

## Operation Information

### Laparoscopic Nephrectomy (Radical/ Partial)

#### Introduction

Kidneys are fist-sized organs located near the back of the upper abdomen that filter wastes and excess fluid from blood through urine production. Laparoscopic radical nephrectomy (LRN) is a minimally invasive surgery to excise the whole kidney, while partial nephrectomy involves excision of part of a kidney.

#### Indications

1. Kidney mass
2. Non-functioning kidney caused by urinary stones, infection, lack of blood supply, abnormal kidney structure or traumatic injury.

#### Outcomes

The operation is a surgical intervention to remove the entire (radical nephrectomy) or part (partial nephrectomy) of kidney.

#### Procedures

1. The operation is performed under general anaesthesia.
2. The working space can be within or behind the peritoneal cavity. Access to the working space is achieved by through small incisions. The working space is distended with gas insufflation. Small ports (channels) are inserted through skin into this working space. A lens laparoscope and surgical instruments are passed through the ports. Surgical operation is performed under video monitoring through the laparoscope.
3. The kidney is separated from the adjacent organs.
4. The blood supply to kidney is isolated and tied off. The ureter is dissected and tied off.
5. The kidney is removed either with or without its surrounding tissues.
6. For partial nephrectomy, a stent (plastic tube) may be placed internally from the bladder to kidney to help healing.
7. The incision is closed with staples or sutures.
8. A drain may be inserted and sutured in place that allows excess fluids to drain out of the body.
9. A urinary catheter is put in to drain urine from the bladder and monitor the urine output.

#### Possible Risks and Complications

1. Wound complications
2. Excessive bleeding (May need transfusion)
3. Damage to adjacent organs requiring further surgical treatment
4. Intestinal obstruction or paralytic ileus
5. Deterioration of renal function requiring dialysis
6. Entry into lung cavity requiring insertion of a temporary drainage tube
7. Mortality (<1%)
8. In the setting of clinical diagnosis of renal mass, the histological abnormality may subsequently be shown not to be cancer

\*\* The risks listed above are in general terms and the possibility of complications is not exhaustive. Please understand that even though all operations are carried out with utmost professionalism and care this does not rule out the possibility of complications arising. In the event of peripheral organ damage or post-operative haemorrhage or leakage, further operations may be required.

## **Pre-operative Preparations**

1. Good hygiene can prevent surgical wound infection. Therefore, we advise you to clean up yourself on the day of operation.
2. The procedure and possible complications will be explained by the doctor and a consent form must be signed prior to the operation.
3. Please inform the doctor and nurse all your past medical history, previous surgical operations, current medication and any complication with drug or anaesthesia. Please inform doctor if you are taking medications that affect blood coagulation, such as Aspirin, Warfarin, Xarelto or Pradaxa and Chinese medication.
4. Nurse will supply surgical soap to you for washing the operation site as necessary.
5. Your doctor would use surgical marker to mark the side of operation, and please do not wash off the marking.
6. No food or drink six hours before operation.
7. Please change to surgical gown after removing all belongings including undergarments, dentures, jewellery and contact lenses.
8. Please empty your bladder before the operation.

## **Post-operative Instructions**

### General

1. After general anaesthesia, you may:
  - experience discomfort in the throat after tracheal intubation.
  - experience side effects of anaesthesia includes feeling tired, drowsy, nausea or vomiting. Inform the nurse if symptoms persist or worsen.
2. Please inform the nurse for any wound pain. Analgesics may be given.

### Wound Care

1. Mild wound bleeding may occur. Sutures or staples will be removed in 7 to 10 days when the wound heals completely.
2. The small drain tube and indwelling urinary catheter will be removed in a few days after the surgery.
3. The stent will be removed about 4 to 12 weeks after the surgery.

### Diet

1. Keep fasting until the bowel motion return, the timing of resuming diet would depend on the progress and instruct by your doctor.
2. Diet would step up progressively from clear fluid, congee to solid food.

### Activities

1. You can resume normal activity gradually. Light activity can start 24 to 48 hours after operation.
2. Early ambulation and deep breathing exercise can help to reduce chest infection or pulmonary embolism.

## **Advices on Discharge**

1. The hospital stay is typically 4 to 7 days and full recovery may take about 6 weeks, which may vary with health condition of the patient and the type of surgical procedure.
2. Heavy lifting, strenuous activities or physical sports should be avoided for 6 to 8 weeks after the operation.
3. Immediately consult your doctor or return to hospital for professional attention in the event of massive bleeding, severe pain or signs of infection with redness, swelling or heat over the wound, shivering, high fever over 38°C or 100°F, or any other unusual symptoms etc.
4. Any follow-up consultations should be attended as scheduled.

## **Care with Caution to Keep Kidney Healthy**

1. Take anti-hypertensive medications as prescribed by the doctor.
2. Maintain a well-balanced diet with low-protein, low-salt intake.
3. Avoid alcoholic and caffeine drinks.
4. Keep up regular physical exercises.

Should there be any enquiries or concerns, please consult the attending doctor.

Under the professional care of the doctor, you will gradually recover. We wish you all the best during your treatment and recovery.

If you have any questions after reading the entire leaflet, please write them down in the spaces provided in order for the doctor to further follow-up.

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Compiled by Union Hospital Operating Theatre (OT) Governance Committee

The above information is for reference only, please enquire your physician for details  
Our Hospital reserves the RIGHT to amend any information in this leaflet without prior notification