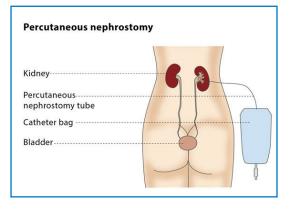
# Having a Percutaneous Nephrostomy Catheter Inserted by the Interventional Radiology (IR) Department

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 percutaneous nephrostomy?



The urine from a normal kidney drains through a narrow, muscular tube, the ureter, into the bladder. When that tube becomes blocked (for example, by a stone or a blood clot) the kidney can rapidly become affected, especially if there is also an infection present. 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 case, and the radiologist performing 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, who specialises in this type of procedure. Throughout the procedure the radiologist will look at live images throughout the procedure to ensure the safe and accurate positioning of the tube into your kidney.

A radiographer and radiology nurse will assist the radiologist during the procedure.

## Where will the procedure take place?

The procedure is performed in the radiology department, in a special room, which is adapted for specialised procedures; a portable ultrasound scanner will also be used during the procedure.

#### How do I prepare for percutaneous nephrostomy?

You need to be an inpatient in the hospital. You will be asked not to eat for four hours beforehand, though you may be allowed to drink some water. You may receive a sedative to relieve anxiety, as well as an antibiotic. You will be asked to put on a hospital gown.

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 need to have a needle put into a vein in your arm, so that you can be given a sedative or painkillers. Once in place, this needle does not cause any pain. You will also have a monitoring device attached to your finger and may receive oxygen through small tubes in your nose.

The radiologist will keep everything as sterile as possible and will wear a theatre gown and operating gloves. Your skin will be cleaned with antiseptic, and then the rest of your body covered with a theatre towel.

The radiologist will use the x-ray equipment and the ultrasound machine to decide on the most suitable point for inserting the fine plastic tube (catheter), usually in your back, just below the twelfth rib. Then your skin will be anaesthetised with local anaesthetic, and a fine needle inserted into the kidney. When the radiologist is sure that the needle is in a satisfactory position, a guide wire will be placed into the kidney, through the needle, which then enables the plastic catheter to be positioned correctly. 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. When the local anaesthetic is injected, it will sting to start with, but this soon wears off, and the skin and deeper tissues should then feel numb. Later, you may be aware of the needle and then the catheter passing into the kidney, and sometimes this is painful, especially if the kidney was sore to start with. If the procedure does become painful for you, then they will be able to arrange for you to have more painkillers through the needle in your arm. 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's situation is different, and it is not always easy to predict how complex or how straightforward the procedure will be. It may be over in 20 minutes, or very occasionally it may take longer than 90 minutes. As a guide, expect to be in the x-ray department for about an hour altogether.

# What happens afterwards?

You will be taken back to your ward on a trolley. Nurses on the ward will carry out routine observations, such as taking your pulse and blood pressure, to make sure that there are no problems. You will generally stay in bed for a few hours, until you have recovered.

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

These are questions that 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 much longer period, to allow a more permanent solution for the blockage to be organised. Taking the catheter out does not hurt at all.

# 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:

- Perhaps the biggest problem is being unable to place the drainage tube satisfactorily in the kidney. If this happens, a surgeon will arrange another method of overcoming the blockage, which may involve surgery.
- 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.
- There may be slight bleeding from the kidney. On very rare occasions, this may become severe, and require a surgical operation or another radiological procedure to stop it.
- Occasionally there may be infection in the kidney, or in the space around it. This can generally be treated satisfactorily with antibiotics.

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.

## Does this procedure use radiation?

This procedure does use x-rays which involves you receiving a moderate dose of radiation; however, the benefit of an accurate diagnosis or successful treatment far outweighs the risk.

# 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.



If you would like this information in large print, Braille, Audio, CD or in another language contact below

# If you have any comments about this leaflet or the service you have received you can contact :

Radiology Admin Team Radiology Department Huddersfield Royal Infirmary, Lindley, Huddersfield HD3 3EA

Telephone No: (01484) 342186

www.cht.nhs.uk

## If you would like this information in another format or language contact the above.

Potřebujete-li tyto informace v jiném formátu nebo jazyce, obraťte se prosím na výše uvedené oddělení

Jeżeli są Państwo zainteresowani otrzymaniem tych informacji w innym formacie lub wersji językowej, prosimy skontaktować się z nami, korzystając z ww. danych kontaktowych

ਰ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਪ੍ਰਾਰੂਪ ਜਾਂ ਭਾਸ਼ਾ ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਉਪਰੋਕਤ ਵਿਭਾਗ ਵਿੱਚ ਸਾਡੇ ਨਾਲ ਸੰਪਰਕ ਕਰੋ।

> اگر آپ کو بی معلومات کس اور فارم بھٹ بی زبان میں درکار ہوں، تو برائے مہربازی مندر جہ بالا شعبے میں ہم سے رابطہ کری.

"إذا احتجت الحصول على هذه المعلومة بشكل مغاير أو مترجمة إلى لغة مختلفة فيرجى منك الاتصال بالقسم المذكور أعلاه"

This leaflet has been prepared by the British Society of Interventional Radiology (BSIR) with the Clinical Radiology Patients' Liaison Group (CRPLG) of The Royal College of Radiologists and edited accordingly by Calderdale & Huddersfield Trust



SMOKEFREE We are a smoke free Trust. If you need help to quit yorkshiresmokefree.nhs.uk can help