

Having a drainage tube in your kidney (percutaneous nephrostomy)

Department of Radiology

Information for Patients

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Introduction

If you are an outpatient please read your appointment letter carefully to check which hospital your appointment is at. This leaflet tells you about your procedure. Please read it carefully as it has important information and instructions.

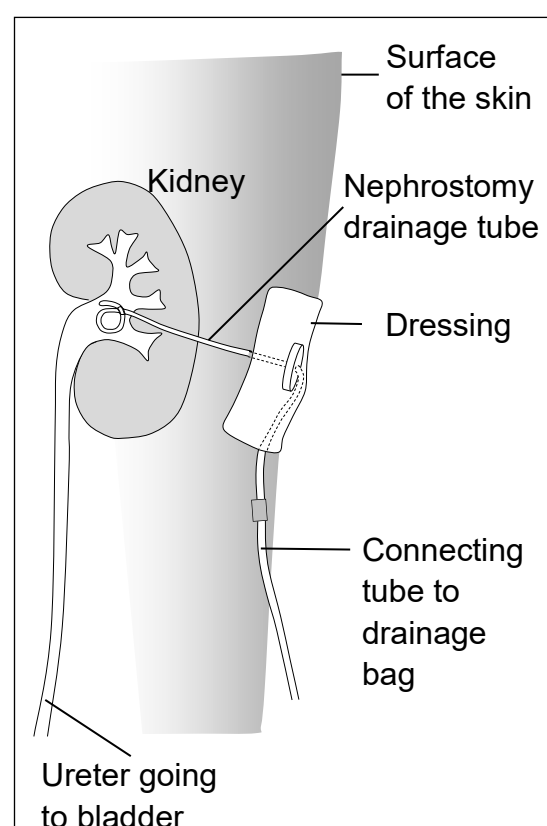
What is a kidney drainage tube (percutaneous nephrostomy)?

The pee (urine) from your kidneys drains through a narrow tube (ureter) into the bladder. If the tube gets blocked, for example by a stone, the kidney can become damaged if it is not treated, especially if there is an infection in the urine as well.

This type of blockage can be relieved by putting a thin plastic tube (nephrostomy drainage tube) into the kidney. This drainage tube lets the urine drain from the kidney into a collecting bag outside the body. This procedure is called a percutaneous nephrostomy.

- **Percutaneous** means through the skin.
- **Nephrostomy** is a tube put into the kidney.

A nephrostomy tube does not treat the cause of the blockage. It eases the symptoms. It helps protect your kidney from more damage until the blockage is treated. 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

Important information

If you are taking medicine that thins the blood (anticoagulants or antiplatelets) it may need to be stopped or replaced with a different one for a few days.

Please call the radiology department for advice as soon as possible. The phone number to call is on your appointment letter and at the end of this leaflet. You will be asked what blood thinning medicine you are taking, how much you take (the dose), and what you are taking it for.

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

You may have already been given instructions on blood thinners by the doctor who referred you for this procedure. Please still call the radiology department so we can check this.

Please tell the X-ray staff when you arrive if:

- **You are allergic to iodine or rubber (latex),** have any other allergies or have asthma.
- **You have had a reaction in the past to a contrast liquid injected into a vein (intravenous contrast).** This is the dye used for kidney X-rays, CT scanning and X-rays of your heart and blood vessels.
- **You are on kidney dialysis or have any problems with your kidneys.**
- **You have diabetes.**
- **There is any chance that you may be pregnant.**

What do I need to do before the procedure?

- **Do not eat for 6 hours** before your nephrostomy appointment time. You may drink water until 1 hour before your procedure. Medicines can be taken as usual unless you have been told not to.
- **Do not drink for 1 hour** before your nephrostomy drainage tube appointment time.

What happens before the procedure?

- You will need to have a blood test.
- We will ask you to put on a hospital gown and paper pants.
- We will put a thin tube (cannula) into a vein in your arm. This is so that we can give you medicines if you need them.
- We may give you some medicines:
 - a sedative to help you feel more relaxed and relieve anxiety. The sedative will make you feel drowsy but will not make you sleep.
 - pain relief to reduce discomfort
 - an antibiotic to help stop the spread of infection.

Asking for your permission (consent)

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

You have been referred to a doctor who specialises in imaging and X-ray treatments (a radiologist). They will confirm that you understand why the procedure is being done, the potential risks and the chances of success.

