

Having a Percutaneous Nephrostomy

Department of Radiology
Information for Patients



Radiology Leaflet No. 21

University Hospitals of Leicester
NHS Trust



Caring at its best

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Introduction

This information tells you about having a percutaneous nephrostomy. It explains what is involved and what the possible risks are.

Referral and consent

The doctor who referred you should have discussed the reasons for needing this procedure. You should make sure that you understand these reasons, the procedure itself, any risks involved and the success rates.

The radiologist (a specialised x-ray doctor) who will be performing the procedure will ask you to sign a consent form. When you sign this it means you have agreed to have the procedure done and that you understand why it is needed. You will have a copy of the consent form to take away.

If after discussion with your hospital doctor or radiologist you do not want the procedure carried out, then you can decide against it. If you feel during the procedure that you do not want it to continue we will explain the implications of not doing so, to help you fully decide.

If the radiologist feels that your condition has changed or that your symptoms do not indicate such a procedure is necessary then he/she will explain this to you. The radiologist will let the doctor who referred you know so that they can see you again to review your condition. At all times the radiologist and referring doctor will be acting in your best interests.

What is a percutaneous nephrostomy?

The urine from your kidney drains through a narrow muscular tube, called the ureter, into the bladder. When the tube becomes blocked, for example by a stone, the kidney can become damaged if left untreated especially if there is infection present as well.

While an operation may become necessary to unblock the ureter, it is also possible to relieve the blockage by putting a thin plastic tube (called a catheter) into the kidney. 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). It does not treat the cause of the blockage but relieves the symptoms until a solution to the problem can be found.

Important information

If you are taking any medication that thins the blood please tell your kidney doctor on the ward before the nephrostomy and the doctor doing the nephrostomy when you arrive in the Radiology Department. These drugs include warfarin and clopidogrel (Plavix).

Please tell the doctor doing the nephrostomy if:

- You have any allergies, in particular to iodine
- You have previously reacted to an intravenous contrast medium (the dye used for kidney x-rays and CT scanning)
- You are diabetic
- There is any possibility that you may be pregnant.

How do I prepare for the procedure?

- You need to be an inpatient in the hospital.
- You will probably be asked not to eat for ideally 6 hours before, though you will be encouraged to drink until one hour before the appointment time.
- You will be asked to put on a hospital gown and paper pants.
- A needle will be put into a vein in your arm so that you may be given medication if necessary and some blood tests will be taken.
- You may be given a sedative to relieve anxiety, some pain relief to reduce discomfort and an antibiotic to prevent the spread of infection.

What happens during the procedure?

The procedure is usually performed in the x-ray department in either an x-ray, ultrasound or CT scanning room. You will lie on the x-ray table, usually flat on your stomach, or nearly flat. Everything will be kept sterile, and the radiologist will wear a theatre gown and sterile gloves. Your skin will be cleaned with antiseptic and you may 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 for inserting the thin plastic tube (catheter). This is usually in your back, just below your ribs. Then your skin will be numbed with local anaesthetic. When the local anaesthetic is injected it will sting but this soon wears off and the skin and deeper tissues should then feel numb.

What happens during the procedure? (continued)

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 plastic catheter to be positioned correctly.

You may be aware of the needle, or the wire and catheter, passing into the kidney. Sometimes this may be painful. There will be a nurse or another member of staff looking after you. If the procedure does become uncomfortable for you they will be able to arrange for you to have some painkillers. Generally, placing the catheter in the kidney only takes a short time and once in place it should not hurt at all.

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

How long will the procedure take?

Every patient's situation is different. It is not always easy to know how complex or how straightforward the procedure will be. It may be over in 30 minutes, or very occasionally it may take longer than 60 minutes. As a guide, expect to be in the Radiology Department for about an hour altogether.

What happens after the procedure?

You will be taken back to your ward. Nurses will carry out routine observations such as taking your pulse, blood pressure and temperature to make sure that there are no problems.

What happens after the procedure? (continued)

You will stay in bed overnight. The drainage tube stays in place attached to a drainage bag. It is important that you take care of this. You should try not to make any sudden movements, for example getting up out of a chair without remembering the bag, and you should make sure that it can move freely with you. The bag will need to be emptied regularly so that it does not become too heavy. The nursing staff will want to measure the amount of urine in it each time.

You will be visited on the ward by nursing staff from radiology the following day and regularly after that to change the dressing. You can ask these staff any questions that you have about your nephrostomy tube.

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

How long will the catheter stay in and what will happen next?

These are questions which only the doctors looking after you can answer. The catheter may only need to stay in a short time e.g. while a stone passes naturally, or it may need to stay in for a longer time to allow a more permanent solution for the blockage to be organised. When the catheter is taken out this should not hurt.

It is possible that you will need further scans or x-rays to investigate the problem.

You will be able to lead a normal life with the catheter and drainage bag in place. You will be given an advice leaflet about washing, showering and other activities before you go home.

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 complications occurring will vary for each patient and the possibility of these complications happening to you will be discussed with you before you sign the consent form.

Bleeding - There will be slight bleeding from the kidney. On rare occasions, this may become severe. 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 required to find out why. The risk of bleeding from the kidney is less than 1 in 25. If this becomes severe it may require a transfusion or further treatment in x-ray.

Infection - Occasionally there may be infection in the kidney. This can usually be treated with antibiotics. The risk of severe infection (called sepsis) is less than 1 in 30.

Kidney damage - Very rarely damage may occur to the kidney. Injury to blood vessels. The risk of injury to a blood vessel is less than 1 in 100.

Chest complications (e.g. pneumothorax, haemothorax, empyema). The risk of a chest complication is less than 1 in 500.

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. At all times during and after the procedure the staff will be monitoring your responses to this treatment in order to minimize the effects of any complications.

