Nephrectomy

What is it?

Nephrectomy is an operation to remove a kidney.

Nephros = kidney (Greek)

Ectomy = surgical removal

The two kidneys make urine, which passes down two tubes (ureters) into the bladder.

Who?

There are several reasons why someone may need a nephrectomy. These may include having a kidney which is badly damaged from infection or injury, or a kidney which did not develop normally and does not work properly. Sometimes there is a tumour (growth) or other lesion in the kidney.

How?

The child is usually admitted on the day of surgery, and stays in hospital the night following surgery. The operation is performed under general anaesthesia.

The approach to the kidney will depend on your child, the surgeon and the reason for the operation. This operation may be done through an incision in the back, the side, or the front of the abdomen, or even as ‘keyhole’ surgery.

Whatever the approach, the surgeon will find the kidney that needs removing, locate and divide the particular blood vessels going to that kidney, and divide its ureter. At the end of the operation, the wound is closed with dissolving sutures.

The child is transferred to the recovery area, and then moved to the children’s ward once awake, and are usually able to eat and drink as normal.

Pain relief medicine will be needed to control pain, and your child is likely to continue to need medicine for pain when they leave hospital.

What are the complications?

Bleeding and infection are the two most frequent complications of any operation, but these occur uncommonly after simple nephrectomy.

Care is taken to avoid significant blood loss when dividing blood vessels during the operation. When there is a large tumour, or the kidney has been badly damaged by trauma, this can be especially difficult. If blood loss is significant, a blood transfusion may be required.

Some blood may be seen in the urine after the operation. This is usually only a small amount and may stain the urine pink or red. There should be no blood clots, and it should clear in a few days.

Infection may develop in the urinary tract or in the wound. Antibiotics are given at the time of operation to reduce this chance. It is important to encourage the child to move after the operation, and to breathe deeply to reduce the chance of chest / lung infection (pneumonia). Pain needs to be well controlled to allow this movement.

Regardless of the approach, there is a small risk of damaging nearby structures. Your surgeon is highly trained and will try to avoid this. These injuries are extremely rare.

What is the follow-up?

There will be a dressing on the wound, which can be removed after a week.

Your child will need review by the surgical team 4-6 weeks after the operation. The surgeon will assess your child’s wound(s). A post-operative ultrasound is occasionally performed at this time.

Your child will now have a single kidney. See “Single Kidney Advice” sheet for more information about what this means for your child’s future.