

Antegrade Ureteric Stent

Radiology Department



[Patient information leaflet](#)

This leaflet informs you about the procedure known as an antegrade ureteric stent. 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 an antegrade ureteric stent?

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. It is usually possible to drain the kidney (to the bladder) by inserting a long 'plastic' tube, called a stent. This is done from the back through the skin, into the kidney and then down the ureter and into the bladder. This stent then allows urine to drain in the normal direction, from the kidney into the bladder. Because the stent is put in through the kidney, and **down the ureter**, this is called an antegrade procedure (as opposed to placing a stent through the bladder, and **up the ureter**, which is a retrograde procedure). Following the stent insertion you may have an external drainage catheter for the following 24/48 hours. You will return to the radiology department to have the stent position checked and then the drain is removed. There will be no outside tubing after this second visit.

Why do I need antegrade ureteric stenting?

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 stent will allow the kidney to drain in a normal way.

Who has made the decision that I need this procedure?

The consultant in charge of your case, and the radiologist doing the antegrade ureteric stenting will have discussed the situation, and feel that this is the best treatment option. However, you will also have the opportunity for your opinion to be considered, and if, after discussion with your doctors, you do not want the procedure carried out, you can decide against it.

How do I prepare for a ureteric stent insertion?

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 four 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 you 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 reacted 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 drive you home after your required amount of bed rest, and someone to stay with you overnight.

What actually happens before and during a stent insertion?

You will be transported 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 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 to localize accurately the most suitable approach.

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

A tract is made through the skin into your kidney. A fine guide wire is passed through this tract and down the ureter. Once it has been placed through the blockage and into the bladder, the long 'plastic' stent can be placed over it.

X-rays confirm the correct positioning of the stent during the procedure.

Urine should then be able to pass down the stent and into the bladder. As a temporary measure, it may be necessary to leave a drainage catheter in the kidney, to let urine drain externally. This catheter will then be fixed to the skin surface, 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 about after care?

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.

What other advice do we recommend after this procedure?

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?

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

It may not be possible to get past the narrowing in the ureter. However, inserting an external drain to allow the kidney to decompress might allow the stent to be placed in the correct position 24/48 hours afterwards.

A surgeon might need to arrange another method to bypass the blockage. This may involve surgery.

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.

There may be slight bleeding from the kidney. On very rare occasions, this may become severe, and 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.

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

What are the benefits of having this procedure?

Relief of urinary obstruction allowing internal drainage of urine from the kidney to the bladder.

Is there an alternative procedure?

Retrograde stent placement in theatre or surgery.

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.

Reference source

- British Society of Interventional Radiology:
 - www.bsir.org/patients/ureteric-stenting/

Additional information on radiation

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

Questions and contacts

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

01483 571122 Extension 4596

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,

Park Barn,

Guildford

Surrey

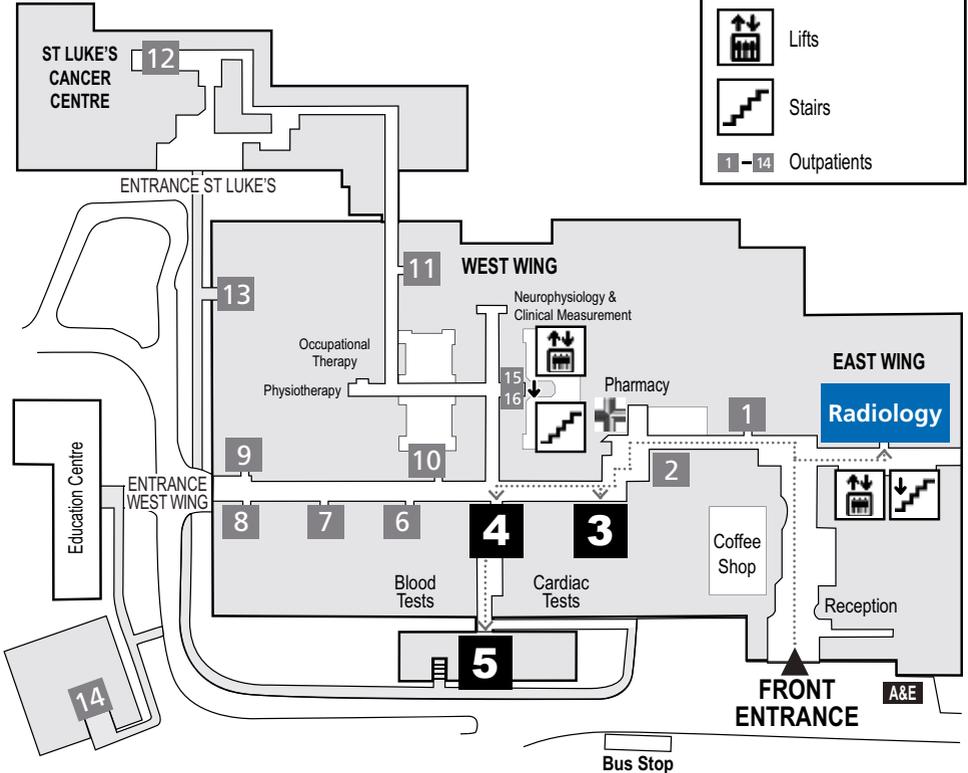
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www.royalsurrey.nhs.uk

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

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www.royalsurrey.nhs.uk

Radiology Department contact details

If you have any questions or would like to know more about this examination, please contact the Radiology Department on:

Telephone: 01483 571122 **ext** 2050 or 01483 464150

Monday–Friday, 9am–5pm

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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