

Department of Renal Medicine & Transplantation

Live Donor Nephrectomy: Your Operation

This information is for patients who have been assessed as suitable to donate a kidney to someone who requires a kidney transplant. It explains what happens before, during and after the operation. It also tells you about any risks and side effects involved.

If you have any further questions, please speak to a doctor or nurse caring for you.

Can I donate my kidney?

For you to be able to donate your kidney and become a living kidney donor, you will have had to undergo many tests. If you are a healthy person with no serious medical conditions and your tests are all satisfactory after your clinical and psychological assessment you are most likely to donate your kidney.

You will have seen specialist live donor nurses, a consultant kidney doctor and a consultant transplant surgeon. If they feel you are suitable to donate a kidney you will be referred to an independent assessor for them to check that you understand the procedure.

What is a live donor nephrectomy?

This is an operation that requires you to be put to sleep under a general anaesthetic to take one of kidney out for donation. This is done by hand assisted keyhole surgery.

What preparation do you need?

- You will be admitted the day before the operation.
- You will be checked in and greeted by a specialist nurse on the ward.
- The admission staff will go through your medical details and may send you for repeat tests, such as blood tests, chest x-ray or ECG (heart tracing).
- The surgeon will explain the operation. You will be asked to sign a consent form to confirm that you understand the operation and agree to go ahead with it.
- An arrow will be drawn on your tummy to show which kidney will be removed.
- The nursing staff on the ward will inform you when you are no longer allowed to eat and drink.

What happens during the procedure?

- You will be asleep having received a general anaesthetic.
- The kidney is cut free using two to three keyhole incisions. The blood vessels between you and the kidney are sealed using a stapling device. Once the kidney is free it is removed through a 6-7cm cut in your lower abdomen.
- The cuts are sealed with invisible, dissolvable stitches. In rare cases you may get stitches or clips that require a removal at a later date.
- Local anaesthetic is usually injected into each small incision to relieve post-operative discomfort.

What happens immediately after the procedure?

You will wake up in the recovery room and then be transferred back to the ward.

There will be some tubes emerging from your body:

- A thin tube (catheter) in your bladder. This is a tube to drain away your urine.
- A line to a vein in your arm. This is to give you fluids and medication, such as pain killers.
- A small plastic drain next to your wound is put in some cases to remove any excess fluid.

Blood tests will be performed after the operation.

You will be given fluids to drink from an early stage after the operation and you will be encouraged to move about as soon as possible to reduce the risk of blood clots forming in your legs.

The catheter is removed over the next two days and the wound drain is removed after 24 to 48 hours.

The average hospital stay is four days.

Are there any side-effects?

Most procedures have the potential for side-effects. You should be reassured that, although all these complications may occur, most patients do not suffer any problems.

Common (greater than one in 10)

- Temporary abdominal bloating
- Temporary shoulder tip discomfort.

Occasional (between one in 10 and one in 50)

- Bleeding, infection, pain or hernia in the wound requiring further treatment
- Urinary tract infection requiring antibiotics.

Rare (less than one in 50)

- Bleeding requiring conversion to open surgery or requiring blood transfusion.
- Injury to organs / blood vessels requiring conversion to open surgery.
- Entry into lung cavity requiring insertion of a temporary drain.
- Injury to nearby local structures (blood vessels, spleen, liver, kidney, lung, pancreas, bowel) requiring more extensive surgery.
- Anaesthetic or cardiovascular problems possibly requiring intensive care admission (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack and death).
- Risk of developing incisional hernia.
- Very small risk of developing renal failure requiring dialysis.

There is a risk to your life having this operation. The risk is one in 3,000.

What happens after the operation?

You will be seen on the ward round every morning by the surgeons. They will advise when the tubes should be removed. You will be encouraged to move about the day after the operation.

You may find that you feel bloated or have a “wind pain”. This is due to the surgeon using gas to inflate the abdominal cavity to assist with surgery. This is relieved with pain relief and walking around as soon as it is safe to do so.

Some donors describe difficulties in opening their bowels. This may not have been a problem beforehand and the surgical team may recommend that you use laxative tablets, a suppository or an enema to help.

