



# Having a drainage tube in your kidney (percutaneous nephrostomy)

# Department of Radiology

Information for Patients

Produced: September 2020

Review: September 2023

Leaflet number: 21 Version: 6

#### Introduction

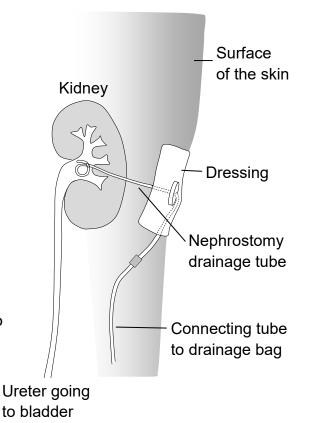
This leaflet tells you about your procedure. Please read it carefully as it contains important information and instructions.

## What is a kidney drainage tube (percutaneous nephrostomy)?

The pee (urine) from your kidneys drains through a narrow muscular tube (ureter) into the bladder. When one of the tubes becomes blocked, for example by a stone, the kidney can become damaged if it is not treated, especially if there is an infection present as well.

It is possible to relieve the blockage by putting a thin plastic tube (nephrostomy drainage tube) into the kidney. This drainage tube 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).

A nephrostomy tube does not treat the cause of the blockage but relieves the symptoms until a solution to the problem can be found. An operation may be needed to unblock the ureter.



# Health information and support is available at www.nhs.uk or call 111 for non-emergency medical advice

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk

# Asking for your consent

The doctor who referred you will have talked to you about the reasons for this procedure and any other options.

You have been sent to a radiologist for this procedure. A radiologist is a doctor who specialises in imaging and X-ray treatments. They will check that you understand why the procedure is being done, and what the potential risks and chances of success are. You will be asked to sign a consent form to confirm this. You should feel that you have had enough information before you sign the consent form.

If after talking to the hospital doctor or radiologist you do not want to have the procedure, you can decide against it.

If the radiologist feels that your condition has changed they will talk to you about whether the procedure is still needed. They may ask you to return to your referring doctor for review.

#### Important information

If you are taking medication that thins the blood (anticoagulants or antiplatelets) please contact the Radiology Department on the telephone number on your appointment letter, for advice as soon as possible.

Your blood thinning medication may need to be stopped or replaced with a different one for a few days.

Common examples of these drugs include aspirin, warfarin, clopidogrel (Plavix®), apixiban (Eliquis), rivaroxaban (Xarelto), ticagrelor (Brilinta), dalteparin and heparin.

You will be asked what blood thinning medication you are taking, how much you take (dose), and what you are taking it for.

You may have already been given instructions by the doctor who referred you for this procedure. Please still contact the Radiology Department by telephone so we can check this.

#### Please tell the doctor doing this procedure if:

- you are allergic to iodine or rubber (latex), or have any other allergies or asthma.
- you have ever had a reaction to an intravenous contrast liquid, the dye used for kidney X-rays and CT scanning, and X-rays of your heart and blood vessels.
- you are on renal dialysis or have any problems with your kidneys.
- you have diabetes.
- there is any possibility that you may be pregnant.

#### What do I need to do before the procedure?

- Do not eat for 6 hours before your nephrostomy drainage tube appointment time. You may drink water until 1 hour before your procedure.
- Do not drink for 1 hour before your nephrostomy drainage tube appointment time.
- You will be asked to put on a hospital gown and paper pants.

#### What happens before the procedure?

- You will need to have a blood test before the procedure.
- A needle will be put into a vein in your arm so that you can be given medication if needed.
- You may be given a sedative to help you feel more relaxed, some pain relief to reduce discomfort and an antibiotic to help stop the spread of infection.

#### What happens during the procedure?

The procedure is usually be done in the X-ray Department, in either an X-ray, ultrasound or CT scanning room. You will usually lie flat on your tummy, or nearly flat, on the X-ray table.

Everything will be kept clean (sterile). Your skin will be cleaned with antiseptic and you will have some of your body covered with sterile sheets.

The radiologist will use the X-ray equipment or the ultrasound machine to decide on the best place to put the thin plastic nephrostomy drainage tube. This is normally in your back, just below your ribs. The skin and deeper tissues will be numbed with local anaesthetic. 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.

A thin needle will be inserted into the kidney. When the radiologist is sure that the needle is in the correct position, a guide wire will be placed through the needle and into the kidney, which then allows the nephrostomy tube to be put in the right place. You may be aware of the needle, wire or tube passing into the kidney. Sometimes this may be painful. If the procedure becomes uncomfortable tell the member of staff who will be with you throughout the procedure. They will arrange for you to have some painkillers. Placing the drainage tube in the kidney usually only takes a short time, and once in place should not hurt at all.

