

Procedure Specific Information Sheet

Laparoscopic Nephrectomy / Nephroureterectomy

Dr Vasudevan has recommended that you have a laparoscopic nephrectomy or nephroureterectomy. This document gives you information on what to expect before, during and after the operation. If there are questions that this document does not answer, please ask Dr Vasudevan

What is a nephrectomy and nephroureterectomy?

A simple nephrectomy refers to removal of the whole kidney.

A radical nephrectomy involves removal of not only the whole kidney but also the fat that surrounds the kidney. This is done if the cancer arises from the kidney, called Renal Cell Carcinoma (RCC).

A nephroureterectomy requires removal of the whole kidney, the fat surrounding it as well as the ureter, which is the tube that connects the kidney to the bladder. This is done if the cancer arises from the ureter, called Transitional Cell Carcinoma (TCC).

Why do I need a nephrectomy / nephroureterectomy?

Investigations would have indicated the presence of cancer in the kidney or cancer in the ureter. Performing a nephrectomy or a nephroureterectomy will give confirmation of the diagnosis as well as the stage of the disease.

Knowing the stage of the disease will help determine if further treatment is required.

If the cancer is detected early enough doing the required surgery is curative.

What happens in the pre-operative consultation?

Dr Vasudevan will organise a date for your procedure. By now, you would have had the necessary investigations such as CT scans and blood tests.

Dr Vasudevan will discuss with you what the operation entails and the possible risks involved. He will then ask you to sign a consent form for the operation to proceed.

What should I do about my medication?

Please inform Dr Vasudevan of all the medications that you are on in the pre-operative consultation. If you are taking some blood thinning medications they may need to be stopped prior to surgery. He can advise you appropriately.

What can I do to make the operation a success?

If you smoke, stopping smoking several weeks or more before the operation may reduce your risk of developing complications and will improve your long-term health. Try to maintain a healthy weight. You have a higher risk of developing complications if you are overweight. Regular exercise should help to prepare you for the operation, help you to recover and improve your long-term health.

What does the operation involve?

The healthcare team will carry out a number of checks to make sure you have the operation you came in for. You can help by confirming to Dr Vasudevan and the healthcare team your name and the operation you are having.

You will be given anti-embolic stockings to wear prior to surgery to reduce the risk of blood clots in your leg.

Also, prior to being taken into the operating theatre and with you fully awake, Dr Vasudevan will confirm with you and mark the kidney to be removed with a permanent marker. Once this critical step is complete you will be taken into the operating theatre.

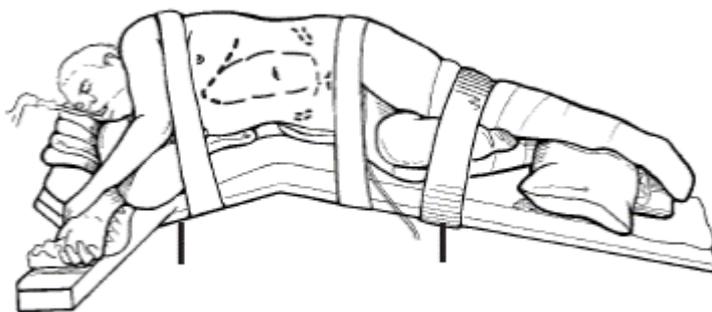
Once in the operating theatre you will be given a general anaesthetic, so that you will not be aware of anything whilst the operation is being performed. The anaesthetist will discuss this with you.

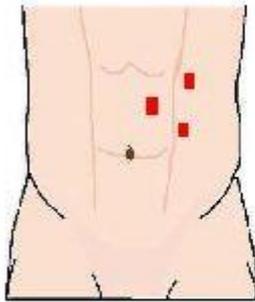
Once you are asleep the surgical team will insert a catheter (IDC) into to your bladder to drain the urine from your bladder.

Laparoscopic Nephrectomy

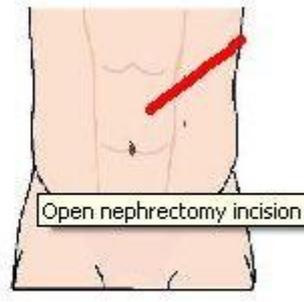
You will be repositioned on your side with the kidney to be removed uppermost. 3 appropriately placed small incisions are made in your abdomen. Using a camera and other small instruments the kidney is dissected free of all its attachments, blood vessels and ureter. Once this is complete the kidney is placed in a plastic bag and is delivered out of your abdomen via a small incision. The kidney is then sent to the laboratory to be analysed. The incisions are then closed using stitches which will dissolve in about 4 weeks.

