Percutaneous Nephrostomy

Interventional Radiology

This leaflet provides information about the procedure, what to expect on the day, the potential risks and important information for afterwards.

Prior to the procedure, you may have a pre-assessment or telephone consultation, where you will have the opportunity to ask further questions.

Please note that this leaflet is not meant to replace discussion between you and your doctor. You should raise any questions you may have with the doctor who has referred you or with the doctor who will be performing the procedure.

What is a percutaneous nephrostomy?

A percutaneous nephrostomy is a tube that is inserted through the skin to drain urine from the kidney. The tube is sited in the skin of the back, on the same side as the affected kidney. This allows urine to bypass a blockage in the normal urinary system and helps protect kidney function. A nephrostomy may be temporary or long-term, depending on the underlying cause. Part of the tube sits inside the body, within the kidney and part of the tube sits outside on the skin. The urine is drained out of the body and collected in a nephrostomy bag.

Why do I need a percutaneous nephrostomy?

You may need a nephrostomy if:

- There is a blockage preventing urine from draining from the kidney
- You have kidney stones causing obstruction
- A tumour or mass is blocking urine flow
- There is infection associated with an obstructed kidney
- The kidney needs to be drained before or after surgery
- A stent cannot be placed or is not suitable

Tel: 01932 723470 **Email:** asp-tr.ir-referrals@nhs.net

How do I prepare for a percutaneous nephrostomy insertion?

You will have a pre-assessment telephone consultation with a nurse before your admission and may be asked to have blood tests before the procedure.

You should stop eating 6 hours prior the procedure, however you can drink 1 cup of clear water per hour until the procedure starts.

As it's a day case procedure, you need to arrange for an adult to collect you from the department and someone to stay with you overnight.

The procedure will take place in the Interventional Radiology (IR), within the Radiology Department at St. Peter's Hospital. When you arrive, you will be given a hospital gown to change into, and a staff will insert an IV cannula.

The doctor will discuss the procedure with you; answer any questions you may have and ask you to sign the consent form if you are happy to proceed.

The procedure will likely be performed under local anaesthetic. Intravenous pain relief and light sedation may also be given, to ensure you are as comfortable as possible.

If you are feeling unwell closer to the day of the procedure, please let the team know.

How is a percutaneous nephrostomy insertion performed?

You will usually lie on your front (prone position), or occasionally on your side. The nephrostomy will be inserted under sterile conditions. The skin on your back is cleaned and numbed with local anaesthetic.

Ultrasound and X-ray imaging are used to guide a needle into the kidney. Once access is gained, a small tube is placed into the kidney and secured to the skin. Contrast is a type of dye that can be seen by the X-ray machine, this is injected through the nephrostomy tube to make sure it is in the right place. Urine will drain into an external collection bag.

The procedure usually takes **30 - 60 minutes**.

What are the potential risks / complications of a percutaneous nephrostomy?

Pain or discomfort

- Mild to moderate pain or discomfort at the insertion site is common and usually improves over a few days.
- This can be managed with simple pain relief.

Bleeding

- Minor bleeding or blood-stained urine is common and usually settles within 24-48 hours.
- Significant bleeding requiring treatment occurs in around 1-3% of patients.
- Very rarely (<1%), a blood transfusion or further procedure may be required.

Infection

- Infection can occur in up to 2-5% of cases.
- Antibiotics are often given to reduce this risk.
- Severe infection or sepsis is uncommon but requires urgent treatment if it occurs.

Tube displacement or blockage

- The nephrostomy tube can move out of position or become blocked.
- This may require flushing, repositioning, or replacement.

Urine leakage around the tube

- Leakage of urine around the insertion site can occur and usually improves with time or dressing changes.

Injury to nearby structures

- Injury to surrounding organs or blood vessels is rare (<1%), as imaging guidance is used.

Radiation exposure

- The procedure uses X-ray guidance. The radiation dose is kept as low as reasonably achievable.

Death

- Death directly related to nephrostomy insertion is very rare.

What happens afterwards?

After the procedure:

- You will be monitored in a recovery area you for 4 to 6 hours, to ensure you recovering as expected and to control any pain.
- Your observations and urine output will be checked

The procedure is usually done as a day case (no overnight stay), however you may need to stay overnight, depending on your condition. You will need someone to pick you up from hospital and stay with you overnight.

You will be given advice on:

- Caring for the nephrostomy tube and drainage bag
- Keeping the site clean and dry
- When and how the bag should be emptied
- Who to contact if there are problems

When should I seek urgent medical advice?

Contact your healthcare team urgently if you experience:

- Increasing pain, redness, or swelling around the tube
- Fever or chills
- Sudden reduction or absence of urine drainage
- Leakage of urine that does not settle
- The tube becomes loose or falls out

Follow-up arrangements, including tube changes or removal, will be discussed with your referring team or urology service.

Further Information

We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty. If they cannot resolve your concern, please contact our Patient Experience Team on 01932 723553 or email asp-tr.patient.advice@nhs.net. If you remain concerned, the team can also advise upon how to make a formal complaint.

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You can use Text Relay to turn telephone communications into text. Use the Relay UK app on your phone, tablet or PC. You can also use Relay UK via Minicom or Uniphone.

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اگر آپ اس کا اردو زبان میں ترجمہ چاہتے ہیں، تو براہ کرم اس فون نمبر 01932 723553 پر رابطہ کریں

Se precisa de uma tradução por favor contacte: 01932 723553

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यदि आपको अनुवाद की ज़रूरत है तो कृपया इस नंबर पर फोन करें: 01932 723553

Jeżeli chcemy, aby te informacje w innym języku, proszę zadzwonić 01932 723553

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