

Laparoscopic nephrectomy surgery

This leaflet gives more information about laparoscopic nephrectomy. It includes the benefits, risks and any alternatives, and what you can expect when your child comes into hospital. If you have any questions or concerns, please speak to a doctor or a nurse caring for your child.

Laparoscopic nephrectomy

A nephrectomy is an operation to remove a kidney. Laparoscopic means doing the surgery through several small cuts (incisions), rather than one large one, as in traditional surgery (also called open surgery). It is also known as 'keyhole surgery' because of the small incisions. Your child might have 2 or 3 small cuts, and each one would be 1cm to 2cm long.

Benefits of a laparoscopic nephrectomy

There are lots of reasons why it is necessary to remove a kidney. Common reasons are that it might be causing problems, for example with urinary (pee) infection, high blood pressure, or pain. There are other, less-common, reasons and the doctor will discuss your child's options with you.

Although most people have 2 kidneys, it is possible to have a normal life with just 1 kidney. If you have questions about this please speak to your child's doctor.

The advantage of keyhole surgery over traditional surgery, is that much smaller wounds are made. A smaller wound means less pain, smaller scars, and a faster recovery.

There are 2 ways of doing laparoscopic nephrectomy, and they affect how much of the ureter (tube between the kidney and the bladder) is removed. Your doctor will explain which method they will use with your child and why.

- **Transperitoneal** surgery involves going through the stomach.
- **Retroperitoneal** surgery involves going from behind the stomach.

Risks of laparoscopic nephrectomy

Although the surgery is usually done without any problems. These are some of the risks, and the doctor will discuss them with you.

- There is a small risk of infection (less than 1 in 20 patients). We usually give antibiotics during surgery to reduce this risk.
- There can be excessive bleeding (less than 1 in 20 patients). However, it is rare for children to need a blood transfusion (1 in 12 patients). It is also very unusual to have to return to the operating theatre for more surgery because of bleeding.

- Sometimes, the surgeon realises it is not possible to remove the kidney using keyhole surgery (about 1 in 10 patients). If this happens, traditional surgery is done and the kidney is removed through a larger wound.
- Very rarely when keyhole surgery is used, other nearby organs or blood vessels can be damaged. This is very unusual (about 1 in 100 patients).
- Sometimes kidney removal does not stop the problem that it was supposed to treat. This is something the surgeon will discuss with you.

Other treatment options

Sometimes a 'wait and see' approach might be used, instead of surgery. This may cause continuing problems from the things that removing the kidney was going to treat.

Instead of removing the kidney using keyhole surgery, it is possible to remove the kidney with traditional surgery. If this method is used there will be 1, larger, wound (with a larger scar), and more discomfort after surgery, and a longer recovery.

Sometimes the problem causing the kidney damage can be repaired. The repair will stop the kidney from becoming any weaker, but it is unusual for a repaired kidney to become stronger.

Preparing for a laparoscopic nephrectomy

There is no specific preparation for laparoscopic nephrectomy. However, all children having surgery with general anaesthetic, will have a pre-assessment appointment.

At this appointment, we will make sure your child is fit for their general anaesthetic. You will also be given information about what will happen on the day of your child's surgery, and how long your child will need to fast (not eat and drink) for before surgery. You and your child will get the chance to ask any questions you have.

Please make sure you bring a list of any medicines that your child is taking, including any you buy in a pharmacy or shop, including homeopathic and herbal remedies.

On the day of surgery you will need to bring your child to the ward on time so that you can meet the surgeon and the anaesthetist.

General anaesthetic for children

General anaesthetic is medicine that is used to make sure a person is asleep and does not feel any pain during surgery. Specially trained doctors (anaesthetists), look after patients that have an anaesthetic. Our anaesthetists are specially trained to give anaesthetics to children. If you would like more information, ask for our leaflet, **Your child's general anaesthetic**.

Giving your permission (consent)

We want to involve you in decisions about your child's care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you understand what the operation involves and that you agree to your child having it.

If you would like more information about our consent process, please speak to a member of staff caring for you.

During laparoscopic nephrectomy

We'll take your child to the anaesthetic room, next to the operating theatre, and you can be with them until they have fallen asleep. A nurse will go with you and then take you back to the ward.

After the surgery, the wounds will be closed with dissolvable stitches. Sometimes medical glue is used to close wounds, which usually comes off within a couple of days. Sometimes it will be important that your child also has a urinary catheter. This is a tube in the bladder that drains pee (urine). If it is needed, it will be put in during the operation.

The anaesthetic and surgery will take about 3 hours.

When your child begins to wake up, you might be able to sit with them in the recovery room while the anaesthetic wears off.

When your child is fully awake and comfortable, they will be moved back to the ward.

Pain

Having a kidney removed is a big operation and can be painful. It is very important to keep the pain under control by taking regular paracetamol. While your child is in hospital, the nurse will give them painkillers as prescribed. The nurse can also give extra painkillers if necessary.

When your child is ready to leave hospital, the nurse or ward pharmacist will give you painkillers to take home with you, and a letter for your child's GP. Sometimes it is necessary for a child to take antibiotics to prevent infection. Please carefully follow the instructions we give you about taking these medicines, and complete the course.

After laparoscopic nephrectomy

Your child will have regular nursing checks on the ward.

Your child might not feel like eating after surgery. If this happens, their appetite will usually return by the next morning.

If they have a urinary catheter, this is usually removed the day after surgery.

Usually children stay for at least 1 night on the ward. Your child might need to stay in hospital longer than this, but it will depend on the individual surgery.

You should travel home by car or taxi, rather than on public transport, if possible.

After you leave hospital

Your child can have a bath 4 days after the operation.

They will be sore for a few days after surgery. In the first week they will probably still need painkillers and should gradually build up to normal activities (including school). Your child can return to school when they are comfortable. This is usually after 1 week, but might be longer. Your child should not do anything too strenuous or energetic, and must not take part in any contact sports (such as rugby or football) for 4 to 6 weeks.

You should get medical attention from your GP or nearest emergency department (A&E) if your child shows signs of infection.

Signs of urine infection include:

- needing to pee more frequently
- increasing pain
- cloudy or smelly pee
- high temperature (fever)

Signs of wound infection include:

- redness or discharge from the wound
- high temperature (fever)

Looking after your child's wound

If your child had **keyhole surgery**, they will have a couple of small cuts which will be closed using dissolvable stitches or medical glue. Both of these will dissolve over time. The stitches or glue might be covered by small dressing strips. These fall off on their own (any time up to a week later).

If your child had **traditional surgery**, they will have a slightly larger wound with dissolvable stitches and possibly medical glue. There might be dressings to help protect the skin from rubbing on clothes, and to keep the wound clean. The dressing can fall off in its own time (this can be any time up to a week later).

Follow-up appointments

A follow-up appointment with the urology team is not always necessary. We will send you details of an appointment, if necessary. The follow-up appointment would be 4 to 6 months after the operation.

Contact us

If you have any questions or concerns about your child's surgery, please contact Beach Ward, **phone** 020 7188 8844.
or a reply in 2 working days, **email** evelinaurologydoctors@gstt.nhs.uk

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

Evelina London Medicines Helpline

If you have any questions or concerns about your child's medicines, please speak to the staff caring for them or contact our helpline, **phone** 020 7188 3003, Monday to Friday, 10am to 5pm
email letstalkmedicines@gstt.nhs.uk



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