

This leaflet tells you about having a percutaneous nephrostomy. It explains what is involved and what the possible risks are. It is not meant to replace informed discussion between you and your doctor, but can act as a starting point for such discussions. If you have any questions about the procedure please ask the doctor who has referred you or the department which is going to perform it.

What is a percutaneous nephrostomy?

A nephrostomy is a procedure in which a fine plastic tube (catheter) is placed through the skin into your kidney to drain your urine. The urine is collected in an attached drainage bag.

Why do you need a nephrostomy?

The most common reason for having a nephrostomy is blockage of the ureter. The urine from a normal kidney drains through a narrow muscular tube (the ureter) into the bladder. When the ureter becomes blocked, the kidney rapidly becomes affected, especially if infection is present. If left untreated, your kidney will become damaged. A nephrostomy drainage will relieve the symptoms of blockage and keep the kidney working.

Are there any risks?

Nephrostomy is a very safe procedure, but as with any medical procedure there are some risks and complications that can arise.

The main risk is bleeding from the kidney. It is common for the urine to be bloody immediately after the procedure. This usually clears over the next 24–48hrs. On

rare occasions, the bleeding may be more severe and require a transfusion. Very rarely the bleeding may require another surgical operation or radiological procedure to stop it.

The urine in the kidney may be infected. This can generally be treated satisfactorily with antibiotics, but occasionally you can feel unwell after the procedure.

Sometimes there is a leak of urine from the kidney, resulting in a small collection of fluid inside the abdomen. If this becomes a large collection, it may require draining under local anaesthetic.

Very rarely, the interventional radiologist will be unable to place the drainage catheter satisfactorily in the kidney. If this happens, you may require a small operation to overcome the blockage or a repeat procedure.

Despite these possible complications, the procedure is normally very safe, and will almost certainly result in a great improvement in your medical condition

Who has made the decision?

The consultant in charge of your care and the interventional radiologist performing the procedure have discussed your case and feel that this is the best option. However, you will also have the opportunity for your opinion to be considered and if, after discussion with your doctors, you no longer want the procedure, you can decide against it.

Are you required to make any special preparations?

A percutaneous nephrostomy is usually

carried out as a day case procedure under local anaesthetic. You may be asked not to eat for four hours before the procedure, although you may still drink clear fluids such as water. You may receive a sedative to relieve anxiety, as well as an antibiotic.

If you have any allergies or have previously had a reaction to the dye (contrast agent), you *must* tell the radiology staff before you have the test.

Who will you see?

A specially trained team led by an interventional radiologist within the radiology department. Interventional radiologists have special expertise in reading the images and using imaging to guide catheters and wires to aid diagnosis and treatment.

Where will the procedure take place?

In the angiography suite or theatre; this is usually located within the radiology department. This is similar to an operating theatre into which specialised X-ray equipment has been installed.

What happens during the procedure?

You will be asked to get undressed and put on a hospital gown. A small cannula (thin tube) will be placed into a vein in your arm.

You will lie on the X-ray table, generally flat, or nearly flat on your stomach. Occasionally a cushion is placed under your stomach. You need to have a needle put into a vein in your arm, so that the radiologist can give you a sedative or painkillers. You may have monitoring devices attached to your chest and finger and may be given oxygen.

A nephrostomy is performed under sterile conditions and the interventional radiologist and radiology nurse will wear sterile gowns and gloves to carry out the procedure.

Your skin will be swabbed with antiseptic, and you will be covered with sterile drapes. The skin overlying the puncture site will be numbed with local anaesthetic. The interventional radiologist will use an ultrasound probe and the X-ray equipment to place a fine needle accurately into the kidney. When happy with the position, a guide wire will be inserted to allow the small plastic tube (catheter) to be placed.

This catheter will then be fixed to the skin surface, and attached to a drainage bag.

Will it hurt?

Unfortunately, it may hurt a little for a very short period of time, but any pain you have should be controlled with painkillers or a sedative. When the local anaesthetic is injected, it will sting for a short while, but this soon wears off. Later, you may be aware of the needle and the catheter passing into the kidney, and sometimes this is painful, especially if the kidney was sore to start with. Generally, placing the catheter in the kidney only takes a short time, and once in place it should not hurt at all.

How long will it take?

Every patient is different, and it is not always easy to predict; however, expect to be in the radiology department for about an hour.

What happens afterwards?

You will be taken back to your ward. Nursing staff will carry out routine

observations including pulse and blood pressure and will also check the treatment site. You will generally stay in bed for a few hours, until you have recovered. The nephrostomy catheter remains in place in your body for the time being and will be attached to a collection bag. You will be able to carry on a normal life with the catheter in place. The bag needs to be emptied fairly frequently, so that it does not become too heavy, but the nurses may wish to measure the amount in it each time.

How long will the tube stay in?

This is a question that can only be answered by the doctors looking after you. It may only need to stay in a short time, for example, while a stone passes naturally, or it may need to stay in for a much longer period, to allow a more permanent solution for the blockage to be organised. Taking the catheter out does not hurt at all.

Finally

Some of your questions should have been answered by this leaflet, but remember that this is only a starting point for discussion about your treatment with the doctors looking after you. Make sure you are satisfied that you have received enough information about the procedure.

Contact: British Society of Interventional Radiology
www.bsir.org

This leaflet has been prepared by the British Society of Interventional Radiology (BSIR) and the Clinical Radiology Patients' Liaison Group (CRPLG) of The Royal College of Radiologists. Approved by the Board of the Faculty of Clinical Radiology: 25 February 2011

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**British Society of Interventional
Radiology**

Percutaneous nephrostomy

Patient information

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The Royal College of Radiologists