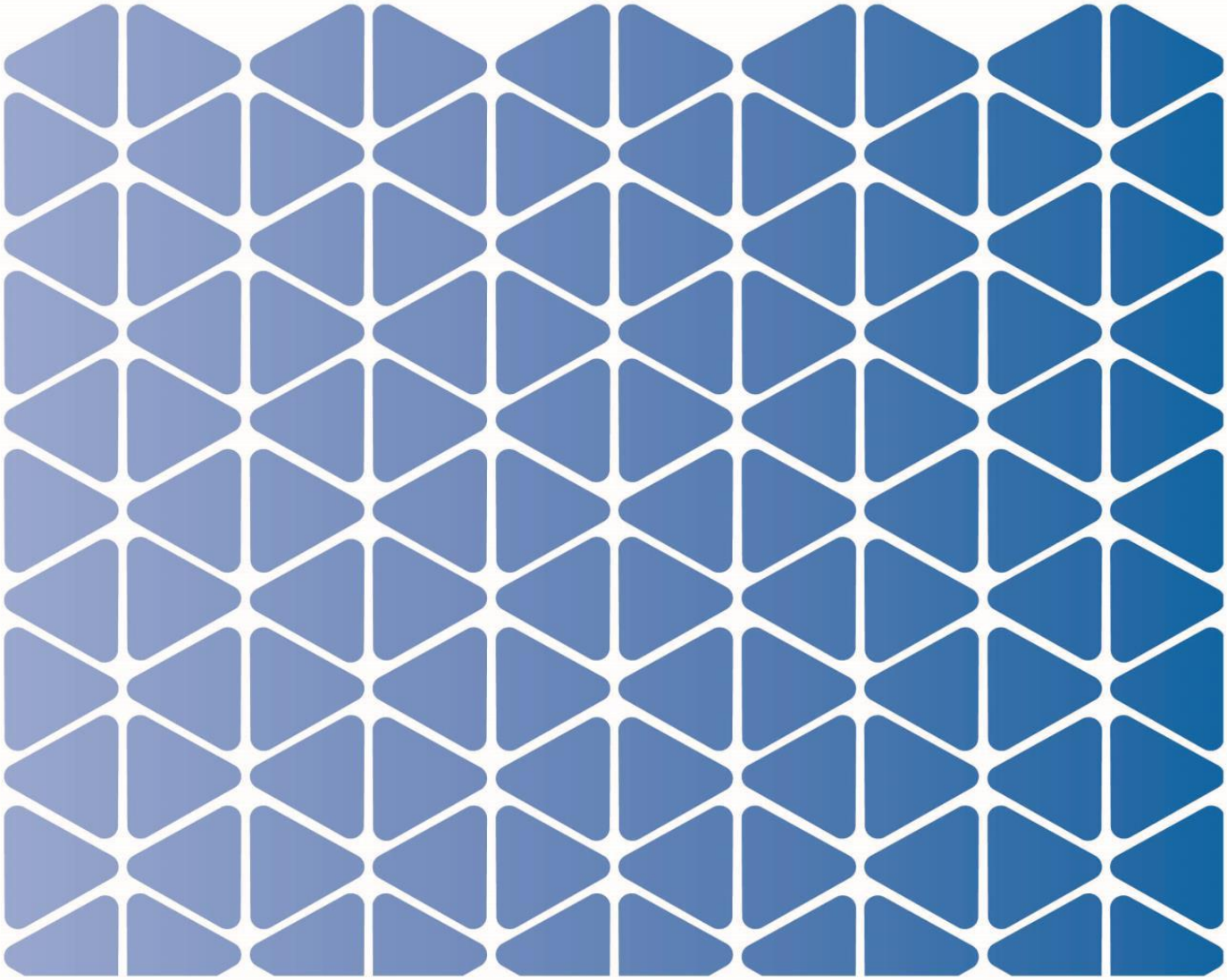
PATIENT INFORMATION

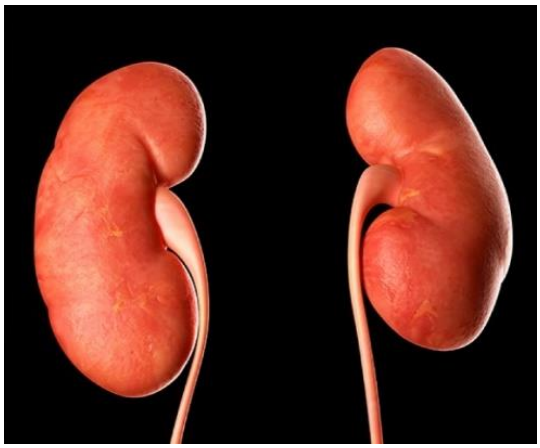
Laparoscopic nephroureterectomy (keyhole removal of the whole kidney and ureter)



