidney may be benign (non-cancerous).

Rare risks (1/50 to 1/250):

- Bleeding during or after the operation requiring a blood transfusion or another operation/procedure to correct.
- Severe infection inside the abdomen or in the blood stream (sepsis), requiring antibiotics and/or another operation/procedure to correct.
- Damage to another organ such as the bowel, liver, spleen, pancreas or lung, requiring another operation/procedure to correct.
- Skin, muscle, or nerve damage from positioning on your side during the operation.

Very rare risks (<1/250):

- Kidney failure requiring dialysis or a kidney transplant.

Other uncommon or very uncommon risks of surgery and anaesthesia include:

- Blood clots in the legs (Deep vein thrombosis (DVT)) or lungs (Pulmonary embolus).
- Chest infection (Pneumonia).
- Heart attack.
- Stroke.

Procedure information

Laparoscopic or robotic nephrectomy

- A serious allergic reaction (Anaphylaxis).
- Death.

What are the alternative treatment options?

Alternative treatment options for the management of a suspected kidney cancer include:

- Nephrectomy via another approach – open or retroperitoneal.
- Partial nephrectomy – removing only the mass and leaving the remainder of the kidney behind.
- Surveillance of the renal mass.
- Biopsy of the kidney mass to confirm it is a cancer prior to nephrectomy.
- Ablation of the mass – destroying the tumour with hot or cold energy.
- Stereotactic radiotherapy – destroying the tumour with radiation therapy.

Alternative treatment options for the management of non-cancerous kidney conditions include:

- Nephrectomy via another approach – open or retroperitoneal.
- Conservative management of the condition.
- Having a long-term ureteric stent.

If I have a kidney cancer, will any other treatment be required?

In the majority of cases, kidney cancer is cured by removing the kidney containing the cancer, and no further treatment is required.

The kidney is sent for further tests after the operation. The results from these tests will allow us to tell you how likely it is that the operation has cured the cancer.

You will need to have follow-up scans for several years after the operation to make sure the cancer doesn't return elsewhere in the body.

If the cancer does return, further treatment may be required, such as surgery or immunotherapy (anti-cancer medications).

This is general information only. Please consult your doctor for more information and treatment options.

For appointments and enquiries please contact 07 3830 3300.