

The Children's Hospital

# Nephrectomy

Information for patients and parents



## What is a nephrectomy?

A nephrectomy is an operation to remove one of the kidneys.

A hemi-nephrectomy (or partial nephrectomy) is when only part of the kidney needs to be removed, either the upper or lower part (pole).

## Why is a nephrectomy needed?

Your child needs a nephrectomy or hemi-nephrectomy because all or part of their kidney does not work. This can be due to an abnormality that they were born with or can be the result of infection. If the whole kidney no longer works then it needs to be removed to prevent further infection.

## What happens before the operation?

Most children will be seen in the pre-assessment clinic before the operation. Here the operation will be explained to you and you will be asked about any previous admissions/operations that your child may have had. If your child has any medical problems, such as allergies, please make the nurse or doctor aware in preassessment.

Blood tests will need to be taken before the operation. This may be done in pre-assessment clinic or when you arrive on the ward.

Your child will be admitted to Toms ward either on the morning of their operation or sometimes on the evening before.

You should have been given instructions on fasting before the operation with your admission letter. It is important to follow these instructions, otherwise your child's operation may need to be delayed or even cancelled.

Your child's surgeon will visit you to explain the operation in more detail, discuss any worries you might have, and ask you to give permission for the operation by signing a consent form. An anaesthetist will also visit you to tell you about the anaesthetic and pain relief.

Please bring in any medications your child is currently taking.

## What does the operation involve?

The operation is done under a general anaesthetic which means your child will be asleep throughout the operation. You can accompany your child to the anaesthetic room and stay with them until they are asleep. The nurse will then take you back to the ward.

This operation can be done in 2 ways, either classical open surgery, or via a camera and 2 or 3 small instruments introduced through small cuts in the skin, a method called "key-hole surgery", or "laparoscopic surgery",

The first way is to do it **open**, where the surgeon makes a small cut in your child's upper abdomen, towards the affected side, about 3 inches in length, and reach the affected kidney, which can then be gently removed after dividing all its blood supply. Sometimes the surgeon may need to remove the ureter as well, which is a tube joining the kidney to the bladder, if it is very big and stretched. This will help to reduce the risk of infection after the operation. The operation will then be called "Nephroureterectomy".

The **laparoscopic technique** involves 3 or 4 small cuts in the skin, the camera is introduced first through one of these cuts, and then the rest of the instruments are placed. The kidney can be detached from its blood supply and ureter, then removed either by making one of the cuts in the skin bigger or by making a separate small cut.

Your child may have a small plastic tube connecting the space created by removing the kidney to the outside into a collecting bag. This tube is called "a drain", and can help to get rid of any small collection that is likely to happen in the place of the

removed kidney. It will need an extra small hole in the skin, and usually stays for no more than 48 hours depending on the amount of fluid in the bag.

## Are there any risks?

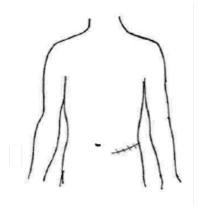
Every anaesthetic carries a risk of complications, but this risk is very small. Your child's anaesthetist is an experienced doctor who is trained to deal with any complications. After an anaesthetic some children may feel sick and vomit. They may have a headache, sore throat or feel dizzy. Usually, these side effects do not last long and not severe.

Risks related to the operation itself can be divided into 2 types; general risks and specific risks.

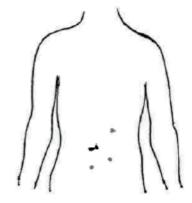
#### **General risks**

These are risks that can happen with any surgical procedure.

- Bleeding uncommon
- Wound infection uncommon
- Scar formation It is usual to have a scar at the site of the wound. The scar will be a straight thin line that hides on the side of the waist



Scar – Open Nephrectomy



Scars – Laparoscopic Nephrectomy

#### **Specific risks**

Specific risks for this operation include:

- Fluid collection at the site of the removed kidney. If this becomes infected your child may become more unwell.
- Muscle weakness. This can affect the area under the skin wound, and in most cases is due to temporary nerve damage during opening of the wound. Rarely, if more than one nerve is cut, this weakness may require repair by another operation.

## What happens after the operation?

When your child wakes up and is ready to return to the ward, a nurse will take you to recovery to collect them. They will be able to drink shortly after the operation but may need a 'drip' overnight to ensure they are getting enough fluid.

Your child may have a plastic tube (catheter) draining urine from their bladder and may have a tube (drain) also coming from the wound site. Your nurse will measure what is coming out of these tubes as well as what fluid your child is taking in (drinks/drip). The nursing staff can remove these tubes easily on the ward after a day or two.

A morphine infusion may be given to your child to control the pain. This will be gradually weaned off and regular pain killers will also be given orally (by mouth).

When your child is feeling a little better, the doctors and nurses will encourage him/her to move around. He/she will be tired and sore to begin with but this will gradually get better.

Your child should be able to go home 1-2 days after the operation although they may need to stay longer if they are very uncomfortable.

### Wound care

The wound will need to be kept clean and dry for 5 days so avoid bathing in this time.

The stitches in the wound are dissolvable so these will disappear in time. They do not need removing.

The 'steri-strips' covering the wound will gradually curl at the ends and come off. If not, you can soak them off with water after 5 days.

## When you get home

It is normal for your child to feel uncomfortable following the operation. Your child's nurse will give you instructions on what pain relief to give and how often.

Your child will be given a small dose of antibiotics to take each day until they return for their follow up appointment. This is to prevent any infection.

Your GP will be sent a letter from the hospital following your child's discharge home. Therefore they will be aware of the operation your child has had and the treatment they have received including what medications they are on. You should contact your GP the same day if:

- Your child's pain seems to be getting worse and pain relief does not help
- There is oozing from the wound
- The wound becomes red and feels hotter than the surrounding skin
- Your child has a high temperature

## What happens next?

You will need to bring your child back to an outpatient appointment in 3-4 months to see their surgeon. Here they will check on your child's progress. This appointment will be sent to you in the post.

Your child can return to nursery/school when they are feeling well enough but should avoid any contact sports until after the outpatient appointment.

### How to contact us

If you have any questions or concerns about the information in this leaflet, you may telephone:

Tom's ward (01865) 234108 or 234109

If you need an interpreter or need a document in another language, large print, Braille or audio version, please call **01865 221473** or email **PALSJR@ouh.nhs.uk** 

Claire McLaren, Senior Staff Nurse Khalid Ashour, Paediatric Surgical Consultant Toms Ward, CHOX Oxford University Hospitals NHS Trust Oxford OX3 9DU Version 1, January 2013 Review date, January 2016