Urology Department

Surgical procedure information leaflet

Name of procedure: Laparoscopic nephroureterectomy (keyhole removal of the whole kidney and ureter)



It has been recommended that you have a laparoscopic removal of your kidney and ureter. This involves removal of your kidney through three or four keyhole incisions, using a telescope and operating instruments put into your abdominal (tummy) cavity. One incision will need to be enlarged to remove the kidney.

This leaflet explains some of the benefits, risks and alternatives to the operation. We want you to have an informed choice so you can make the right decision. Please ask your surgical team about anything you do not fully understand or want to be explained in more detail.

We recommend that you read this leaflet carefully. You and your doctor (or other appropriate health professional) will also need to record that you agree to have the procedure by signing a consent form.

Benefits of the procedure

The aim of laparoscopic nephroureterectomy is to remove a tumour-bearing kidney and its ureter, using a telescopic (keyhole) technique, through several small incisions in your abdomen, Sometimes, an additional incision is needed to remove the lower part of the ureter. One of the keyhole incisions needs to be enlarged to remove the kidney and ureter.

Serious or frequent risks

Everything we do in life has risks. This operation is generally a safe surgical procedure. Occasionally complications can arise because of the procedure's invasive nature. The general risks of surgery include problems with:

- breathing (for example, a chest infection);
- the heart (for example, abnormal rhythm or, occasionally, a heart attack); and
- blood clots (for example, in the legs or occasionally in the lung).
- Stroke
- Death

Those specifically related to laparoscopic simple nephrectomy include:

- Common risks (Greater than 1 in10):
  - Pain or discomfort at the site of the operation
  - Shoulder tip pain due to irritation of your diaphragm by the carbon dioxide gas
  - Temporary abdominal bloating (gaseous distension)
  - Risk of tumour recurrence elsewhere in your urinary tract requiring repeated telescopic examinations of your bladder

- Occasional risks (Between 1 in 10 and 1 in 50):
  - Bleeding, infection or significant pain in the wounds
  - Bleeding requiring blood transfusion or conversion to open surgery
  - Need for additional treatment for cancer after the procedure

- Rare risks (Less than 1 in 50):
  - Entry into your lung cavity requiring insertion of a temporary drainage tube
  - Recognised (or unrecognised) injury to organs/blood vessels requiring conversion to open surgery (or deferred open surgery)
  - The abnormality in your kidney or ureter may turn out not to be cancer
  - Involvement or injury to nearby local structures (blood vessels, spleen, liver, lung, pancreas & bowel) requiring more extensive surgery
  - Persistent urine leakage from your bladder requiring prolonged catheterisation or further surgery
  - Anaesthetic or cardiovascular problems possibly requiring intensive care (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack and death)

- Hospital-acquired infection
  - Colonisation with MRSA (0.9% - 1 in 110)
  - MRSA bloodstream infection (0.02% - 1 in 5000)
  - Clostridium difficile bowel infection (0.01% - 1 in 10,000)

The rates for hospital-acquired infection may be greater in high-risk patients, for example those patients

- with long-term drainage tubes;
- who have had a long stay in hospital; or
- who have been admitted to hospital many times.

Most people will not experience any serious complications from their surgery. The risks increase for the elderly, those who are overweight and people who already have heart, chest or other medical conditions such as diabetes or kidney failure.

A skilled team of doctors, nurses and other healthcare workers who are involved in this type of surgery every day will care for you. If problems arise, we will be able to assess them and deal with them appropriately.

Alternative options

- Observation alone – leaving the tumour in your kidney and observing it carefully for any signs of enlargement
- Open nephroureterectomy – removing the whole kidney and ureter through one (or more) abdominal or loin incisions
- Endoscopic control of the tumour – usually using flexible instruments passed up from your bladder and laser treatment to the tumour
- Palliative treatment – using radiotherapy or chemotherapy to control symptoms such as bleeding, if surgery is not appropriate or is deemed too hazardous

Your urologist will discuss the options with you to help your decision.

Your pre-operative assessment

Before you are admitted for your operation, you may be required to attend for a pre-operative assessment, to ensure that you are fit for surgery. It is important that you attend for this appointment to avoid delaying your surgery.

