

Having a nephrostomy catheter inserted (in the Interventional Radiology (IR) Department)

This information sheet has been given to you to help answer some of the questions you may have about having a nephrostomy catheter inserted. If you have any questions or concerns, please do not hesitate to speak to a doctor or nurse caring for you.

What is a nephrostomy?

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 catheter is a small, thin tube 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.

In adults, the procedure is usually done under local anaesthetic. A local anaesthetic is medication that is used to numb a specific area of your body so it is pain-free. You should have received a copy of our leaflet **Having an anaesthetic**. If you have not received one, please ask a member of staff for a copy.

What are the benefits of having a nephrostomy?

The nephrostomy catheter lets urine drain from the kidney. The nephrostomy works by temporarily diverting urine formed by the kidney away from the site of blockage externally into a bag whilst your ureter is blocked. This allows your kidney to function normally and preserves your kidney function and helps treat infection in a blocked kidney.

Are there any risks of having a nephrostomy?

- 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** – but we will give you antibiotics before the procedure to help to prevent this.
- **Blood in your urine** after the procedure. This is common and usually lasts for one or 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 you should tell your doctor immediately.
- **Dislocation** – you must be careful not to dislodge it.

Are there any alternatives to a nephrostomy?

Sometimes you can have an operation where a stent can be put in through your bladder and up into your kidney. This also overcomes the blockage but it is not suitable for everyone.

What do I need to do to prepare for the procedure?

Inpatients

Your kidney 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) or any medicines that thin the blood (for example, warfarin, rivaroxaban), as these may need to be withheld temporarily before the procedure. Call the IR Department for advice as soon as you get your appointment letter on 020 7188 5573 (for Guy's Hospital) or 020 7188 5477 (for St Thomas' Hospital).
- If you are taking medicines for diabetes (for example, metformin) or using insulin, then these may need to be altered around the time of the procedure. Call the IR Department on the numbers above 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 two hours before your surgery.

What happens before the nephrostomy?

You will be given the opportunity to ask the radiologist any questions you have and you will need to sign the consent form before the procedure can take place. You will be given a hospital gown to wear.

A cannula (small plastic tube) will be put into your arm so we can give you medicine during the procedure.

Giving my consent (permission)

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

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

What happens during the nephrostomy?

You will be taken into the IR theatre and asked to lie on your stomach on the table. 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. Your skin will be cleaned.

Local anaesthetic will be injected into your back to numb the area, so you should not feel any pain following this.

Most patients have 'conscious sedation'. This involves us 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 however you are awake enough during the procedure to breathe for yourself and communicate with the staff.

The radiologist will use ultrasound and fluoroscopy imaging to place the catheter into your kidney.

The catheter will be held in place by a suture (stitch) to your skin and dressing. The external (outside) end of the catheter is connected to a urine bag.

There is a chance that the radiologist will not be able to access your kidney's urine collecting system. This could be for a number of reasons, for example, if your kidney is not in the normal position. If this is the case, other options will need to be discussed with you.

Will I feel any pain?

The local anaesthetic injection does sting for a short while. The procedure itself should be pain free, though occasionally you may feel a pushing sensation as the catheter is inserted. The position in which you will be asked to lie during the procedure may be uncomfortable for a short period. If you experience any pain during the procedure, please tell the nurse and further pain relief can be given to you.

What happens after the nephrostomy?

Usually you will stay in the recovery room, until your ward nurse collects you. You will need to stay in bed for four to six 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 IR Department 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.

Will I have a follow-up appointment or need further treatment?

Some patients need to come back to the IR Department a few days after the procedure to check whether your kidney drains adequately. The radiologist will inject a contrast dye into the catheter. Using imaging machines, they will be able to see how well your kidney is improving. This is known as a nephrostogram (this test is described in a separate leaflet). 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 stent (plastic tube) is placed across the blockage extending from the kidney into the 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 radiology and will be seen by their kidney specialist.

There is no defined 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 catheter has a life span of approximately three months. It is replaced to prevent occlusion (blockage) and to reduce infection risk.

Contact us

Please contact the IR Department at Guy's Hospital on **020 7188 5525** or St Thomas' Hospital on **020 7188 5477**, Monday to Friday, 9am and 5pm, if you have any questions or concerns about having a nephrostomy.

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

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk

t: 020 7188 3514 (complaints)

e: complaints2@gstt.nhs.uk

Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch:

t: 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111

NHS Choices – Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

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A list of sources is available on request