

Robotic, Laparoscopic And Open Nephrectomy

What Is A Nephrectomy?

A nephrectomy is a surgical procedure to remove all or part of a kidney. This operation can be performed for various medical reasons, including treating certain diseases, disorders, or injuries affecting the kidney. The surgery can be performed in different ways, depending on the patient's condition and the surgeon's preference.

What Does A Nephrectomy Treat?

A nephrectomy is used to treat several conditions, including:

- Kidney cancer.
- Non-functioning or severely damaged kidneys.
- Chronic kidney infections.
- Severe kidney trauma.
- Polycystic kidney disease.
- Kidney donation for transplant

Types of Nephrectomy

- **Robotic nephrectomy:** This is a minimally invasive surgery where the surgeon uses robotic instruments to remove the kidney through small incisions. The robotic system provides enhanced precision, flexibility, and control.
- **Laparoscopic nephrectomy:** Another minimally invasive technique, laparoscopic nephrectomy involves using a laparoscope (a thin tube with a camera and light) to guide the surgeon in removing the kidney through small incisions.
- **Open nephrectomy:** In this traditional approach, the surgeon makes a larger incision in the side or abdomen to access and remove the kidney. This method may be necessary for larger tumours or more complex cases.

How To Prepare For Your Treatment

Preparation for a nephrectomy involves several steps:

- **Medical evaluation:** Undergo a thorough medical evaluation, including blood tests, imaging studies, and possibly an electrocardiogram (ECG).
- **Medications:** Inform your doctor about all medications you are taking. You may need to stop certain medications, especially blood thinners, before surgery.
- **Diet and fasting:** Follow your surgeon's instructions regarding diet and fasting before the procedure. Typically, you may need to fast for at least 8 hours prior to the surgery.

- **Smoking and alcohol:** Avoid smoking and limit alcohol consumption before surgery, as these can affect healing and recovery.
- **Preoperative instructions:** Follow all preoperative instructions given by your healthcare team, including guidelines on bathing and preparing your surgical site.

How Long Does The Treatment Process Take?

The duration of the nephrectomy procedure depends on the type of surgery performed:

- **Robotic or laparoscopic nephrectomy:** These procedures typically take 3 to 4 hours.
- **Open nephrectomy:** This surgery may take 2 to 4 hours, depending on the complexity of the case.

What Happens After Treatment?

After a nephrectomy, the recovery process includes:

- **Hospital stay:** You will likely stay in the hospital for a few days. Minimally invasive surgeries may have shorter hospital stays compared to open nephrectomies.
- **Pain management:** Pain and discomfort are common after surgery, and you will be given pain medications to manage this.
- **Monitoring:** Your vital signs and kidney function will be closely monitored. You may have a urinary catheter temporarily.
- **Activity:** Gradually increase your activity level as recommended by your healthcare team. Avoid heavy lifting and strenuous activities for several weeks.
- **Follow-up appointments:** Attend all follow-up appointments to ensure proper healing and to monitor kidney function.

Nephrectomy For Kidney Conditions

Nephrectomy is a critical treatment for conditions such as kidney cancer, severe kidney infections, and chronic kidney damage. The surgical removal of a diseased or damaged kidney can alleviate symptoms, prevent further complications, and, in the case of kidney cancer, potentially save lives.

By understanding the types of nephrectomy, how to prepare, and what to expect during recovery, patients can approach their treatment with confidence and clarity, maximising their chances of a successful outcome.