Not all patients require a detailed pre-operative assessment and a health questionnaire is used to determine which patients require a full assessment. You may therefore be asked to complete a health questionnaire immediately after you have been listed for your surgery. The health questionnaire may be on paper or on a tablet/computer. The information required includes all medical conditions, regular medications, allergies to medications and your previous anaesthetic history. The information you give us will be reviewed by the pre-operative assessment team. If you do not require further assessment you will then be given a date for surgery. If you require further assessment you will be given an appointment to attend the pre-operative assessment clinic.

At the clinic, the nursing staff will confirm the medical information you have previously given. You will likely have an examination of your heart and lungs and some further tests may be required, such as a blood test, X-ray, heart test or lung test. If a more detailed assessment or discussion is required you may see an anaesthetist prior to your admission for surgery. This may require an additional appointment.

If you are taking prescribed medicines please bring a copy of your repeat prescription to your appointment and a copy of the operation consent form (if you were provided with a copy at your out-patient appointment).

Following your assessment, the staff will provide you with written information regarding preparation for your surgery and a point of contact. It is important that you follow the fasting instructions given on your admission letter.

Being admitted to the ward

You will usually be admitted on the day of your surgery. You will be welcomed on to the ward and your details checked. We will fasten an armband containing your hospital information to your wrist.

You will usually be asked to continue with your normal medication during your stay in hospital, so please bring it with you, in the green bag provided for you at pre-operative assessment.

Your anaesthetic

Your surgery will usually be carried out under a general anaesthetic. This means that you will be asleep during your operation and you will feel nothing. Alternatively a spinal anaesthetic (a spinal) may be used for this type of operation.

Before you come into hospital

There are some things you can do to prepare yourself for your operation and reduce the chance of difficulties with the anaesthetic.

- If you smoke, consider giving up for several weeks before the operation. Smoking reduces the amount of oxygen in your blood and increases the risks of breathing problems during and after an operation.
- If you are overweight, many of the risks of anaesthesia are increased. Reducing your weight will help.
- If you have loose or broken teeth or crowns that are not secure, you may want to visit your dentist for treatment. The anaesthetist will usually want to put an airway in your mouth to help you breathe. If your teeth are not secure, they may be damaged.
- If you have long-standing medical problems, such as diabetes, hypertension (high blood pressure), asthma or epilepsy, you should consider asking your GP to give you a check-up.
- If you become unwell or develop a cough or cold the week before your surgery please contact the pre-operative assessment team on the number provided. Depending on your illness and how urgent your surgery is, we may need to delay your operation as it may be better for you to recover from this illness before your surgery.

Your pre-surgery visit by the anaesthetist

After you come into hospital, the anaesthetist will come to see you and ask you questions about:

- your general health and fitness;
- any serious illnesses you have had;
- any problems with previous anaesthetics;
- medicines you are taking;
- allergies you have;
- chest pain;
- shortness of breath;
- heartburn;
- problems with moving your neck or opening your mouth; and
- any loose teeth, caps, crowns or bridges.

Your anaesthetist will discuss with you the different methods of anaesthesia they can use. After talking about the benefits, risks and your preferences, you can then decide together what is best for you.

On the day of your operation

Nothing to eat and drink (nil by mouth)

It is important that you follow the instructions we give you about eating and drinking. We will ask you not to eat or drink anything for six hours before your operation. This is because any food or liquid in your stomach could come up into the back of your throat and go into your lungs while you are being anaesthetised. You may take a few sips of plain water up to two hours before your operation so you can take any medication tablets.

Your normal medicines

Continue to take your normal medicines up to and including the day of your surgery. If we do not want you to take your normal medication, your surgeon or anaesthetist will explain what you should do. It is important to let us know if you are taking anticoagulant drugs (for example, warfarin, aspirin, clopidogrel, persantin or dabigatran).

Your anaesthetic

When it is time for your operation, a member of staff will take you from the ward to the operating theatre. They will take you into the anaesthetic room and the anaesthetist will get you ready for your anaesthetic.

To monitor you during your operation, your anaesthetist will attach you to a machine to watch your heart, your blood pressure and the oxygen level in your blood.

General anaesthetic

General anaesthesia usually starts with an injection of medicine into a vein. A thin plastic tube (venflon) will be placed in a vein in your arm or hand and the medicines will be injected through the tube. Sometimes you will be asked to breathe a mixture of gases and oxygen through a mask to give the same effect.