The procedure will take about 2 hours.





Three or four 1-cm incisions in laparoscopic nephrectomy



A long surgical incision in open nephrectomy

Laparoscopic Nephroureterectomy

This procedure involves similar steps to the laparoscopic nephrectomy (above), however once the kidney has been dissected free the ureter is dissected all the way down to the bladder. Once this is done the ureter is cut and removed in continuity with the kidney.

In some cases, if the ureter cannot be dissected laparoscopically then a small midline incision is made in the abdomen to dissect out the ureter.

Once the kidney and ureter have been removed it is sent to the laboratory to be analysed. The incisions are closed with dissolving stitches.

The procedure takes about 3 hours.

What can I expect after the operation is completed?

You will wake up in the recovery area in your bed. When the nurses in the recovery area are happy with your condition a nurse from the ward will take you back to the ward.

Once on the ward, you will be observed closely by the nursing staff. Regular observations will be done to ensure that you are recovering well.

The following day, you will be encouraged to sit out of bed and will be given a light diet. As your mobility improves the catheter from your bladder will be removed. Once you are able to eat and drink normally and can be reasonably independent with your activities, you can be discharged home.

You can expect to be discharged home after about 3 days.

What are the possible complications of a laparoscopic nephrectomy / nephroureterectomy?

Dr Vasudevan will try to make the operation as safe as possible but sometimes complications can happen.

The possible complications include:

- Anaesthetic complications- The anaesthetist will discuss this with you.
- Bleeding – Blood loss during the procedure is commonly minimal, usually less than 100ml. it is rare (2%) to require a blood transfusion. If you do not consent to a blood transfusion, please inform Dr Vasudevan prior to surgery.
- Injury to adjacent organs – The kidneys are close to a number of important organs such as liver, spleen and bowel. Although rare, accidental damage to these organs may occur. If

damage does occur further surgical correction may be required.

- Hernia – This is where a part of the abdominal contents protrudes through a weak section at the keyhole incision site. This is rare, but if you notice a bulge or pain at the incision site further investigation and correction may be needed.
- Conversion to open surgery – Although uncommon, the surgical procedure may require conversion to a standard open procedure if difficulty is encountered during the laparoscopic procedure. This will require a larger open incision and longer recovery period in hospital and at home.
- Deep Vein thrombosis – This is a blood clot in your leg. It is rare (0.7%). If present it can cause pain, swelling or redness in your leg. If you notice these symptoms please inform Dr Vasudevan and further investigations will be needed and if confirmed will need blood thinning medications.
- Pulmonary Embolus- This is a blood clot in the lung and is extremely rare. It gets there when a piece of blood clot breaks off from a clot in the leg and by moving through the blood stream lodges itself in the lung. It can cause shortness of breath and chest pain. If you experience such symptoms please call an ambulance and present to the nearest emergency department.
- Infection – Antibiotics are given during the surgery to minimise the chance of infection in the post-operative period. If despite this you notice any symptoms of an infection such as redness to the wound, fever, discharge from the wound or pain on urination please inform Dr Vasudevan. If infection is confirmed antibiotics will be given to treat it.

How soon will I recover?

- Pain control – You may have some discomfort at the sites of incisions for a few days. Paracetamol should be sufficient to control your pain. If the pain is excessive let Dr Vasudevan know.
- Showering – You may shower as per normal when you return home. The wound sites can get wet, but must be padded dry after showering. Tub baths are not recommended in the first 2 weeks after surgery as this will soak the incisions and increase risk of infections
- Activity – Taking walks is advisable. Prolonged sitting or lying in bed should be avoided. Climbing stairs is allowed but done slowly. Driving should be avoided for 1 to 2 weeks. Do not lift heavy items or do vigorous exercise for 6 weeks. You can return to work in about 4 weeks.

Follow-up appointment with Dr Vasudevan

Once discharged from hospital please arrange a follow-up appointment with Dr Vasudevan for about 6 weeks after surgery.

During this appointment he will assess your incisions, discuss the result of your kidney specimen and arrange any further treatment if required.

Regular follow-up of the contralateral good kidney is required with periodic ultrasound and blood tests. Dr Vasudevan will arrange for this in your follow-up visit.