RUH

Undergoing a Percutaneous Nephrostomy

This leaflet explains:

Undergoing a percutaneous nephrostomy

This leaflet tells you about the procedure known as 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 a discussion.

Whether you are having the percutaneous nephrostomy as a planned or an emergency procedure, you should have a sufficient explanation before you sign the consent form.

What is a percutaenous nephrostomy?

The urine from a normal kidney drains through a narrow, muscular tube, the ureter, into the bladder. When that tube becomes blocked (e.g. by a stone or a blood clot), the kidney can rapidly become affected, especially if there is infection present as well. While an operation may become necessary, it is also possible to relieve the blockage by inserting a fine plastic tube called a catheter, through the skin, into the kidney, under local anaesthetic. This catheter then allows the urine to drain from the kidney into a collecting bag, outside the body. This procedure is called a percutaneous (meaning through the skin) nephrostomy (a tube put into the kidney).

Why do I need a percutaneous nephrostomy?

Other tests will have shown that the tube leading from your kidney to the bladder has become blocked. However, it may not be obvious what the cause of the blockage is. If left untreated, your kidney will become damaged.

Who has made the decision?

The doctors in charge of your care, and the radiologist doing the percutaneous nephrostomy will have discussed the situation, and feel that this is the best treatment option. However, you will also have the opportunity for your opinion to be considered, and if, after discussion with your doctors, you do not want the procedure carried out, you can decide against it.

Who will be doing the percutaneous nephrostomy?

A specially trained doctor called a radiologist. Radiologists have special expertise in using x-ray and scanning equipment, and also in interpreting the images produced. They need to look at these images while carrying out the procedure. Consequently, radiologists are amongst the best trained people to insert needles and fine tubes into the body, through the skin, and place them correctly.

Where will the procedure take place?

At the RUH this is generally in Room G, 1st floor x-ray, **B30**

How do I prepare for a percutaneous nephrostomy?

You need to be an inpatient in the hospital. You will be asked not to eat for 6 hours beforehand, though you may be allowed to drink some water up to 3 hours before. You need to have a small plastic tube (cannula) put into a vein in your arm, so that the nurse can give you an antibiotic before you go for the procedure. The radiologist can give you a sedative or painkillers if required. The nurse will go through a checklist with you and you will be given a hospital gown to put on.

If you have any allergies, you **must** let your doctor know. If you have previously reacted to intravenous contrast medium (the dye used for kidney x-rays and CT scans), then you must also tell your doctor about this.

What actually happens during a percutaneous nephrostomy?

You will lie on the x-ray table, generally flat on your stomach, or nearly flat. You will have a monitoring device attached to your chest and finger, and your blood pressure will also be taken and recorded. If sedation or painkillers are given you will receive oxygen through small tubes in your nose.

The radiologist will use the x-ray equipment and/or the ultrasound machine to decide on the most suitable point for inserting the fine plastic tube (catheter), usually in your back. Then your skin will be anaesthetised with local anaesthetic, and a fine needle inserted into the kidney under U/S guidance. Everything will be kept sterile during the procedure.

When the radiologist is sure that the needle is in a satisfactory position, a fine guide wire will be placed into the kidney, through the needle, which then enables the catheter to be positioned correctly. This catheter will then be fixed in place and attached to a drainage bag. There will be a nurse looking after you the whole time you are in the department.

How long will it take?

Every patient’s situation is different, and it is not always easy to predict how long the procedure will be. As a guide, expect to be in the x-ray department for about an hour.

What happens afterwards?

You will be taken back to your ward on your bed. Nurses on the ward will carry out routine observations, such as taking your pulse, blood pressure, temperature and respirations to make sure that there are no problems and also check that the catheter is draining. You will generally stay in bed until you have recovered. The urine may be bloodstained at first but this should clear over time. You will be able to eat and drink when you feel able and are back on the ward.

How long will the catheter stay in, and what happens next?

These are questions which only the doctors looking after you can answer. 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 longer period, to allow a more permanent solution for the

blockage to be organised. The catheter can stay in for up to 6 months if needed before it would need changing.

The RUH uses 2 types of catheter and the radiologist will decide which one to put in. The commonest type used is the locking pigtail shaped tube, although for a short term nephrostomy they may use a non-locking plastic tube.

If you need to go home with the nephrostomy tube then the ward nurses or the urology out-patient nurses will go through everything with you.

Are there any risks or complications?

Percutaneous nephrostomy is a very safe procedure, but there are some risks and complications that can arise, as with any medical treatment such as small risk of bleeding, infection and damage to the kidney. Despite these possible complications, the procedure is normally very safe, and will almost certainly result in a great improvement in your medical condition. Occasionally, an operation is required, but if the percutaneous nephrostomy had not been attempted, this operation would have been necessary anyway.

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, before you sign the consent form.

Other sources of information

Websites

For general information about radiology departments, visit The Royal College of Radiologists' website: www.goingfora.com

NHS Direct
For health advice or information you can call NHS Direct on 0845 45647 or visit the website: www.nhsdirect.nhs.uk

Your health, your choices: www.nhs.uk/nhs choices

Please visit our website at www.ruh.nhs.uk/urology

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