You will sign a consent form to confirm this. **You should feel that you have had enough explanation before you sign the consent form.**

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

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

Who will be doing my procedure?

- a doctor who specialises in imaging and X-ray treatments (an interventional radiologist) will do the procedure.
- someone trained to take X-ray pictures (radiographer) will control the X-ray machine.
- a radiology nurse and healthcare assistant will help the radiologist and care for you.
- we are a teaching hospital, a student may also be in the room. If you do not want this, you can ask that a student is not in the room when you have your examination.

What happens during the procedure?

- It is usually done in a special X-ray room in the Radiology Department.
- We will ask you to lie down on the X-ray table. This may be either flat (or nearly flat) on your tummy, or on your side.
- We put a blood pressure cuff (strap) on your arm. We also put a small peg on your finger. These will all be attached to a monitoring machine to check your blood pressure, your heart rate and your heart health.
- Everything will be kept clean (sterile). We clean your skin with antiseptic. This may feel cold. We cover some of your body 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.
- We inject some local anaesthetic into the skin and deeper tissues over the kidney. You will feel a stinging pain to start with. This soon wears off and the skin and deeper tissues should then feel numb.

- We put a thin needle through your skin into the kidney. We may put a liquid that shows up on X-rays (contrast liquid) through the needle. This is to check it is in the kidney.
- We might ask you to stop breathing and keep still for a few seconds. This happens when we want to take an X-ray picture.
- When the radiologist is sure that the needle is in the right place, they put a guide wire through the needle and into your kidney. They use this to guide the nephrostomy tube into the right place in your kidney.
- You may be aware of the needle, wire or tube passing into your kidney. You may feel pushing and pulling. You may also feel some pain. If the procedure becomes uncomfortable please tell us. We can arrange for you to have some painkillers. Placing the drainage tube in the kidney usually only takes a short time. When it is in place it should not hurt at all.
- We fix the outside part of nephrostomy drainage tube to the surface of your skin. We will put a dressing on your skin over the tube.
- We attach the end of the tube to a drainage bag to collect your urine.

How long will the procedure take?

Every patient's situation is different. It is not always easy to know how difficult or how straight forward the procedure will be. It may take 30 minutes or can sometimes take longer than 1 hour. You should expect to be in the Radiology Department for about 1 hour.

What happens after the procedure?

You will be taken back to your ward. Nurses will do routine checks, such as taking your pulse and blood pressure. This is 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 on the ward will need to measure the amount of urine each time the bag is emptied.
- 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 take care of your dressing.
- You will be able to resume your 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.

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. The doctor looking after you should be able to tell you how long you need a tube in for.

The tube may only need to stay in for a short time. This can happen if you have a stone in your ureter that may pass naturally.

The tube may need to stay in for a longer time. This may happen if doctors need to plan a more permanent solution for your blockage.

You may need more scans or X-rays to find out what is causing the blockage.

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?

As with any procedure or operation, complications are possible. We have included the most common risks and complications in this leaflet. The possibility of these happening is different for each person. We will talk to you about your risks before you sign the consent form.

- **Bleeding:** There will be slight bleeding from the kidney. Your urine will be blood stained at first. This should start to clear within 24 to 48 hours. If it does not start to clear within 48 hours, we may need to take more X-ray pictures 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.
- **Reaction to contrast liquid** - Some patients may be allergic to the contrast liquid. You could get symptoms such as feeling or being sick (nausea or vomiting), or a rash. If you get any of these symptoms at the hospital, tell the doctor, nurse or other staff looking after you. If you get symptoms at home you should contact your GP or call 111.

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

Sometimes 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. This is to reduce the effects of any complications.

What are the risks from exposure to radiation in this examination?

The main risk from exposure to X-rays is a higher risk of getting a cancer in the future. This risk is thought to be 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 test that uses X-rays gives a dose on top of this natural background radiation.

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 risks of radiation are slightly higher for an unborn child. We must ask all patients age 10 to 15 years registered female and all patients aged 16 to 55 years about their periods and/or possibility of being pregnant.

The benefits of having this test are likely to outweigh any possible risks. The risks of not having the test could be greater. We try to keep your exposure to X-rays as low as possible.

What if I need to talk to someone?

Before the procedure:

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 براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
على هذه المعلومات بلغة أخرى، الرجاء الاتصال على 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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