York Teaching Hospital
NHS Foundation Trust

Laparoscopic Nephrectomy

Information for patients, relatives and carers

Department of Urology

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The following information is a guide as to what to expect during and after this operation. Everyone is different and will recover at different rates. It is therefore impossible to put everything in writing. This leaflet covers the most common questions asked by patients about their recovery and aims to give you a guide as to what can normally be expected.

Why am I having a nephrectomy?

Your doctor will have already discussed with you the medical problem with your kidney which needs removing.

Nephrectomy is often performed to remove a cancerous growth, or suspected cancer in the kidney. Sometimes the kidney is removed because it has stopped functioning properly.

What are the benefits to having laparoscopic rather than open surgery?

- Less blood loss during the operation.
- Less pain in the post-operative period.
- Quicker post-operative recovery
- Shorter length of time in hospital.
- Shorter recovery time at home, with quicker return to normal daily activities.

If your kidney is being removed because of a kidney cancer, the success of laparoscopic nephrectomy is identical to an open nephrectomy as far as long term survival and cancer cure rates are concerned.

What are the risks of having a Laparoscopic Nephrectomy?

Almost all patients

- Pain or discomfort at the incision site
- Temporary abdominal bloating (gaseous distension)

Common (Between 1 in 2 and 1 in 10 patients)

- Shoulder tip pain due to irritation of your diaphragm by the carbon dioxide gas
- Temporary abdominal bloating (gaseous distension)

Occasional (Between 1 in 10 and 1 in 50 patients)

- Bleeding, infection, pain or hernia at the incision site requiring further treatment
- Recognised (or unrecognised) injury to organs/blood vessels requiring conversion to open surgery (or deferred open surgery)

Rare (Between 1 in 50 and 1 in 250 patients)

- Bleeding requiring transfusion or conversion to open surgery
- Entry into your lung cavity requiring insertion of a temporary drainage tube
- The abnormality in the kidney may turn out not to be cancer
- Involvement or injury to nearby local structures (blood vessels, spleen, liver, lung, pancreas and bowel) requiring more extensive surgery

Very rare (less than 1%)

- Dialysis may be required to stabilise your kidney function if your other kidney does not function well
- Anaesthetic or cardiovascular problems potentially requiring an admission to Intensive Care, such as a chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack or death.

Hospital-Acquired Infection

- Colonisation with MRSA (0.9% - 1 in 110)
- Clostridium difficile bowel infection (0.2% - 1 in 500)
- MRSA bloodstream infection (0.08% - 1 in 1250)

Like any operation, there is a risk of death from the procedure. This procedure carried a risk of death in less than 1 in 100 patients.

The likelihood of a complication increases if you are:

- Over 70 years of age
- Overweight
- A smoker
- A heavy drinker

If this operation is being performed for a kidney cancer, then the cancer may not be cured with the removal of the kidney. No treatment can promise to cure the cancer. You can discuss the risk of the cancer coming back, how your condition will be monitored and what further treatment options there are with your consultant.

What are the alternatives to having a Laparoscopic Nephrectomy?

- A traditional nephrectomy using a larger “open” cut
- Small kidney tumours can sometimes be removed or destroyed without losing the rest of the kidney. Removal entails an operation called partial nephrectomy. Destruction can be achieved by a procedure under local or general anaesthetic e.g. radio frequency ablation (RFA) or cryotherapy
- Embolisation
- Kidney cancer that has spread to other parts of the body (metastatic kidney cancer) may be treated by medical therapy alone
- No treatment at all

What does a Laparoscopic Nephrectomy involve?

Laparoscopic Nephrectomy is an operation to remove a kidney through a number of small cuts made in your abdomen. This type of surgery is also known as keyhole surgery.

Once you are asleep, you will be taken through to the operating theatre and positioned on the operating table. A fine rubber tube, called a catheter, will be placed in your bladder via your urethra, (water pipe). This is not only used to monitor your urine output during and after your operation but it also deflates your bladder during the operation and stops it from getting in the way.

A small cut, about one centimetre long, is made in your abdomen next to your belly button and a plastic tube, called a port, is passed through it into your abdominal cavity. Carbon dioxide gas is then passed through the port to inflate your abdominal cavity. This creates enough space to allow the operation to be carried out.

A narrow telescope is then passed through this port to look inside your abdomen. Two or three further small cuts are then made on your abdomen, on the side of the kidney to be removed, and ports placed through each of these cuts.

Once all the necessary ports have been placed, special narrow instruments are then passed through them to perform the operation and remove the diseased kidney. The steps taken to disconnect the kidney from its blood supply and surroundings are the same as for an open operation. The advantage of a laparoscopic approach is that the kidney can be removed through a much smaller cut.

The whole kidney is then removed from your body through one of the cuts made. The cut is lengthened to allow the removal of your kidney; usually this is between five and seven centimetres long. In some cases, once the kidney has been removed from your body, a rubber drain is then passed through one of the port sites and stitched into place. This drain allows any free blood or tissue fluid to leave your body. The drain will typically be removed between 24 and 36 hours after your operation. All the ports are then removed and the wounds will be closed with dissolvable stitches underneath your skin. Small dressings are placed over the wounds.

