

# Nephrectomy

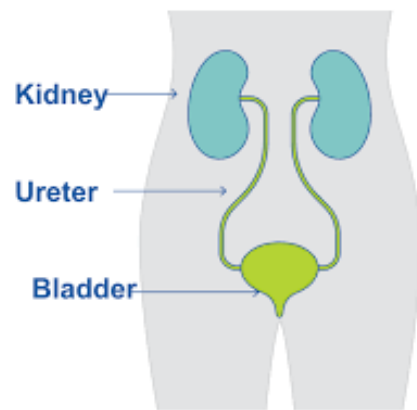
## Patient Information – Urology Service

### 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 process blood and remove about 1.8 litres of waste products and extra water.

The waste products 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 surgery will be performed – partial, simple or radical.

#### Partial nephrectomy

This is when only part of the kidney is removed.

#### Simple nephrectomy

This is the removal of the kidney only.

#### Radical nephrectomy

This is the removal of the kidney and its surrounding fat ± the adrenal gland and ureter.

A nephrectomy can be performed via open surgery or laparoscopic (keyhole) surgery. Your urologist will discuss which option is suitable for you.

## Why do I need a total nephrectomy?

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The common reasons for a total nephrectomy are:

- Cancer of the kidney
- Staghorn calculus  
This is where there is significant tissue damage and recurrent infection
- The presence of very large, painful cysts
- The non-functioning kidney is causing problems
- Live donor kidney transplant
- Chronic infection, which has led to kidney scarring and loss of function
- Kidney trauma with uncontrolled bleeding.

## What happens before my operation?

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The surgery and outcomes will be explained to you by your surgeon before the surgery. When you feel comfortable that you understand what is to be done and have had all your questions answered, you will be asked to sign a consent form. This consent form should be signed by both yourself and your surgeon and forwarded to the hospital prior to your admission.

A blood test will need to be performed and a urine sample may need to be taken a few days prior to your surgery. A chest x-ray may also be requested.

If you are over 60 years of age or have other medical conditions, you may also have an electrocardiogram (ECG) prior to surgery to check the health of your heart.

You will be advised when to stop eating and drinking before surgery. This includes water and chewing gum. You can swallow tablets with a small sip of water.

You should bring your own medications with you to hospital.

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

**Please inform your surgeon if you are taking anti-coagulant (blood thinning) medication (e.g. warfarin, clopidogrel, dabigatran, rivaroxaban or ticagrelor), or any medication for diabetes. Your surgeon will advise when to stop and restart these medications. If you are taking aspirin, it is okay to continue taking this.**

## What happens on the day of my operation?

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You will go to Christchurch Hospital on the day of your surgery, unless advised otherwise. Be aware that this is not a day surgery. On arrival, the staff will guide you through what is required prior to your surgery.

You will have a clean hospital gown and protective stocking fitted.

The flank (your side), on the side with the kidney to be removed, will be shaved. For laparoscopic cases, your abdomen will be shaved.

An IV (intravenous) line will be placed in a vein in your arm or hand that will be used to supply fluids or medications during the surgery.

You may be given a medication to prevent blood clots.

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

This operation is performed under general anaesthesia. The anaesthetist will see you before the surgery. A tube may be inserted into your throat to help you breathe while you are in a sleep-like state.

Just prior to your surgery, you may be given a pre-medication tablet to relax you.

## **What to expect after the operation?**

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For open surgery, you will be in hospital for four to six days. For laparoscopic surgery, you will be in hospital for two to three days.

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

### **Pain control**

Your pain is managed in conjunction with your anaesthetist.

For pain relief, it is likely you will have a (patient-controlled analgesic (PCA) 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 sutures will be dissolvable and do not need removing.

### **Urethral catheter**

A catheter will be coming out of your urethra (tube from the bladder to empty urine). This is temporary and will be removed a few days post-operation.

## **What to expect after discharge?**

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You can do most activities after your operation except any heavy lifting, straining, intercourse, or strenuous activity. These should be avoided for four to six weeks after surgery.

You will be able to continue with your normal daily routines as you feel able.

You can usually resume driving when you feel that you could perform an emergency stop without being concerned about abdominal pain (usually about four weeks after surgery).

## Possible complications

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All procedures have a potential for side effects. You should be reassured that, although these complications are well-recognised, the majority of patients do not suffer any problems after a urological procedure.

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 one to two litres per day
- Have regular monitoring of your blood pressure and blood tests
- Contact your GP immediately if you experience:
  - Chills, fever or pain in your bladder or back
  - Urine that is cloudy and smells offensive.

These symptoms may indicate a urinary tract infection and require treatment.

### Bleeding

It is also common to pass small amounts of blood during the healing process. This is normal and nothing to worry about. 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.

However, there is a small risk of severe bleeding occurring. If you have fresh, heavy bleeding that does not stop, if you have severe pain with passing urine or if you are unable to pass urine at all (possible blockage), please visit the Emergency Department at your local hospital.

### Wound infection

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

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

Please contact your GP immediately if you have any concerns or notice any of the above symptoms.

## Follow-up

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You will receive an appointment in the mail to attend the Urology Outpatient clinic. This is usually about six weeks following your surgery.

A letter will also be sent to your own doctor about your operation.

## Contact information

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For more information about:

- Hospital and specialist services, go to [www.cdhb.health.nz](http://www.cdhb.health.nz)
- Your health and medication, go to [www.healthinfo.org.nz](http://www.healthinfo.org.nz)

For information on parking, how to get to the hospital, and visiting hours, please visit [www.cdhb.health.nz](http://www.cdhb.health.nz)