

Nephrostomy

Radiology Department



Patient information leaflet

This leaflet informs you about the procedure known as a nephrostomy. It explains what is involved and the possible risks.

The benefits and risks of this procedure should already have been explained to you by your doctor. If you have any concerns about the procedure, you should discuss these with your consultant prior to being admitted. You will have an opportunity to ask the radiologist any other questions you may have. Please make sure you do this before you sign the consent form.

The Radiology Department

The radiology department may also be called the x-ray department or diagnostic imaging department. It is the facility in the hospital where radiological examinations of patients are carried out, using a range of equipment.

Who does what?

Radiologists are specialist doctors trained to interpret x-rays and carry out more complex examinations.

They are supported by **specialist radiographers**, who are highly trained to carry out x-rays and other imaging procedures.

Radiology nurses are specialist nurses who will assist the radiologist and care for you throughout the procedure until you are handed back to the ward nurses, who will collect you from the Interventional Suite where this procedure is carried out.

Prior to this procedure being performed, the radiologist will explain fully what is involved and you will have the opportunity to ask any questions you have regarding the procedure.

A written consent will be required. (You should have sufficient explanation before you sign the consent form)

What is a nephrostomy?

The urine from a normal kidney drains through a narrow, muscular tube called the ureter, into the bladder. When the ureter becomes blocked, the kidney can become enlarged, and may stop working efficiently. When this situation occurs it is usually possible to drain the kidney by inserting a catheter (plastic tube) from outside of the body which will drain the urine into a bag. This is achieved by passing the tube from the back, through the skin and into the kidney. This will relieve the symptoms of blockage and keep the kidney working.

Why do I need a nephrostomy?

Other tests will have shown that the tube leading from your kidney to the bladder has become blocked. However, it may not be obvious what the cause of the blockage is. If left untreated, your kidney will become damaged. An operation may be necessary to provide a permanent solution to the blockage, but in the meantime, insertion of a nephrostomy catheter will allow the kidney to drain.

Who has made the decision that I need this procedure?

The consultant in charge of your case, and the radiologist doing the nephrostomy will have discussed the situation, and feel that this is the best treatment option.

How do I prepare for a nephrostomy?

If you are an outpatient, you will be admitted to a ward before the procedure.

We will notify you which ward and at what time to come into the ward.

Please do not eat for six hours before the examination; you may drink water up to two hours before the procedure.

If you are taking any tablets or other medication please take them at the usual time.

It is usual to test your blood for clotting time, to check that you do not have an increased risk of bleeding.

If you are taking **Warfarin** or **Aspirin**, or if you have previously had an allergic reaction to intravenous contrast medium (x-ray dye) please phone us before your appointment.

If you have any other allergies please tell the doctor.

Ladies – if you are pregnant, or think you may be pregnant, please phone us before your appointment. We may need to change or cancel your appointment.

Can I bring a relative or friend?

Yes, but for safety reasons, they will not be able to accompany you into the x-ray room, except in very special circumstances.

You will need someone to collect you and to drive you home after your required amount of bed rest, and someone to stay with you overnight.

What actually happens before and during a nephrostomy?

You will be transported from the ward to the department on a bed.

You will have a cannula (a short plastic tube) inserted into a vein in your arm. This will allow us to give you some sedation and painkillers, and make you more relaxed.

It is usual to give antibiotics for this procedure.

For the examination you will need to lie **on your stomach** on an x-ray couch. This allows easy access to the kidneys.

During the procedure we will monitor your blood pressure, ECG (heart tracing) and pulse.

The doctor and a radiology nurse will prepare and put on a sterile gown and gloves.

There will be other staff in the room to look after you and to operate the x-ray equipment.

An area on your back (near your waist) will be cleaned with antiseptic fluid and your body covered with sterile towels.

The radiologist will use the x-ray and/or ultrasound probe to localize accurately the most suitable area of approach.

Your skin and deeper tissue will be numbed with local anaesthetic.

Using ultrasound guidance, a tract is made through the skin into your kidney using a needle. To ensure the needle is correctly positioned, an x-ray dye is injected into the tract. When the radiologist is sure that the needle is in a satisfactory position, a guide wire is placed into the kidney through the needle. A plastic catheter is then fed over the guide wire and once in position, the guide wire and needle are removed. The catheter is left in place, fixed to the skin and attached to a drainage bag.

Will the procedure be painful?

When the local anaesthetic is injected, it will sting to start with, but this soon passes off, and the skin and deeper tissues should then feel numb. You may experience a 'pushing' sensation but should not feel pain. You will be given painkillers and sedation during the procedure.

How long will the procedure take?

Every patient's situation is different, and it is not always easy to predict how complex or how straightforward the procedure will be. Generally, the procedure will be over in about half an hour, but you may be in the x-ray department for about an hour or so.

What happens after the procedure?

You will be taken back to your ward on your bed. Nurses on the ward will carry out routine observations such as taking your pulse and blood pressure, to make sure that there are no problems. You will generally stay in bed for a few hours, until you have recovered from your sedation.

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 for a short time, for example, while a stone passes naturally through the ureter, 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 is a simple procedure. To remove the catheter you will return to the department and it will be removed under x-ray guidance using x-ray dye.

What about after care?

With the external drainage catheter, make sure that the bag can move freely with you. Be careful getting up out of a chair or climbing out of bed, remember your bag. The bag will need to be emptied and the nurses will want to measure the amount of fluid each time.

What are the risks or complications associated with this procedure?

