PERCUTANEOUS INSERTION OF A NEPHROSTOMY TUBE

Information about your procedure from The British Association of Urological Surgeons (BAUS)

This leaflet contains evidence-based information about your proposed urological procedure. We have consulted specialist surgeons during its preparation, so that it represents best practice in UK urology. You should use it in addition to any advice already given to you.

To view the online version of this leaflet, type the text below into your web browser:
http://www.baus.org.uk/_userfiles/pages/files/Patients/Leaflets/Percutaneous nephrostomy.pdf

Key Points

- A nephrostomy is a fine tube placed through your skin to drain a blocked kidney
- Urine drains into a bag which must be emptied periodically
- You should be careful not to dislodge the tube and make sure that the dressings are secure
- Nephrostomies can leak, bleed and block

What does this procedure involve?

A nephrostomy tube is a small tube that is put into your kidney (usually under local anaesthetic and sedation, when necessary) to drain urine into a collecting bag outside your body. It is usually done to drain a blocked kidney.

Sometimes we perform it as a planned procedure, but it is usually done as an emergency when there is severe infection or kidney failure.

What are the alternatives?

- **Insertion of a ureteric (internal) stent** – usually performed under general anaesthetic
- **Observation** – no treatment, but monitoring of your condition over a period of time
What happens on the day of the procedure?
The procedure is usually performed by a specially-trained doctor called a Radiologist.

You will lie on an X-ray table, flat (or nearly flat) on your stomach. The radiologist may put a needle into a vein in your arm so that you can be given a sedative or painkillers.

We may provide you with a pair of TED stockings to wear, and we may give you a heparin injection to thin your blood. These help to prevent blood clots from developing and passing into your lungs. Your medical team will decide whether you need to continue these after you go home.

Details of the procedure
- we usually give you an injection of antibiotics before the procedure, after you have been checked for any allergies
- the radiologist will use X-rays or ultrasound to find the best place on your back to insert a fine tube into your kidney
- your skin will be anaesthetised with local anaesthetic and a fine needle put into the kidney
- you may still feel some discomfort or pushing during the procedure
- once the radiologist is sure the needle is in the correct position, a guidewire is passed through it and the needle is removed
- a fine tube (nephrostomy) is threaded over the guidewire
- the tube is fixed to the skin of your back with stitches, and attached to a drainage bag (pictured above)
- the procedure normally takes 20 minutes or so; occasionally, it may take longer
- how long you need to stay in hospital depends on why the nephrostomy tube is needed and your doctor will advise you about this

**Are there any after-effects?**

The possible after-effects and your risk of getting them are shown below. Some are self-limiting or reversible, but others are not. We have not listed very rare after-effects (occurring in less than 1 in 250 patients) individually. The impact of these after-effects can vary a lot from patient to patient; you should ask your surgeon’s advice about the risks and their impact on you as an individual:

<table>
<thead>
<tr>
<th>After-effect</th>
<th>Risk</th>
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<tr>
<td>Short-lived discomfort in the kidney and at the insertion site through the skin</td>
<td>Almost all patients</td>
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<tr>
<td>Minor bleeding from the kidney</td>
<td>Between 1 in 2 &amp; 1 in 10 patients</td>
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<tr>
<td>Leakage of urine around the drainage tube</td>
<td>Between 1 in 2 &amp; 1 in 10 patients</td>
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<tr>
<td>Blockage of the drainage tube</td>
<td>Between 1 in 2 &amp; 1 in 10 patients</td>
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<tr>
<td>Generalised infection (sepsis) following tube insertion</td>
<td>Between 1 in 2 &amp; 1 in 10 patients</td>
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<td>Failure to place the tube satisfactorily in the kidney</td>
<td>Between 1 in 50 &amp; 1 in 250 patients</td>
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<td>Inadvertent damage to adjacent organs (e.g. bowel, liver, spleen, lung)</td>
<td>Between 1 in 50 &amp; 1 in 250 patients</td>
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What is my risk of a hospital-acquired infection?

