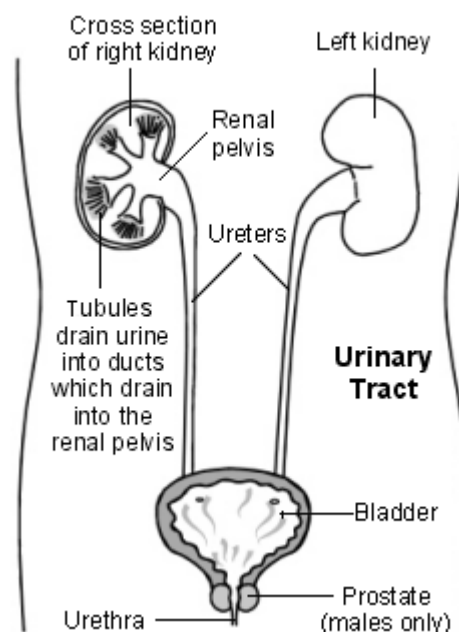


# Patient Information

**Urology**

**Nephrectomy and  
Nephroureterectomy – The  
Enhanced Recovery  
Programme.**

Most people have two kidneys, one at each side at the back of the abdomen. They filter the blood in your body to remove waste products, which are passed out of the body in your urine. Urine is carried by a foot long tube the width of a pen called the ureter, leading from each kidney to the bladder. When the bladder is full, urine passes out of your body, through a tube called the urethra.



## **Why do I need a Nephrectomy?**

Nephrectomy is the medical term for the surgical removal of a kidney.

A kidney may need to be removed for a number of reasons.

- The kidney may be only partially working, or not working at all. If left in place, it can be a source of repeated infections and pain.
- Infection may have damaged the kidney so that it requires removal.
- A cancer arising within the kidney may have been diagnosed. The usual treatment for this is to remove the affected kidney. (Nephrectomy)
- A cancer within the draining tube (ureter) requiring removal of the tube and the kidney. (Nephroureterectomy)

## **How is the operation performed?**

A kidney is removed either through minimally invasive Laparoscopic Nephrectomy, otherwise known as keyhole surgery, or a large skin incision known as open surgery.

We will refer to each procedure throughout this leaflet as either 'keyhole' or 'open' surgery.

## **Laparoscopic Nephrectomy (Keyhole)**

The more modern laparoscopic method of kidney removal uses 3 or 4 one cm incisions (cuts). A thin tube with a light and a camera on the end (a laparoscope) and surgical instruments can then be passed through these incisions. The camera sends pictures to a TV screen to enable the surgeon to see the kidney and surrounding tissue. At the end of the procedure one of the incisions will be enlarged to 5–8 cms to enable the surgeon to remove the kidney.

If it is difficult to perform the operation well using this approach, it will be completed by using a traditional incision open surgery. The likelihood of this is less than 5%.

The approach to having your operation (either keyhole or open) will have been discussed with you in clinic by the Clinician, so you can make an informed choice.

## **What are the risks of a Nephrectomy?**

The laparoscopic (keyhole) method of kidney removal has been shown to cause less blood loss and fewer complications than the open method. There is a shorter recovery time and possible earlier return to work.

The open surgical approach is now mainly used for complicated cases or kidneys with a very large

tumour over 10 cm. Do ask your surgeon if in any doubt.

## **Common side effects of Laparoscopic Nephrectomy (keyhole)**

1. Some patients experience temporary shoulder tip pain and abdominal bloating for 12 - 48 hours after the operation. This may be due to inflation of the abdominal cavity with gas during the operation.

2. Bleeding can occur during the surgery with keyhole or open surgery so a blood transfusion may be required. The likelihood of this occurring is in 2% of patients with keyhole surgery and more for open surgery.

3. Conversion rate from keyhole surgery to open surgery is 5%.

4. More serious complications such as infection, and damage to surrounding organs i.e. intestines, liver, spleen, pleura are rare. In addition there are the anaesthetic risks, DVT, PE (Deep Vein Thrombosis and pulmonary Embolism). These will be discussed with you by the clinician when you consent to surgery.

You can help yourself to reduce these risks by if necessary stopping smoking, eating a healthy diet, taking regular exercise and being of normal weight for your height as you prepare yourself for surgery.

## **The advantages of keyhole surgery over open surgery are:**

- Reduced blood loss
- Reduced hospital stay
- Reduced complications
- Very small wound and scar
- A rapid recovery.
- An early return to work.

## **The Enhanced Recovery Programme**

The Enhanced Recovery Programme aims to promote your quick recovery after surgery so that you may return to full health as soon as possible. There is evidence to suggest that the earlier you get out of bed and start to eat and drink after surgery, the better. This will help to reduce complications related to the surgery and reduced activity. Other aspects of the programme include good control of your pain and reducing the stress of the operation on your body.

## **Before your operation**

You will have met your Consultant Surgeon in clinic who will talk to you about the reason you need an operation, the benefits and any associated risks. It is important that you understand the information you have been given. If not, please contact your Surgeons secretary or the enhanced recovery nurse.

Your consultant will arrange for you to be seen by a nurse in the pre-assessment clinic. Pre-assessment will assess your fitness for surgery and arrange any further tests that may be needed. This can include an ECG (tracing of your heart rhythm) and blood tests.

## **Getting ready for admission**

There are steps you can take to prepare yourself for surgery and improve your chance of a quick recovery.

These include stopping smoking. Your GP or pharmacist can advise you on nicotine replacements and support if you feel this would help.

Other steps such as eating a healthy diet and cutting down on alcohol intake can help reduce the risk of complications after your surgery.