Nephrostomy insertion is considered a low risk examination, although there are some complications that can arise.

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.

Blood in your urine after the procedure is common and usually lasts for one to two days. It is not serious and severe bleeding is rare. On the very rare occasions bleeding from the kidney may become severe, it may require a surgical operation or another radiological procedure to treat it.

Occasionally there may be infection in the kidney, or in the space around it. This can generally be treated satisfactorily with antibiotics, but we will give you antibiotics before the procedure to help to prevent this.

Radiation is used during the procedure, but your consultant has decided that the benefits of having the procedure are greater than any potential risk of exposure to radiation. The radiation dose you receive will be kept as low as possible.

The dye we use is iodine based, however, as it does not enter the bloodstream, allergic reactions are extremely rare.

The catheter can become blocked, dislodged or stop working properly. If you notice any problems you should tell your doctor immediately. You must be careful not to dislodge it.

What are the benefits of having this procedure?

There will be relief of urinary obstruction by allowing drainage of the urine from the kidney externally.

Is there an alternative procedure?

Retrograde stent placement in theatre. This is where a stent (tube) can be put in through the bladder and up into your kidney. This also overcomes the blockage but every patient's situation is different and this is not suitable for everyone.

Privacy and dignity

Sometimes tests or procedures, although necessary, can be embarrassing or undignified for patients but we will endeavour to do everything we can to make you as comfortable as possible during your visit to the department.

For further information about Diagnostic Imaging Services at Royal Surrey County Hospital NHS Foundation Trust, please contact:

Royal Surrey County Hospital NHS Foundation Trust
Egerton Road
Guildford
Surrey
GU2 7XX

www.royalsurrey.nhs.uk

Reference source

www.bsir.org/patients/nephrostomy/#col_right

Other sources of information

Additional information

www.kidney.org/atoz/content/hydronephrosis

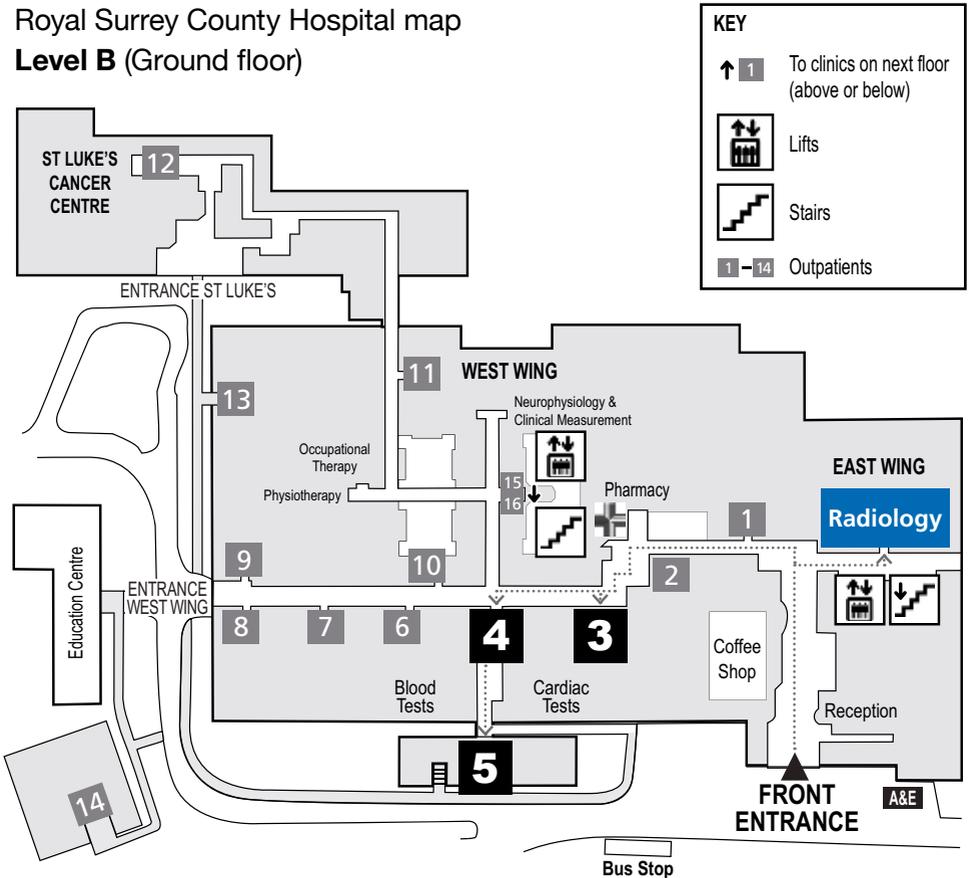
Information on radiation

www.gov.uk/government/publications/ionising-radiation-dose-comparisons/ionising-radiation-dose-comparisons

How to find the Radiology Department

Royal Surrey County Hospital map

Level B (Ground floor)



Data sharing reference information is available on Royal Surrey County Hospital patient information leaflet entitled:

Your Healthcare records – your information, PIN120703–562

Royal Surrey County Hospital NHS Foundation Trust

Egerton Road

Guildford

Surrey

GU2 7XX

www.royalsurrey.nhs.uk

Radiology Department contact details

If you have any questions or would like to know more about this procedure, please telephone the Interventional Suite Radiology Department.

Telephone: 01483 571122 **ext** 4596

If you are unable to keep your appointment, please contact us as soon as possible.

PALS and Advocacy contact details

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

Telephone: 01483 402757

Email: rsc-tr.pals@nhs.net

Opening hours: 9.00am–3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

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