What happens before my operation?

You will see the Urology Consultant or Registrar in the Out Patient Department who will do your operation. A planned date for your surgery will be made. If you are having your kidney removed because you have a growth or a cancer in your kidney you will also be given the contact details of the urology specialist nurse. Please contact the urology specialist nurse if you need to talk to someone before your operation.

Before your operation, you will be asked to attend a pre-assessment clinic. At the clinic we will be able to assess your general fitness for the operation. You will have blood, heart and lung tests carried out. You will have the opportunity to ask more questions about your operation if you feel you need to. It may also be necessary for you to undergo an anaesthetic assessment before your operation. This involves an assessment of your heart and lung function whilst you are pedalling on an exercise bicycle. By doing this test it will give us information on the best place for you to be cared for immediately after your operation.

You should also be given another leaflet called “What you need to know when coming into hospital for surgery” that has detailed information on anaesthetics and their side effects.

You will receive written information outlining the admission process for the day of your operation. This will cover where you need to present yourself, and when you should have last had anything to eat or drink. If you have any questions regarding the admission process, you should contact the Urology Waiting List Office on telephone number 01904 725707 or Ward 27 on telephone number 01904 726027. Any questions regarding your medication, for example when to stop your warfarin, if you are taking it, should have been answered at your pre assessment visit.

On the day of your operation, you will come to the Admissions Ward, currently Ward 27. You will be seen by a member of the nursing staff. It may be necessary for you to have more blood tests at this time. The consultant performing your operation will see you and go through the operation with you again. Any questions you may have will be answered. The consultant will make sure that you:

- Fully understand the operation
- Fully understand the risks and benefits of the operation and
- Are aware of alternative to having a laparoscopic nephrectomy

The consultant will go through the consent form (FYCON104-1 Laparoscopic Nephrectomy) with you and if you are prepared to go through the operation and ask you to sign it. A copy of the consent form will be offered to you for your records. Your consultant will also mark which side of your body, typically with an arrow on the skin over your hip region, with a pen to confirm the side of your body where the kidney is to be removed from.

You will also be seen by an anaesthetist at this time. They will discuss the anaesthetic side of things with you, including pain relief following your operation. They will check when you last had something to eat and drink. Please note that you should not eat anything six hours before your operation. You can drink clear fluids up to two hours before your operation. It is important that you follow these instructions exactly.

Shortly before your operation, you will be asked to change into a theatre gown. Your personal belongings will be checked and stored in a box, which is then locked and transferred to the ward you will go to after your operation. You will be taken to the operating theatre by a nurse from the ward. You will initially go to the anaesthetic room, where again you will meet the anaesthetist as well as two to three members of the theatre team. Your anaesthetic will be given to you here.

What happens after my operation?

The anaesthetist will wake you up from your anaesthetic and you will be taken to the recovery ward where you will be closely monitored by a specialist nurse until you are ready to go to the general ward.

When you wake up from your anaesthetic you will have a drip in your arm to supply you with some fluid. The drip will usually stay in place for between one and two days.

You will have a bladder catheter that was put in during your operation. This is there so that the medical staff can monitor the amount of urine produced by your remaining kidney. The catheter is typically removed once you are comfortable and more mobile.

In the days following your operation, your nurses will measure your temperature, breathing rate, pulse, blood pressure and urine output regularly. To reduce the risk of any blood clots forming in your legs, you will be encouraged to mobilise from the first day after your operation. You will also be asked to wear compression stockings, unless there is a specific medical reason that you should not.

You will be given a daily injection of a blood thinning drug called Fragmin (or Clexane) until you are discharged from hospital. Unless you take warfarin, you (and/or your partner) will be instructed on how to administer this before you leave hospital, as you will need to continue this treatment for a period of four weeks from the date of your operation.

Your intestines may not work for a day or two after your operation, so you may feel bloated and have wind pains, these are not uncommon. Usually your consultant will suggest that you eat and drink as normal within the first couple of days after your operation.

How much pain will I have?

You may also have a very fine plastic tube in your back called an epidural. This will deliver pain relief to you in the days following your operation. This is normally removed two to three days after your operation. Patients usually have some pain around their wounds after their operation which should quickly settle as the days go by. You may be given some painkillers to take home from hospital with you if you need them. Please make sure that you read the instructions carefully and take them as directed. You will be asked to take painkillers regularly over the first few days after your operation. This is so that your pain is under control and you recover more quickly. As you begin to feel better, you will not need to take as many painkillers. You should reduce the amount you take gradually rather stopping suddenly.

If your consultant feels that your pain has been controlled in hospital by taking paracetamol, then you will not be given any to take home with you. This is because you can get them easily from your local chemist or shop. You should not mix different types of painkillers unless told to by your doctor. If you experience any nausea, sickness, dizziness or feel faint stop taking the painkillers and contact your GP to discuss an alternative.

