

Nephrostomy



What is a nephrostomy?

A nephrostomy is a tube that is used to drain urine from a kidney into a bag outside the body. It helps to relieve a build-up of urine in a kidney, which can be caused by a blockage. It is a small thin tube (catheter) which is put directly into your kidney through the skin of your back so that the urine can come out into a bag. The bag is not usually a permanent solution and can be exchanged for a stent (a small plastic tube) which connects the kidney to the bladder.

Why do I need it?

Normally urine drains from your kidneys through a narrow tube (the ureter) into your bladder. If your ureter becomes blocked and urine cannot pass into your bladder, doctors may recommend that you have a nephrostomy catheter inserted. The nephrostomy works by temporarily diverting urine formed by the kidney away from the site of blockage – the urine drains externally into a bag whilst your ureter is blocked. This allows your kidney to function normally, preserves your kidney function and helps treat infection in a blocked kidney. You may need one nephrostomy tube or two depending on whether one or both ureters are blocked.

What preparation will I need?

Inpatients

Your renal doctor, clinical nurse specialist or ward nurse will help you to prepare, whether you are staying in this hospital, or a referring hospital.

Outpatients

If you are coming from home to have a nephrostomy you need to make sure you do the following:

- **Continue to take your usual medication**, unless your doctor or nurse tells you not to.
- Please let us know if you are taking any **antiplatelet medicines** (for example, aspirin, Clopidogrel, Prasugrel or Ticagrelor) or any **medicines that thin the blood** (for example, Warfarin, Rivaroxaban), as these may need to be withheld temporarily before the procedure.

Call the Interventional Radiology secretaries on 01872 252285 for advice as soon as you get your appointment letter.

- You cannot eat or drink anything (except water) for six hours before surgery.
- You can drink water up to 2 hours before your surgery.

What will happen?

A nephrostomy tube is usually put in under local anaesthetic during a short stay in hospital. The procedure is done by an Interventional Radiologist (a doctor who specialises in diagnosing and treating disease using X-rays and scans). The procedure is done in the radiology department as the doctor will use X-ray and an ultrasound scan to guide them as they place the nephrostomy tube in your kidney. The procedure can take up to 30-60 minutes.

Before the procedure, a fine tube (cannula) may be put into a vein in your arm. Through the cannula, you may be given intravenous antibiotics to reduce the risk of getting an infection.

1. You will usually be asked to lie flat on your stomach on an x-ray table.
2. Monitoring equipment will be attached to you so we can measure your blood pressure, heart rate and the oxygen level in your blood, throughout the procedure.
3. You may be given 'conscious sedation' – this involves the nurse giving you two medications through your cannula to relax you and ease your pain. This often causes you to forget most of the procedure afterwards, but you are awake enough during the procedure to breathe for yourself and communicate with the staff.
4. Your skin will be cleaned. The doctor will inject some local anaesthetic into the skin on the side of your back.
5. Once the area is numb the doctor will gently insert a fine needle into your kidney and then put a guidewire through the needle. The doctor will use the guidewire to place the nephrostomy tube in the correct position in the kidney.
6. The tube is kept securely in place with special dressings so it won't come out and is connected to a bag outside the body that collects the urine.

When the nephrostomy tube is being put into the kidney it may hurt a little for a short time. You may be given a painkiller through the cannula in your arm. Remember to let the doctor or nurse know if you're in any pain or feeling anxious.

What happens afterwards?

Usually you will stay in the recovery unit until your ward nurse collects you. You will need to stay in bed for two hours, or as instructed by your nurse. Your blood pressure and pulse and the oxygen level in your blood will be checked at regular intervals, both in the recovery unit and by your ward nurses. The catheter site will be checked regularly and you must be careful not to dislodge it. You can usually eat and drink normally, unless your nurse tells you not to.

Are there any risks or complications?

Serious risks and complications of having a nephrostomy are very rare. However, as with any procedure, some risks or complications may occur. The radiologist will explain these to you:

- **Infection** – we will give you antibiotics before the procedure to help to prevent this.
- **Blood in your urine** – this is common and usually lasts for one to two days. It is not serious and severe bleeding is rare.
- **Problems with the catheter** – for example it can become blocked, dislodged or stop working properly. If you notice any problems, tell your doctor immediately.
- **Dislocation** – you must be careful not to dislodge the tube – if you do dislodge the tube please contact your doctor immediately.

What follow up will I need?

You may need to come back to the Radiology Department a few days after the procedure to check whether your kidney is draining adequately. The radiologist will inject a contrast (dye) into the catheter. Using X-ray, he/she will be able to see how well your kidney is improving. This is known as a nephrostogram. The radiologist and your doctor will decide when to remove the catheter.

Nephrostomy is usually a temporary procedure. Your doctor may decide that you do not need any further treatment, once your kidney has drained, or they may consider other treatment options. This depends on what is causing the blockage.

The options include:

- **Ureteric stenting** – a plastic tube (stent) is placed across the blockage extending from your kidney into your bladder. It is placed through the catheter already attached to you. Occasionally, this procedure may be done at the same time as your nephrostomy insertion but this will be discussed with you in advance. Your doctor will decide when the stent can be removed.
- **Surgery** – to relieve the blockage.

Some patients don't need any follow up appointment in the Radiology department and will be followed up with their kidney specialist. There is no set time for when the nephrostomy should be removed as every patient's case is unique. You will have regular blood checks and possibly further ultrasounds/ CT scans to help decide upon this. You may even have to have the catheter exchanged for a new one before it is finally removed. A nephrostomy catheter has a life span of around three months. It is replaced to prevent occlusion (blockage) and to reduce infection risk. To exchange the catheter is a smaller procedure, which is usually done during an outpatient appointment.

Contact us

If you have any questions or need any further information, please contact Interventional Radiology on 01872 253962.

If you would like this leaflet in large print, braille, audio version or in another language, please contact the General Office on 01872 252690

