

This leaflet tells you about having antegrade ureteric stenting. It explains what is involved and what the possible risks are. It is not meant to replace informed discussion between you and your doctor, but can act as a starting point for such discussions. If you have any questions about the procedure please ask the doctor who has referred you for the test or the department which is going to perform it.

What is antegrade ureteric stenting?

Urine from a normal kidney drains through a narrow muscular tube (the ureter) into the bladder. When, for example, a stone blocks the ureter, the kidney can rapidly become affected, especially if there is infection present as well. While an operation may become necessary, it is also possible to relieve the blockage initially by placing a nephrostomy tube and then by inserting a long plastic tube, called a stent, through the skin, into the bladder through the ureter. As 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). This stent allows urine to drain in the normal fashion, from the kidney into the bladder.

Why do you need antegrade ureteric stenting?

Other imaging tests have shown that the ureter has become blocked. You will have already had a percutaneous nephrostomy placed to relieve the blockage. While a nephrostomy can be permanent solution, a ureteric stent allows an internal solution without the need for a tube or drainage bag

on the outside. Ureteric stents can be placed either by an antegrade or retrograde technique, but in your case the decision has been made to place it in an antegrade fashion.

Are there any risks?

Antegrade ureteric stenting is a very safe procedure, but as with any medical procedure there are some risks and complications that can arise.

The main risk is probably the failure to place the stent. This is more common if the ureter is completely blocked. If this happens, a nephrostomy will be reinserted and the interventional radiologist will arrange a second visit. Antegrade stenting may be successful on a second visit but occasionally surgery is necessary for a combined approach to place the stent.

There may also be bleeding from the kidney and, on very rare occasions, this may require another radiological procedure or surgery to stop it.

Despite these possible complications, the procedure is normally very safe and will almost certainly result in a great improvement in your medical condition.

Who has made the decision?

The consultant in charge of your care and the interventional radiologist performing the procedure have discussed your case and feel that this is the best option. However, you will also have the opportunity for your opinion to be considered and if, after discussion with your doctors, you no longer want the procedure, you can decide against it.

Are you required to make any special preparations?

Antegrade ureteric stenting is usually carried out as a day case procedure under local anaesthetic. You may be asked not to eat for four hours before the procedure, although you may still drink clear fluids such as water.

If you have any allergies or have previously had a reaction to the dye (contrast agent), you *must* tell the radiology staff before you have the test.

Who will you see?

A specially trained team led by an interventional radiologist within the radiology department. Interventional radiologists have special expertise in reading the images and using imaging to guide catheters and wires to aid diagnosis and treatment.

Where will the procedure take place?

In the angiography suite or theatre; this is usually located within the radiology department. This is similar to an operating theatre into which specialised X-ray equipment has been installed.

What happens during the procedure?

You will be asked to get undressed and put on a hospital gown. A small cannula (thin tube) will be placed into a vein in your arm.

You will have already had a nephrostomy performed. You will lie on the X-ray table, generally flat or nearly flat, on your stomach. You need to have a needle put into a vein in your arm, so that the interventional nurse can give you a strong sedative and painkillers. You may have monitoring

devices attached to your chest and finger and may be given oxygen.

Antegrade ureteric stenting is performed under sterile conditions and the interventional radiologist and radiology nurse will wear sterile gowns and gloves to carry out the procedure.

Your skin near the point of insertion will be swabbed with antiseptic and you will be covered with sterile drapes. Your skin near the nephrostomy tube will be numbed with local anaesthetic. The nephrostomy tube will be removed over a guidewire to allow the introduction of a special plastic tube (catheter). The blockage will be identified and a new guidewire will be used to cross the blockage into the bladder. Once the wire has been placed through the blockage and into the bladder, the long plastic stent can be placed over the guide wire. Urine should now be able to pass down the stent and into the bladder. As a safety measure, a new nephrostomy drainage tube will be left in the kidney and clamped. This will be removed the next day if everything is working normally.

Will it hurt?

When the local anaesthetic is injected, it will sting for a short while, but this soon wears off.

During the procedure, you may be aware of some pushing as the ureteric stent is delivered to the correct position.

Occasionally you may feel some discomfort when the wire enters the bladder. Although this is uncomfortable for a short while, it means that the procedure has been successful.

How long will it take?

Every patient is different, and it is not always easy to predict; however, expect to be in the radiology department for about an hour.

What happens afterwards?

You will be taken back to your ward. Nursing staff will carry out routine observations including pulse and blood pressure and will also check the treatment site. You will generally stay in bed for a few hours, until you have recovered and are ready to go home.

Finally

Some of your questions should have been answered by this leaflet, but remember that this is only a starting point for discussion about your treatment with the doctors looking after you. Make sure you are satisfied that you have received enough information about the procedure.

Contact:

British Society of Interventional Radiology
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This leaflet has been prepared by the British Society of Interventional Radiology (BSIR) and the Clinical Radiology Patients' Liaison Group (CRPLG) of The Royal College of Radiologists. Approved by the Board of the Faculty of Clinical Radiology: 25 February 2011

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**British Society of Interventional
Radiology**

Antegrade ureteric stent insertion

Patient information

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