## **Planning for discharge**

It is a good idea to start planning for your discharge before you come in.

- Is there someone who will be able to collect you from hospital when you are ready to go home? Will they be able to stay with you for a day or two?
- Can someone do some shopping for you and make sure you have everything you need for the first couple of weeks after you return home?
- Perhaps you or a friend or relative could make some meals in advance that could be placed in the freezer or buy in some ready meals or convenience food.
- If you are able, complete the washing and ironing and change the bed sheets before you come in. This means returning to a clean tidy home afterwards. If you live with your partner or family, ask them to make sure the house is clean and tidy before you return home.
- Think about whether you need help with children or pets, not just when you are in hospital but also for a couple of weeks after discharge.

After your surgery you will be encouraged to get dressed in your normal clothes when you are able to. Please try to ensure you have some comfortable clothes to bring in with you. Jogging bottoms or leggings and a t-shirt or casual shirt are ideal.



Please feel free to discuss any of this with your consultant or pre-assessment nurse

### **The day before your operation**

Unless you have been told otherwise, you may eat and drink normally up to 6 hours before your operation and drink water until 2 hours before your operation.

In pre-assessment you will be given “pre-load” drinks. These are sachets that are mixed with water and drunk the evening before and the morning of your surgery. Pre-load drinks are high carbohydrate drinks that reduce the stress on your body caused by fasting before and during your operation.

### **The day of your operation.**

Most people are now admitted on the morning of their operation. You will be asked to come to the Same Day Admissions Unit (SDAU) which is based in The Treatment Centre at Milton Keynes University Hospital. Please bath or shower before you come into hospital.

The nurses in the unit will welcome you and help you to get ready for your operation. It is important to keep warm whilst you are waiting to go to the operating theatre so please bring a dressing gown and slippers or warm socks to wear whilst you are in the SDAU.

Your belongings will be taken care of and taken to the ward when you have had your operation. Please only bring minimal belongings in a small bag and avoid bringing anything valuable in to hospital with you. You will go to theatre from the SDAU. After

your operation you will be taken to the ward where you will be cared for until you are ready to go home.

Your length of stay in hospital will depend on the method of surgery used.

For keyhole surgery: 1 to 2 days

For open procedures: 3 to 5 days.

## **After your operation**

You will be cared for and closely monitored in recovery until you have fully woken up and your pain is well controlled. When nursing staff are happy with your progress, you will be transferred to the ward. Some people will need to be more closely monitored in the High Dependency Unit for a short period before moving to the ward.

A leaflet 'pain relief after surgery' which you will be given with your pre-assessment information pack will explain methods of pain relief which will be discussed by the anaesthetist on the day of your admission. Most patients having this surgery will have a small tube inserted by the wound and in the area of the operation through which local anaesthetic is given through a small continuous balloon pump to keep you comfortable. Your pain and any nausea will be carefully monitored and treated.

You will have a drip going into a vein in your arm and this will remain until you are drinking normally. You will be able to take some oral fluids and food when instructed by the nursing team; this is usually the same day or the following day.

A catheter will be in your bladder so that your urine output can be monitored. This can easily be removed once your surgeon is happy with the function of your remaining kidney. This is normally the morning after your operation. The catheter stays in longer with nephroureterectomy

It is important that you are comfortable enough to get out of bed and walk around. Please let your nurse know if you have pain and they can give you extra pain relief if appropriate.

If you have had keyhole or open surgery your wound stitches may be dissolvable or non-dissolvable materials that require to be removed. This will be discussed with you on discharge from hospital.

You will be allowed home once you are eating and drinking well, moving around, the catheter is removed and when you are passing urine well.

If you have had a Nephroureterectomy then you may go home with a catheter to be removed by the GP or District Nurse.

## **Discharge from hospital**

After major surgery it is important to make arrangements for assistance at home for the first few days.

For the first two weeks after your operation you should get plenty of rest. Make sure you try to have a walk each day. Don't overdo it and gradually increase the distance.

Avoid strenuous exercise for:

Keyhole surgery 4 to 6 weeks

Open surgery for 2 to 3 months

If you are given pain killers to take home, it is important for your recovery that you take them regularly as prescribed.

Bath or shower daily and keep an eye on your abdominal wound for signs of infection. If your wound feels hot to touch, is more painful or there is a discharge, please see your GP.

You can return to your work when you and your doctor feel you are fit and depending on the nature of your job. Usually 2 or 3 weeks off work are needed. If you are unsure about your fitness to return to work please contact your GP.

You can return to driving after 2-3 weeks. You will need to be able to perform an emergency stop without discomfort to be safe before you drive again.

After any surgery you may feel tired for a number of weeks, this is quite normal.

You will be reviewed in the Urology clinic about 6 weeks after your operation.

## Notes

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## **Contacts**

**Enhanced Recovery Nurse (Mon-Fri 8am-4pm)**  
**Eleanor Shield**

01908 996540 or

01908 660033 - Bleep 1833

**Ward 24** 01908 996992

**On-call surgical registrar (at night and weekends)**

01908 660033 – Bleep 1557

**Emergency Department**

01908 243600

**Pre-assessment Unit**

01908 995452

**Same Day Admission Unit**

01908 995468

**We ask for information about you so that you can receive proper care and treatment. This information remains confidential and is stored securely by the Trust in accordance with the provisions of the Data Protection Act 2018/GDPR. Further guidance can be found within our privacy notice at found on our Trust website at [www.mkhospital.nhs.uk](http://www.mkhospital.nhs.uk)**

**Author: Mr Andrews, Mary Norton, Angela Shipley POA**

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