

# Percutaneous nephrostomy

## Radiology Department Patient Information Leaflet

### Introduction

This leaflet tells you about having a 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 discussions. If you have any questions about the procedure, please ask the doctor who has referred you or the department which is going to perform it.

### What is a percutaneous nephrostomy?

A nephrostomy is a procedure in which a fine plastic tube (catheter) is placed through the skin and into your kidney to drain your urine. The urine is collected in an attached drainage bag.

### Why do you need a nephrostomy?

The most common reason for having a nephrostomy is blockage of the ureter. The urine from a normal kidney drains through a narrow muscular tube (the ureter) into the bladder. When the ureter becomes blocked, the kidney rapidly becomes affected, especially if infection is present. If left untreated, your kidney will become damaged. A nephrostomy drainage will relieve the symptoms of blockage and keep the kidney working.

## Are there any risks?

A nephrostomy is a very safe procedure, but as with any medical procedure, there are some risks and complications that can arise. The main risk is bleeding from the kidney. It is common for the urine to be bloody immediately after the procedure. This usually clears over the next 24 to 48 hours. On rare occasions, the bleeding may be more severe and require a transfusion. Very rarely, the bleeding may require another surgical operation or radiological procedure to stop it. It is very rare that bleeding can cause a risk to life.

The urine in the kidney may be infected. This can generally be treated satisfactorily with antibiotics, but occasionally you can feel unwell after the procedure.

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 under local anaesthetic.

Very rarely, the interventional radiologist will be unable to place the drainage catheter satisfactorily in the kidney. If this happens, you may require a small operation to overcome the blockage or a repeat procedure.

Despite these possible complications, the procedure is normally very safe, and will almost certainly result in a great improvement in your medical condition.

## Who has made the decision?

Your doctors, the vascular access nurse and the interventional radiologist will have discussed your care and feel this is the most appropriate next step. However, you will also have the opportunity for your opinion to be considered and if, after discussion with your doctors, you no longer want the procedure, you can decide against it.

## Are you required to make any special preparations?

A percutaneous nephrostomy is usually carried out as a day case procedure under local anaesthetic.

If you have any allergies or have previously had a reaction to the dye (contrast agent), you **must** tell the radiology staff before you have the test.

## Who will you see?

You will be seen by a specially trained team led by an interventional radiologist within the radiology department. Interventional radiologists have special expertise in reading the images and using imaging to guide catheters and wires to aid diagnosis and treatment.

## Where will the procedure take place?

The procedure will take place in the angiography suite or theatre. This is usually located within the radiology department. This is similar to an operating theatre, into which specialised X-ray equipment has been installed.

## What happens during the procedure?

You will be asked to get undressed and put on a hospital gown. You will lie on the X-ray table, generally flat or nearly flat on your stomach. Occasionally, a cushion is placed under your stomach. You may have monitoring devices attached to your chest and finger, and you may be given oxygen.

A nephrostomy is performed under sterile conditions and the interventional radiologist and radiology nurse will wear sterile gowns and gloves to carry out the procedure. Your skin will be swabbed with antiseptic and you will be covered with sterile drapes. The skin overlying the puncture site will be numbed with local anaesthetic.

The interventional radiologist will use an ultrasound probe and the X-ray equipment to place a fine needle accurately into the kidney. When happy with the position, a guide wire will be inserted to allow the small plastic tube (catheter) to be placed. 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. The local anaesthetic will numb the tissue. When the local anaesthetic is injected, it will sting for a short while, but this soon wears off. Later, you may be aware of the needle and the catheter passing into the kidney, and sometimes this is painful, especially if the kidney was sore to start with. 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 is different, and it is not always easy to predict. However, expect to be in the radiology department for about an hour.

## What happens afterwards?

You will be taken back to your ward. Nursing staff will carry out routine observations including your pulse and blood pressure, and they will also check the treatment site. You will generally stay in bed for a few hours, until you have recovered. The nephrostomy catheter will remain in place in your body for the time being and will be attached to a collection bag. You will be able to carry on a normal life with the catheter in place. The bag needs to be emptied fairly frequently, so that it does not become too heavy, but the nurses may wish to measure the amount in it each time.

## How long will the tube stay in?

This is a question that can only be answered by the doctors looking after you. 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 should not hurt at all.

## X-ray precautions

The procedure uses X-rays, and these use a small amount of radiation which may add slightly to the normal risk of cancer.

Your doctor thinks that the benefit of the examination outweighs the risks. However, if you are concerned about these possible risks, please discuss these with this doctor.

For more information, visit:

<https://www.gov.uk/government/publications/medical-radiation-patient-doses/patient-dose-information-guidance>

**If you are a female patient, you must tell us if you are or might be pregnant before you attend for your scan.**

## 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.

## Contact

The British Society of Interventional Radiology

[www.bsir.org](http://www.bsir.org)

Department of Radiology  
Russells Hall Hospital  
West Wing, Ground Floor  
Pensnett Road  
Dudley  
West Midlands  
DY1 2HQ

© This leaflet has been reproduced with kind permission from British Society of Interventional Radiology

If you have any questions, or if there is anything you do not understand about this leaflet, please contact:

The Radiology Department

Russells Hall Hospital switchboard number: 01384 456111

**This leaflet can be downloaded or printed from:**

<http://dgft.nhs.uk/services-and-wards/radiology>

If you have any feedback on this patient information leaflet, please email [dgft.patient.information@nhs.net](mailto:dgft.patient.information@nhs.net)

**This leaflet can be made available in large print, audio version and in other languages, please call 0800 073 0510.**

للحصول على هذه النشرة بحجم أكبر، وعلى شكل إصدار صوتي و بلغات أخرى، الرجاء الاتصال بالرقم 08000730510.

此宣传单可提供大字版本、音频版本和其它语言版本，请拨打电话：0800 073 0510。

Ulotka dostępna jest również w dużym druku, wersji audio lub w innym języku. W tym celu zadzwoń pod numer 0800 073 0510.

ਇਹ ਪਰਚਾ ਵੱਡੇ ਅੱਖਰਾਂ, ਬੋਲ ਕੇ ਰੀਕਾਰਡ ਕੀਤਾ ਹੋਇਆ ਅਤੇ ਦੂਸਰੀਆਂ ਭਾਸ਼ਾਵਾਂ ਵਿਚ ਵੀ ਪ੍ਰਾਪਤ ਹੋ ਸਕਦਾ ਹੈ, 0800 073 0510 ਤੇ ਫੋਨ ਕਰੋ ਜੀ।

Aceasta broșura poate fi pusă la dispoziție tipărită cu caractere mari, versiune audio sau în alte limbi, pentru acest lucru va rugăm sunați la 0800 073 0510.

یہ کتابچہ آپ کو بڑے حروف کی لکھائی، سمعی صورت اور دیگر زبانوں میں مہیا کیا جا سکتا ہے۔ جراثے مہربانی فون نمبر 08000730510 پر رابطہ کریں۔