If your pain becomes worse after you leave hospital, please make an appointment to see your GP or Practice Nurse.

When can I go home?

The hospital stay for this operation is variable, depending upon your recovery. The earliest will be home the following day, but stays of a few days are not uncommon. Once you are comfortable walking around, eating and drinking, you are generally ready to go home. Typical hospital stay is one to three days.

What happens before I leave the ward?

Your nurse will go through the discharge instructions and paperwork with you and discuss the care that you will need once you are at home. Any new medication that you need will also be explained to you before you are discharged. The nurse will give you the necessary follow up papers and appointments that you need. Please ask if you are unsure about any of these before you go home.

Advice for when you get home

- **Can I bath or shower?**

You may bath or shower as usual. The first time you bath or shower at home you may feel light headed or faint. You should leave the bathroom door unlocked and arrange for someone to check on you regularly to make sure you are OK. You may use any safety equipment that you usually use. You can use your usual toiletries but do not soak your wounds, apply talcum powder or deodorants to them. Adding salt to your bathwater is unnecessary. Pat your wounds dry gently with a clean towel.

- **When can I resume my usual activities?**

This will depend upon your usual level of activity and general health. You can resume your usual activities when you feel ready to. If you try to do something that gives you pain, stop and try again in a few days time. In general, recovery from a laparoscopic operation is quicker than that of the same operation performed through the conventional open route.

Gentle activity after your operation will help your recovery. In particular, it will help you prevent blood clots forming in your legs. Walking is good exercise.

Try a short distance first and then increase your walking time day by day. Rest when you feel tired. There are no restrictions on your leisure, sporting or domestic activities as long as you feel well enough to do them. You are not going to damage any of the internal stitches with exercise, so long as you stop if the exercise causes you any pain. The full recovery period can take four to six weeks after your operation and sometimes may take longer.

- **Will my bowels be affected?**

Due to the change in your usual routine and if you are taking painkillers containing codeine, you may experience a change in your bowel habit. You may become a little constipated. This could take several days to return to normal. Drink plenty of fluids and try to eat a high fibre cereal and wholemeal bread every day. If you feel this is not helping your problem, ask your local pharmacist or GP for advice.

- **When can I drive again?**

You should not drive for about two weeks after your operation. You will be able to drive when it is comfortable for you to sit for a while and you can have a free range of movements in your arms, legs, neck and tummy. You should be able to perform an emergency stop comfortably before setting off driving on the roads.

- **When can I have sexual intercourse again?**

When you feel able to do so comfortably.

- **When can I go back to work?**

Depending on your job, you can usually return to work three to eight weeks after your operation. Your GP will provide you with a sick note if you need one.

What happens with my wounds?

The nurse will explain how your wounds were closed with you. Typically wounds are closed with dissolvable stitches underneath your skin, so that there is nothing that needs removing from the wound afterwards. Occasionally metal staples can be used. The nurse will discuss with you the arrangements for their removal. If your wound dressings need changing after you are discharged from hospital, arrangements will usually be made for the district nurse to change these in the first few days after you have gone home.
You may have some pain and bruising around your wounds which is normal following your operation.

These will improve with time. Bruising will naturally spread out and turn many different colours before disappearing. Your wounds may become hard along the scar. This is due to scar tissue formation, and will settle over time. Sometimes tingling, pulling, numbness and itching are felt in the wounds, which is part of the healing process.

Please contact your GP or Practice Nurse for advice if you experience any of the following:

- Increased redness and swelling around your wound which is hard and painful when you touch it
- If you feel your pain or bruising has worsened
- A cloudy or smelly discharge coming from your wound
- You feel generally unwell or feverish

What should I do if I have any problems or worries about my operation after I have gone home?

If within the first 24 hours after you have gone home you have any problems or worries, please contact the ward from where you were discharged. You should have been provided with a telephone number by the nurse at the time of your discharge. If it is after 24 hours, please contact your GP.

Before you come into hospital for your operation

- Please bring your completed admission form with you, this will have been sent to your through the post in advance.

- Bring your nightwear, slippers and toiletries with you.

- Please bring all the medication you are currently taking with you.

- Bring only essential personal items with you into hospital. You will be asked to take responsibility for your property at all times.

- Make sure you have **not** had anything to eat or drink from the time you have been told not to.

If you become ill, or are unable to keep your admission date for whatever reason, please let the Waiting List Coordinator know as soon as possible by telephoning 01904 725707.
We will then arrange another date for your surgery.

Tell us what you think

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact Mr B Blake-James, Consultant, The York Hospital, Wigginton Road, York, YO31 8HE or telephone 01904 725846.

Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email pals@york.nhs.uk.

An answer phone is available out of hours.

Leaflets in alternative languages or formats

Please telephone or email if you require this information in a different language or format, for example Braille, large print or audio.

如果你要求本資 不同的 或 式提供，電 或發電

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