Wrightington, Wigan and
Leigh Teaching Hospitals
NHS Foundation Trust

Percutaneous Nephrostomy Insertion (PCN)

Patient Information

Interventional Radiology Suite
Royal Albert Edward Infirmary

The Patient Information Leaflets page on the Trust website is available on the link: https://www.wwl.nhs.uk/patient-information-leaflets or scan the QR code.

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The WWL Way

Introduction

You have been advised by your urology consultant that you need to have a PCN also known as a percutaneous (meaning through the skin) nephrostomy (a tube into the kidney) insertion, and you have been referred to the radiology department to have this procedure. This information leaflet explains the procedure and what is involved. It is not meant to replace informed discussion between you and your doctor, but it can act as a starting point for such a discussion.

If after reading this information, you still have concerns or require a further explanation, please contact the radiology team on telephone: 01942 778713; alternatively you can ring the hospital switchboard on telephone: 01942 244000 and ask for the X-Ray department.

Please read this leaflet carefully to ensure you are successfully prepared for the examination.

Why do I need this procedure?

The urine drains from a normal kidney through a narrow, muscular tube called a ureter and then into the bladder. The most common cause for needing this procedure is the ureter becoming blocked, usually by a stone, or a stricture (narrowing). This prevents the kidney from performing its normal function, which is to filter the blood, and if left untreated could cause damage to the affected kidney.

What is involved in the procedure?

A small plastic tube will be inserted through the skin and directly into the kidney. The skin will be injected with local anaesthetic which will make the area numb. Once the tube is successfully placed, it will allow the urine to drain through the plastic tube and into a drainage bag which will be attached to your skin.

Consent

If you are having the percutaneous nephrostomy (PCN) as a planned procedure, you will have time to discuss the procedure with the radiologist (a specialised X-Ray doctor) who will be inserting the nephrostomy. The radiologist will also explain the risks and benefits of having the procedure and answer any questions you may have. Once you agree and understand, you will be asked to sign a consent form.

Where will the procedure take place?

It will take place in the X-Ray department, in a room that is adapted for specialist procedures.

How can I prepare for the procedure?

- You will need to fast from midnight the night before your procedure.
- Specialist urology nurses will arrange for you have some bloods tests prior to your procedure.

What are the risks of this procedure?

With any procedure, complications are possible; this leaflet includes the most common complications and risks that are associated with this procedure. The possibility of you experiencing risks or complications varies for each patient but these will be discussed with you before you sign the consent form.

- Some mild bleeding can occur. The urine may also be blood stained, this is normal and will clear up.
- Rarely, the procedure can cause damage to the kidney.

Safety

X-Rays are a type of radiation. We are all exposed to natural background radiation every day; this comes from the sun, the food we eat, and the ground. X-Ray exposure carries a small risk, but your urology doctor feels that this risk is outweighed by the benefits of having this procedure. We take all safeguards to minimise the amount of X-Rays you receive.

Information for female patients between the ages of 12 and 50

The risks of radiation are slightly higher for an unborn child so you will be asked to confirm that you are not pregnant before the examination can proceed. A radiographer (X-Ray technician) will ask you additional questions regarding your menstrual cycle; this is to prevent X-Raying an unborn baby. If there is a chance you may be pregnant, please let a member of staff know at the earliest opportunity or contact the radiology team on the number provided in this leaflet.

On the day of the procedure

Please see your admissions letter for the date, time, and location of where to report to. A nurse will prepare you for the procedure, this involves:

- Providing you with a hospital gown to wear, to protect your own clothes.
- Giving you a single of dose of antibiotics. This will be administered through a cannula (a fine plastic tube that is inserted into your vein) to protect you from infection.

What happens during the procedure?

You will be taken to the X-Ray department and into the interventional radiology suite; you will meet the radiologist, radiology nurses and radiographers. You will be asked various questions by a team member then the radiologist will discuss the procedure with you in full and explain the associated risks and complications that are indicated in this leaflet. This is an opportunity for you to ask any questions you may have. Please ensure you are satisfied with everything that has been explained to you about the procedure before you sign the consent form.

You will be asked to get onto the X-Ray table; usually you will be asked to lie on your stomach. A radiology nurse will place some stickers on your back and connect you to an ECG machine (heart monitor). Your blood pressure will be checked every ten minutes and your pulse and oxygen levels will also be continuously monitored throughout the procedure.

The radiologist will use an ultrasound machine to determine the best place for inserting the nephrostomy tube. Your skin will be cleaned with a cold antiseptic solution and a sterile drape will be placed over your body.

The skin will then be numbed by injecting local anaesthetic. A fine needle will then be placed into the kidney; X-Rays will be used to ensure the needle is in the correct position. A small guide wire will then be placed through the needle and into your kidney.

You may feel some pressure and pushing as the nephrostomy tube is being inserted into the kidney. Once in place, the nephrostomy tube will then be locked to ensure it does not fall out. The nephrostomy tube will be protected with a drainage bag; this will contain an adhesive that enables the bag to attach to your skin and collect the urine.

What happens after the procedure is done?

After the procedure, you will be transferred to a hospital bed and taken to a ward. You will need to recover in hospital overnight for routine monitoring.

Once you are discharged, it is important you take care of the nephrostomy tube and the drainage bag. The discharging ward can make a referral to the district nursing team to change your drainage bag at your local clinic. Your bag will need to be emptied regularly, so that it does not become too heavy and cause irritation to the nephrostomy tube or skin.

If you experience a high temperature, back pain, redness, swelling around the tube, leakage of urine from the drainage site, or if your tube falls out, you should contact the radiology team on the number provided in this leaflet.

It is important to ensure you drink at least 3 litres of fluid on a daily basis, this will help to stop the urine becoming too concentrated and blocking the tube.

How long will the tube need to stay in then kidney for?

Your urologist will decide how long your nephrostomy tube needs to stay in place, as this differs from patient to patient. If the tube is still needed after 3 months, the X-Ray department will send you an appointment for you to attend hospital as a day case patient to have your tube changed.

Contact Details

Radiology Team 01942 778713
Main Switchboard 01942 422000

Comments, Compliments or Complaints

The Patient Relations/Patient Advice and Liaison Service (PALS) Department provides confidential on the spot advice, information and support to patients, relatives, friends, and carers.

Contact Us

Tel: 01942 822376 (Monday to Friday 9am until 4pm)

The Patient Relations/PALS Manager
Wrightington, Wigan and Leigh Teaching Hospitals NHS Foundation Trust
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Ask 3 Questions

Become more involved in decisions about your healthcare. You may be asked to make choices about your treatment. To begin with, try to make sure you get the answers to three key questions:

1. What are my options?
2. What are the positives and negatives of each option for me?
3. How do I get support to help me make a decision that is right for me?

How We Use Your Information

For details on how we collect, use, and store the information we hold about you, please see patient information leaflet, Ref. **Corp 006** How we use your information, this can be found on the Patient Information Leaflets page on the Trust website, see details on the front cover.

This leaflet is also available in audio, large print, Braille, and other languages upon request. For more information, please ask in the department/ward.

Call 111 first when it's less urgent than 999.

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