Spinal anaesthetic

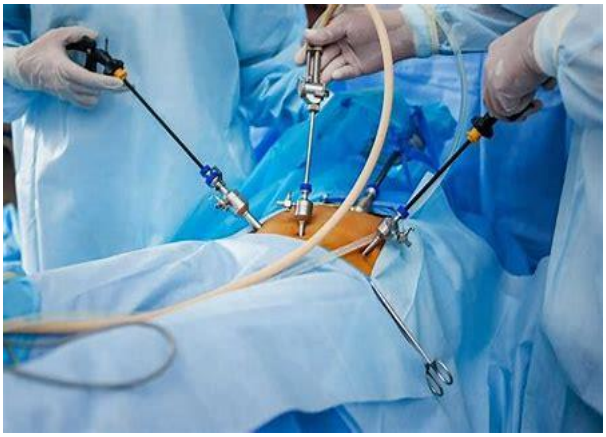
A spinal anaesthetic involves the injection of a local anaesthetic drug through a needle into the small of your back to numb the nerves from the waist down to the toes for 2 – 3 hours. You will be asked to either sit on the side of the bed with your feet on a low stool or lie on your side, curled up with your knees tucked up towards your chest. You will remain awake during this procedure. You may feel some discomfort in your lower back or legs whilst the anaesthetic is being injected. The anaesthetic staff will support and reassure you during the procedure. As the spinal begins to take effect your anaesthetist will measure its progress and test its effectiveness. A spinal should cause you no

unpleasant feelings and usually takes only a few minutes to perform. Once the injection is finished you will normally be asked to lie flat as the spinal works quickly and is usually effective within 5 – 10 minutes. Your skin will initially feel numb to touch and your leg muscles will feel weak. Once the injection is working fully you will be unable to move your legs or feel any pain below the waist.

Your anaesthetist will ensure that you are comfortable throughout the procedure.

Details of the procedure

- We carry out the procedure under a general anaesthetic meaning that you will be asleep throughout
- We usually give you an injection of antibiotics before the procedure, after you have been checked for any allergies
- We inflate your abdominal (tummy) cavity by injecting carbon dioxide gas using a special needle
- We place a telescope & operating instruments into your abdominal cavity through three or four small incisions (pictured)



- We free your kidney and the upper ureter using these instruments
- We disconnect the remaining lower ureter using either a telescope passed into bladder or a separate incision (cut) in your lower abdomen
- We remove the kidney and ureter from your abdomen by enlarging one of the port incisions
- We close the wounds with absorbable stitches or clips which normally disappear within two to three weeks and inject local anaesthetic into the wounds for pain relief
- We put a catheter in your bladder to monitor your urine output; this is removed as soon as you are mobile.
- We usually put a drain down to the area where the kidney was removed, to prevent fluid accumulation; this is removed when it stops draining
- The procedure takes from three to four hours to complete, depending on complexity
- You can expect, on average, to be in hospital for three to five days

Following major abdominal surgery, some urology units have introduced Enhanced Recovery Pathways. These actually start before you are admitted to hospital. After your surgery, they are designed to speed your recovery, shorten your time in hospital and reduce your risk of re-admission. We will encourage you to get up and about as soon as possible. This reduces the risk of blood clots in your legs and helps your bowel to start working again. You will sit out in a chair shortly after the procedure and be shown deep breathing/leg exercises. We will encourage you to start drinking and eating as soon as possible.

Pain relief after surgery

Pain relief is important to aid your recovery from surgery. This may be in the form of tablets, suppositories or injections. Once you are comfortable and have recovered safely from your anaesthetic, we will take you back to the ward. The ward staff will continue to monitor you and assess your pain relief. They will ask you to describe any pain you have using the following scale.

0 = No pain
1 = Mild pain
2 = Moderate pain
3 = Severe pain

It is important that you report any pain you have as soon as you experience it.

What are the risks?

The risk to you as an individual will depend on whether you have any other illness, personal factors, such as smoking or being overweight and surgery that is complicated or prolonged.

General anaesthesia is safer than it has ever been. If you are normally fit and well, your risk of dying from any cause while under anaesthetic is less than one in 250,000. This is 25 times less likely than dying in a car accident. The side effects of having a general anaesthetic include drowsiness, nausea (feeling sick), muscle pain, sore throat and headache. There is also a small risk of dental damage.

The side effects of having a spinal anaesthetic are headache, low blood pressure, itching of the skin due to the drugs injected and temporary difficulty in passing urine. Rare complications of a spinal anaesthetic are temporary loss of sensation in your legs, 'pins and needles' or muscle weakness in your legs. Permanent damage to the nerves is very rare.

