

Information for Patients

Nephrectomy

What do the kidneys do?

The kidneys are bean-shaped organs, each about the size of a fist. They are located near the middle of the back, just below the rib cage, one on each side of the spine. Every day, a person's kidneys processes blood and removes about 1.8 L of waste products and extra water. The wastes and extra water become urine. This flows to the bladder through tubes called ureters. The bladder stores urine until releasing it through urination.

What is a nephrectomy?

A nephrectomy is the surgical removal of your kidney when disease or severe injury has caused permanent damage. A single kidney can carry on the functions normally managed by both kidneys and you can return to good health after the operation. Your Urologist will have performed tests before this surgery was planned to ensure that your remaining kidney is functioning normally.

The reason for your nephrectomy will indicate which one of three types of nephrectomy will be performed—partial, radical or nephroureterectomy:

- A partial nephrectomy means that only part of the kidney is removed.
- A radical nephrectomy is the removal of the entire kidney and its surrounding fat, sometimes including the adrenal gland.
- A nephroureterectomy is the removal of the kidney and its surrounding fat, along with the adrenal gland and ureter all the way down to the bladder.

A nephrectomy can be preformed via open surgery, laparoscopic or robotic-assisted laparoscopic surgery. Your Urologist will discuss which option is suitable for you.

Why do I need a nephrectomy?

Common reasons for a nephrectomy are:

- Cancer of the kidney
- Very large kidney stones that have caused damage to the kidney
- Non-functioning kidney causing problems like pain and infections
- Kidney donation for transplant

What happens before my operation?

The operation and outcomes will be explained to you by your Urologist.

A blood test will need to be performed and a urine sample may need to be taken 4-5 days prior to surgery. If you are over 60, or have other medical problems, you will have an electrocardiogram (ECG) to check the health of your heart prior to surgery.

It is important to avoid constipation. Try to establish and maintain a regular, soft bowel habit leading up to your operation. Identify the foods that can help you maintain a regular bowel habit for your post-op period.

What happens on the day of my operation?

You will be advised when to come to hospital: this is usually on the day of surgery.

You should bring all your own medications with you to hospital.

You will be encouraged to commence deep breathing and coughing exercises preoperatively. This prevents any breathing complications or chest infection occurring following the surgery and anaesthetic.

You will have protective stockings fitted.

This operation is performed under general anaesthesia. The anaesthetist will discuss this with you prior to the operation. Just prior to surgery you may be given a tablet to help you relax.

What happens during my operation?

Open surgery uses a cut in the side of your abdomen through which the kidney is removed.

Laparoscopic or robotic removal is done via three or four 1 cm cuts. A laparoscope (thin tube with a light and camera on the end) is then inserted through the cuts. The camera sends pictures to a TV screen so that the surgeon can see the kidney and surrounding tissue. One of the cuts will be enlarged enough to enable the kidney to pass through once it has been disconnected from the surrounding tissues and blood vessels.

What to expect after my operation

For open surgery you will be in hospital for 4-6 days.

For laparoscopic or robotic surgery you will be in hospital for 2-3 days.

When the operation is completed, you will go to the recovery room for a short while where you will be cared for until you are ready to be transferred to your room.

Pain Control

Pain control is managed in conjunction with your anaesthetist. For pain relief it is likely you will have a PCA (Patient Controlled Analgesia) pump attached to your intravenous line. You will be able to control the amount of pain relief by pressing a button connected to the pump.

Wound

The wounds will depend on what type of nephrectomy operation you have had. The stitches will be dissolvable and do not need removing.

Urethral Catheter

A catheter will be coming out your urethra (water pipe). This is temporary and will be removed a few days post-operation.

After discharge

You will receive a follow-up appointment in the post to see your Urologist six weeks after the operation.

You can do most activities after your operation except any heavy lifting, straining, intercourse or strenuous activity, which should be avoided for 4-6 weeks after surgery. You will be able to continue with your normal daily routines as you feel able.

Generally when you feel that you could perform an emergency stop without being concerned about abdominal pain (at about 4 weeks), then you can resume driving.

Discharge advice

Even though one kidney functions as well as two, you may be advised to take some precautions to protect the remaining kidney. These precautions include:

- Increase your amount of exercise as tolerated
- Aim for a fluid intake of 1 to 2 L per day
- Have regular monitoring of your blood pressure and blood tests
- See your GP promptly if you experience chills, fever or pain in your bladder or back, or your urine is cloudy and smells offensive. These symptoms may indicate a urinary tract infection and require treatment.

Possible complications

Bleeding

Bleeding severe enough to bring you back to the hospital is rare. This risk disappears when healing is complete, six to eight weeks after surgery. If you notice an increase in bleeding or are unable to pass urine, contact your GP.

Wound Infection

Your wound may become infected post-operation. Symptoms can include:

- Redness
- Swelling
- Pain
- Hot to touch
- Discharge from wound

You will need to contact Urology Associates if you think you have an infection. The nurses can assess your wound and refer you to a Urologist if treatment is required.



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