The wounds are closed with invisible, dissolvable stitches. Sometimes the dressings may cause small blisters. To prevent this, dressings may be changed the next day. Once the wound is dry the dressings can be removed and you can shower normally. We do not recommend that you sit and soak the wounds in a bath until two weeks after the operation. You can eat and drink normally. There is no need to change your diet.

What happens when I go home?

You will be given painkillers and medication to ensure that you do not become constipated. You will be given a contact number in case of any problems and an appointment will be made for you to see the surgeon, usually two weeks after you are discharged.

- You may feel tired when you get home. It is likely that you will feel like resting in the afternoon, but you will find that this tiredness improves within the first few days after the operation.

- You should avoid any heavy lifting for the first four to six weeks and driving for the first two to three weeks. Your doctor will advise when it is safe to drive. Any increase in abdominal pressure can cause wound pain or may cause the muscles to become weak and this may result in a hernia. Walking and gentle exercise are recommended. Activities should be gradually increased.
- Eat a healthy diet and drink plenty of fluids.
- You can return to work once you feel fit. Usually, three to six weeks off work are needed but this will depend on your job.
- Sexual intercourse can be resumed three to four weeks after surgery.
- You may feel emotional after surgery. This is normal and improves after several weeks. If it does not and you are feeling low and depressed, it is important to tell your GP.

What should I look out for?

Serious problems after the operation are rare but you should take note of any of the following:

- Any of the wounds looking red, hot or discharge of fluid. This may be a sign of a wound infection which may require antibiotics to allow the cuts to heal.
- A bulge or swelling near the surgical wounds. This may be due to a collection of tissue fluid that may need to be drained with a small needle being inserted under the skin. It may also be due to a hernia. This may need surgical repair to strengthen the area once you have fully recovered.
- Your blood pressure may go up and you may require medication to ensure it is at the right level to prevent any long-term damage.
- If you feel unwell or have any concerns following discharge, your GP can advise whether you need to be seen at the hospital. You are always welcome to telephone the living donor transplant coordinators or the transplant ward for advice.

Long term follow up

You will be seen by the surgeon two weeks after your operation. An appointment will be made for you to see the living donor coordinator or kidney doctor after six to 12 weeks.

You will have several blood tests during the first year to check your kidney function. This is usually every three to six months and these can be taken either at the hospital or at your GP surgery. You should then have a yearly check of your kidney function and your blood pressure for the rest of your life. **As a living donor there is lifelong commitment to be fit and healthy.** It is recommended to maintain a healthy diet and lifestyle.

There are some medications we advise that you should avoid. They are a type of painkiller called non-steroidal anti-inflammatory drugs. Prolonged use of these tablets can be harmful to your remaining kidney.

Examples are:

Tablets: ibuprofen, diclofenac or naproxen Your GP or pharmacist will be able to advise further.

Useful sources of information

National Kidney Federation: www.kidney.org.uk

NHSBT transplant activity reports:

<https://www.odt.nhs.uk/statistics-and-reports/organspecific-reports/>

Kidney Care UK: <https://www.kidneycareuk.org/>

NHSBT Organ donation: <https://www.organdonation.nhs.uk/>

Contact us

If you have any questions, please contact the Living Donor Coordinators at your local hospital:

St George's Hospital: 020 8725 0305 / 0745 / 1035 (office hours only)

St Helier Hospital: 020 8296 4522

Royal Sussex County Hospital: 01273 696 955 Ext 7478

Transplant Ward at St George's Hospital: Champney's Ward 020 8725 0062 / 1080

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.stgeorges.nhs.uk

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you advice and information when you have comments or concerns about our services or care. You can contact the PALS team on the advisory telephone line Monday, Tuesday, Thursday and Friday from 2pm to 5pm.

A Walk-in service is available:

Monday, Tuesday and Thursday between 10am and 4pm

Friday between 10am and 2pm.

Please contact PALS in advance to check if there are any changes to opening times. The Walk-in and Advisory telephone services are closed on Wednesdays.

PALS is based within the hospital in the ground floor main corridor between Grosvenor and Lanesborough Wing.

Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health. **Web:** www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones. **Tel:** 111

AccessAble

You can download accessibility guides for all our services by searching 'St George's Hospital' on the AccessAble website (www.accessable.co.uk). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.



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