What if I need to talk to someone after the procedure?

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

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

Background radiation

The risk of having x-rays is very small indeed. We are all exposed to natural background radiation every day of our lives. This comes from the sun, food we eat and the ground. Each examination gives a dose on top of this natural background radiation. The risks of radiation are slightly higher for the unborn child so we must ask female patients aged 10 to 55 years about their menstrual history. The radiation from the x-rays during a percutaneous nephrostomy is equivalent to receiving approximately a few weeks of natural background radiation.

The benefits of this examination outweigh any potential risk and the risk from not having the examination could be greater. We will take all safeguards to minimise the amount of x-rays you receive.

Other sources of information

Websites

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

For information about the effects of x-rays read the publication: "X-rays how safe are they" on the Health Protection Agency website: www.hpa.org.uk

Other sources of information (continued)

Please note that the views expressed in these websites, do not necessarily reflect the views of University Hospitals of Leicester NHS Trust or the NHS.

University Hospitals of Leicester website:

www.leicestershospitals.nhs.uk

NHS Direct

For health advice or information you can call NHS Direct on 0845 46 47 or visit the website: www.nhsdirect.nhs.uk

Additional hospital information

Directions and car parking

Hospital car parking is available to all hospital patients and visitors. Spaces are limited so please allow plenty of time to find a car parking space. A charge is payable.

Bus services to the hospital

There is a regular bus service from the city centre. Phone Traveline on 0871 200 2233 for times and routes.

A Hospital Hopper bus links the three hospitals, Beaumont Leys Centre, Hamilton Centre and the railway station. Buses run every 30 minutes between 6.30am and about 6.30 pm Monday to Friday. A charge is payable for this service.

Relatives and escorts

You may wish to bring a friend or relative to accompany you to and from the Radiology Department when you have your examination although they may not always be allowed into the examination room. This may be useful if you do not understand English very well or if you have any special needs.

Additional hospital information (continued)

Children

Baby changing facilities are available. Please ask to be shown to them if you wish to use them.

We are unable to offer childcare facilities. If you need to bring your children with you, please bring along an adult who can supervise them whilst your examination is being carried out.

Facilities available

Refreshments: Refreshments including hot and cold drinks are available in the hospital.

Shops: Each hospital has a shop selling magazines, newspapers, sweets and drinks. Please ask a member of staff for directions to these facilities.

How was it for you?

If you wish to make any comments or suggestions regarding your visit to the Radiology Department please fill in a suggestion form or speak to a member of staff. Suggestion forms are located in all waiting areas within the department.

University Hospitals of Leicester NHS Trust also has a Patient Information and Liaison Service (PILS), and you are welcome to contact them on:

Freephone: 08081 788337

email: pils.complaints.compliments@uhl-tr.nhs.uk

We review our information leaflets on a regular basis. If you have any comments about how we can improve these leaflets please speak to a member of staff.

This leaflet has been produced according to guidelines from the Royal College of Radiologists.

Any questions?

If you have any questions write them down here to remind you what to ask when you speak to your consultant or radiologist.

If you would like this information in another language or format, please contact the service equality manager on 0116 258 8295

ਆਪਨਿ ਯਦਿ ਐਫ਼ ਲਿਫਲੇਟੋਰ ਅਨੁਵਾਦ - ਲਿਖਿਤ ਵਾ ਅਡਿਓ ਟੇਪ' ਐ ਚਾਨ, ਤਾਹਲੇ ਅਨੁਗ੍ਰਹ ਕਰੇ ਸਾਰ੍ਹਿਸ਼ ਇਕੁਯਾਲਿਟੀ ਮਿਆਨੇਜ਼ਾਰ ਡੇਭ ਬੇਕਾਰ' ਐਰ ਸਾਥੇ 0116 258 8295 ਨਾਂਬਾਰੇ ਯੋਗਾਯੋਗ ਕਰਨ ।

यदि आप को इस लीफ़्लिट का लिखती या टेप पर अनुवाद चाहिए तो कृपया डैब बेकर, सर्विस ईक्वालिटी मैनेजर से 0116 258 8295 पर सम्पर्क कीजिए ।

ਜੇ ਤਮਨੇ ਆ ਪਤ੍ਰਿਕਾਨੂੰ ਬੇਖਿਤ ਅਥਵਾ ਟੇਪ ਉਪਰ ਆਖਾਨਰ ਜੇਹੰਨੂੰ ਭੋਖ ਨੋ ਮਫੇਰਆਨੀ ਕਰੀ ਤੇਐ ਐਕਰ, ਸਰਵਿਸ ਈਕੁਯਾਲਿਟੀ ਮੈਨੇਜਰਨੋ 0116 258 8295 ਉਪਰ ਸੰਪਰਕ ਕਰੋ.

Haddaad rabto warqadan oo turjuman oo ku duuban cajalad ama qoraal ah fadlan la xiriiir, Maamulaha Adeegga Sinaanta 0116 258 8295.

ਜੇਕਰ ਤੁਹਾਨੂੰ ਇਸ ਲੀਫਲਿਟ ਦਾ ਲਿਖਤੀ ਜਾਂ ਟੇਪ ਕੀਤਾ ਅਨੁਵਾਦ ਚਾਹੀਦਾ ਹੋਵੇ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਡੈਬ ਬੇਕਰ, ਸਰਵਿਸ ਇਕੁਯਾਲਿਟੀ ਮੈਨੇਜਰ ਨਾਲ 0116, 258 8295 ਤੇ ਸੰਪਰਕ ਕਰੋ ।

Eğer bu broşürün (kitapçığın) yazılı veya kasetli açıklamasını isterseniz lütfen servis müdürüne 0116 258 8295 telefonundan ulaşabilirsiniz.