The nephrostomy drainage tube will then be fixed to the surface of your skin and attached to a drainage bag. A dressing may be placed on your skin over the tube.

#### How long will the procedure take?

It is not always easy to know how complex or straightforward the procedure will be, as every patient's situation is different. It may take 30 minutes or can sometimes take longer than 1 hour. As a guide, expect to be in the Radiology Department for about 1 hour altogether.

#### What happens after the procedure?

After the procedure you will be taken back to your ward. A nurse will carry out routine checks such as taking your pulse, checking your temperature and blood pressure, to make sure there are no problems.

You will stay in hospital overnight as an inpatient.

The nephrostomy tube stays in place attached to a drainage bag. It is important that you take care of this. Do not make any sudden movements. When you move, for example getting up out of a chair, make sure the drainage bag can move freely with you. The bag will need to be emptied regularly so that it does not become too heavy. Staff will need to measure the amount of urine in it each time.

Your dressing will be changed by the staff on your ward. They can contact radiology nursing staff for you, if you have any questions.

When you go home, ward staff will arrange for a district nurse to continue the care of your dressing.

### How long will the nephrostomy tube stay in and what happens next?

This will depend on the reason why you are having the drainage tube put in, and can be answered by the doctor looking after you.

The tube may only need to stay in for a short time, for example while a stone in the ureter passes naturally. It may need to stay in for a longer time to allow a more permanent solution for the blockage to be organised.

It is possible that you may need further scans or X-rays to investigate the cause of the blockage.

You will be able to lead a normal life with the nephrostomy tube and drainage bag in place. You will be given another leaflet to advise you about washing, showering and other activities at home.

If your nephrostomy tube needs to stay in for more than 3 months, we will arrange for you to come back to have it changed.

When the nephrostomy tube is taken out it should not hurt.

#### Are there any risks or complications?

Complications are possible with any procedure or operation. We have included the most common risks and complications in this leaflet, although they are different for each person.

Your risks will be discussed with you before you sign the consent form.

**Bleeding:** There will be slight bleeding from the kidney. Your urine will be blood stained but this should start to clear within 24 to 48 hours. If it does not start to clear within 48 hours more X-rays may be needed to find out why. The risk of bleeding from the kidney is less than 1 in 25. If the bleeding becomes severe you may need a transfusion or further treatment.

**Infection:** There is a risk of infection in the kidney. This can usually be treated with antibiotics. The risk of severe infection (sepsis) is less than 1 in 30.

**Kidney damage:** There may be damage to the blood vessels within the kidney. The risk of injury to a blood vessel is less than 1 in 100.

**Chest complications:** The risk of a chest complication is less than 1 in 500. Examples are air (pneumothorax), bleeding (haemothorax) or infection (empyema) in the chest.

The risk of a major complication including death is less than 1 in 200.

Occasionally it is not possible to place the drainage tube in the kidney.

Despite these possible complications, the procedure is normally very safe. Staff will check your responses at all times during and after the procedure, to reduce the effects of any complications.

#### What are the risks from radiation in this procedure?

The risk from having X-rays are very small. We are all exposed to natural background radiation every day of our lives. This comes from the sun, the food we eat, and the ground. Each X-ray examination gives a dose on top of this natural background radiation.

The risks of radiation are slightly higher for an unborn child, so we therefore ask female patients aged between 10 to 55 years, about their periods and possibility of being pregnant.

The radiation from the X-rays during a percutaneous nephrostomy procedure, is the same as getting about a few weeks of natural background radiation.

The benefits of this examination are likely to outweigh any potential risk, and the risk from not having the examination could be greater. We follow safeguarding procedures to minimise the amount of X-rays you receive.

#### Any questions?

#### Before the procedure:

If you have any questions about the procedure, write them down to remind you when you come to the hospital.

If you need to ask a question before you come to the hospital, you can contact the clinic on 0116 258 8293.

When you are on the ward you can ask the nurse, or the doctor who referred you for the procedure.

When you are in the X-ray room you can ask the radiologist doing the procedure.

#### After the procedure:

If you have any problems after the procedure, speak to your radiology nurse or to the staff on your ward.

When you go home you will be given a telephone number to call if you have any questions or problems.

You will be given a leaflet to tell you how to care for your nephrostomy tube and dressing at home.

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہِ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔ علی هذه المعلومات بلغةٍ أُخری، الرجاء الاتصال علی رقم الهاتف الذي يظهر في الأسفل જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

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