Your risk of getting an infection in hospital is between 4 & 6%; this includes getting MRSA or a Clostridium difficile bowel infection. This figure is higher if you are in a “high-risk” group of patients such as patients who have had:

- long-term drainage tubes (e.g. catheters);
- bladder removal;
- long hospital stays; or
- multiple hospital admissions.

What can I expect when I get home?

- you will be given advice about your recovery at home, and instructions about emptying your drainage bag periodically when it fills up
- you will be given a copy of your discharge summary and a copy will also be sent to your GP
- any antibiotics or other tablets you may need will be arranged & dispensed from the hospital pharmacy
- you should try to keep the skin around the nephrostomy tube clean
- to prevent infection, you should put a sterile dressing around the area where the tube leaves your skin; this should be changed at least twice a week, especially if it gets wet
- you may shower or bathe 48 hours after the tube has been inserted but try to keep the tube site itself dry
- you can protect the skin with plastic wrap during showering or bathing
- after 14 days, you do not need any protection for the tube while washing, but swimming is not recommended with a nephrostomy tube
- if you experience a high temperature, back pain, redness or swelling around the tube, leakage of urine from the drainage site, poor (or absent) drainage or if your tube falls out, you should contact your doctor immediately
- your urologist will decide how long your drainage tube needs to stay in place; it should not stay in place for more than three months so, if you don’t receive an appointment to remove or replace it after this time, you should contact your urologist
- your drainage bag should be changed every seven days, or when it is soiled; the hospital will provide you with spare bags
General information about surgical procedures

Before your procedure
Please tell a member of the medical team if you have:

- an implanted foreign body (stent, joint replacement, pacemaker, heart valve, blood vessel graft);
- a regular prescription for a blood thinning agent (e.g. warfarin, aspirin, clopidogrel, rivaroxaban, dabigatran);
- a present or previous MRSA infection; or
- a high risk of variant-CJD (e.g. if you have had a corneal transplant, a neurosurgical dural transplant or human growth hormone treatment).

Questions you may wish to ask
If you wish to learn more about what will happen, you can find a list of suggested questions called "Having An Operation" on the website of the Royal College of Surgeons of England. You may also wish to ask your surgeon for his/her personal results and experience with this procedure.

Before you go home
We will tell you how the procedure went and you should:

- make sure you understand what has been done;
- ask the surgeon if everything went as planned;
- let the staff know if you have any discomfort;
- ask what you can (and cannot) do at home;
- make sure you know what happens next; and
- ask when you can return to normal activities.

We will give you advice about what to look out for when you get home. Your surgeon or nurse will also give you details of who to contact, and how to contact them, in the event of problems.

Smoking and surgery
Ideally, we would prefer you to stop smoking before any procedure. Smoking can worsen some urological conditions and makes complications more likely after surgery. For advice on stopping, you can:

- contact your GP;
- access your local NHS Smoking Help Online; or
- ring the free NHS Smoking Helpline on 0300 123 1044.
Driving after surgery
It is your responsibility to make sure you are fit to drive after any surgical procedure. You only need to contact the DVLA if your ability to drive is likely to be affected for more than three months. If it is, you should check with your insurance company before driving again.

What should I do with this information?
Thank you for taking the trouble to read this information. Please let your urologist (or specialist nurse) know if you would like to have a copy for your own records. If you wish, the medical or nursing staff can also arrange to file a copy in your hospital notes.

What sources have we used to prepare this leaflet?
This leaflet uses information from consensus panels and other evidence-based sources including:

- the Department of Health (England);
- the Cochrane Collaboration; and
- the National Institute for Health and Care Excellence (NICE).

It also follows style guidelines from:

- the Royal National Institute for Blind People (RNIB);
- the Information Standard;
- the Patient Information Forum; and
- the Plain English Campaign.

Disclaimer
We have made every effort to give accurate information but there may still be errors or omissions in this leaflet. BAUS cannot accept responsibility for any loss from action taken (or not taken) as a result of this information.

PLEASE NOTE
The staff at BAUS are not medically trained, and are unable to answer questions about the information provided in this leaflet. If you do have any questions, you should contact your urologist, specialist nurse or GP.