Your anaesthetist will discuss the risks with you and will be happy to answer any questions you may have.

After your surgery

- You will be taken to the recovery room to the general or day care ward. You will need to rest until the effects of the anaesthetic have worn off. You will have a drip in your arm to keep you well-hydrated.
- Your anaesthetist will arrange for you to have painkillers for the first few days after the operation.
- You will be encouraged to get out of bed and move around as soon as possible, as this helps prevent chest infections and blood clots.
- Your surgical team will assess your progress and answer any questions you have about the operation.

Catheter care

After the catheter is removed it may take a while to control your urine flow. You may feel a constant urge to urinate, and may even have some leakage. Do not worry, this is normal and will improve. You may experience some stinging and burning the first few times you pass urine after the catheter is removed. Drinking plenty of non-alcoholic fluids can help to ease this.

You will be encouraged to drink 2 -3 litres of fluid a day. Do not restrict your fluid intake because you are worried about leaking. You may be asked to use a bottle to collect your urine so that the volume can be recorded.

Once you have gained sufficient bladder control you will be ready to go home. Your urine may still be slightly pink. If possible try to arrange for someone to drive you home.

Leaving hospital

Length of stay

How long you will be in hospital varies from patient to patient and depends on how quickly you recover from the operation and the anaesthetic. Most patients having this type of surgery will leave hospital in 3 – 4 days.

Medication when you leave hospital

Before you leave hospital the pharmacy will give you any extra medication that you need to take when you are at home.

Convalescence

After leaving hospital you should take things easy for a few weeks. It is common to feel tired and low during this time. This is natural and will pass.

During your convalescence it is not unusual to experience some twinges of discomfort in your incisions which may go on for several weeks; this can used be controlled by simple painkillers such as paracetamol.

Diet

You do not need to follow a special diet. Fruit, vegetables and other high fibre foods will help avoid constipation.

Exercise

You should do lighter exercise, such as walking and light housework after 3-4 weeks. You can increase your exercise gradually as you feel well enough.

Sex

You can resume usual sexual activity when you are comfortable.

Driving

Do not drive for the first 6 weeks after the operation. It is your responsibility to check with your insurance company when your cover restarts after an operation.

Work

How long you will need to be away from work varies depending on:

- How quickly you recover
- Whether or not your work is physical

Most people will be able to return to work most people can return to work after two to four weeks after the operation, or longer in the case of heavy manual labour.

Outpatient appointment

- The pathology results on your kidney will be discussed in a multidisciplinary team (MDT) meeting
- You and your GP will be informed of the results at the earliest possible opportunity
- We normally arrange a follow-up appointment for you once the pathology results are available appointment.

Contact details

If you have any specific concerns that you feel have not been answered and need explaining, please contact the following.

- Alexandra Hospital:
  - Secretaries: 01527 512155
  - Ward 10 Nursing Staff: 01527 512101 or 01527 503030 ext: 42101 or 44072
  - Ward 18 Nursing Staff: 01527 512106 or 01527 503030 ext: 42106/ 44050
  - Sharon Banyard, Urology Nurse Specialist: 01527 503030 ext: 45746
  - Jackie Askew, Uro-oncology Macmillan Nurse Specialist: 01527 503030 ext: 44150
- Kidderminster Hospital and Treatment Centre:
  - Secretaries: 01562 513097
  - Penny Templey, Urology Nurse Specialist: 01562 512328
  - Sarah Holloway and Kerry Holden, Nurse Specialist – Survivorship Programme: 01562 512328
- Worcestershire Royal Hospital:
  - Secretaries: 01905 760766
  - Helen Worth and Lisa Hammond, Urology Nurse Specialists: 01905 760875

Other information

The following internet websites contain information that you may find useful.

- www.worcsacute.nhs.uk
  Worcestershire Acute Hospitals NHS Trust
- www.patient.co.uk
  Information fact sheets on health and disease.
- www.nhsdirect.nhs.uk
  On-line Health Encyclopaedia and Best Treatments website.
- www.baus.org.uk
  Information from The British Association of Urological Surgeons

If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PET@nhs.net

Opening times:

The PALS telephone lines are open Monday to Thursday from 8.30am to 4.30pm and Friday: 8.30am to 4.00pm. Please be aware that a voicemail service is in use at busy times, but messages will be returned as quickly as possible.

If you are unable to understand this leaflet, please communicate with a member of staff.