

Insertion of an antegrade ureteric stent

Your doctors have recommended that you have an antegrade ureteric stent inserted. They will have weighed the benefits of having this procedure against the possibility of complications. Your clinical team will have discussed these with you. If you are still unsure about the benefits of having the procedure, please ask. This information sheet explains what the procedure involves, the possible risks and the complications you may experience.

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 and bypass the blockage by using an antegrade ureteric stent. The antegrade stent is placed through the kidneys via a nephrostomy (an artificial opening made from the kidneys out to the skin surface) and down into the urinary bladder.

Why do I need an antegrade ureteric stenting?

The aim of this procedure is to help with the flow of urine from the kidney to the bladder. A ureteric stent is usually inserted if you have an obstruction of the kidney or ureter. If this obstruction is left untreated, your kidney will become damaged, but the insertion of a stent will allow the kidney to drain in a normal way. If left untreated, your kidney could be damaged.

Who has made the decision?

The consultant in charge of your care and the doctor inserting nephrostomy will have discussed your situation, and feel that this is the best treatment option for you. However, your opinion will also be taken into account and if, after discussion with your doctors, you do not want the procedure carried out, you can decide against it.

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 occur. The main risk is probably 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 for a second procedure. Antegrade stenting may be successful on the subsequent procedure, but occasionally surgery is necessary for a combined approach to place the stent successfully.

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 will be inserting the antegrade ureteric stenting?

A doctor called an interventional radiologist. These doctors are able to see what they are doing by using x-rays and other scanning equipment. They will be assisted by radiology nurses and radiographers, who will look after you throughout the procedure.

Where will the procedure take place?

This procedure is carried out in a room in the x-ray (radiology) department at Chelsea.

How do I prepare for antegrade ureteric stenting?

- You will need to have had some blood tests beforehand (2-7 days before your procedure day) to check that you do not have an increased risk of bleeding
- If you are not already an inpatient, you will need to be admitted to the hospital on the day of the procedure
- You **must not** eat for six hours before the procedure, although you will be allowed to drink clear fluids up to two hours before the procedure
- You should not bring any valuables with you in case of loss or theft
- If you are taking any medication that thins your blood such as aspirin, tinzaparin and warfarin, you **must** contact the radiology department
- If you have any allergies, you **must** let your doctor know. If you have previously reacted to intravenous contrast medium (the dye used for kidney x-rays and CT scans), then you must also let your doctor know.

Can I bring a relative or friend?

You may bring someone with you but for safety reasons they cannot accompany you into the x-ray room.

When you arrive at The Royal Marsden

- Please report to the day care area (the details are on your appointment letter)
- You will have a fine plastic tube (cannula) put into a vein in your arm, so that you can be given fluids and receive medication while in the x-ray department. Once in place, this tube does not cause any pain.
- You will be allocated a bed on a ward, although you may not go there until after the procedure
- Before you go to the x-ray department, we will ask you to change into a hospital gown
- You can either walk to the x-ray department or be taken there on a trolley
- When you arrive in the x-ray department, a nurse will greet you and the radiologist will explain the procedure and discuss it with you before you sign the consent form
- If you have any questions, this is a good time to ask the radiologist.

What happens during the procedure?

- You will lie on the x-ray table, generally flat or nearly flat, on your stomach (tummy)
- You may have monitoring devices attached to your chest and finger and may be given oxygen



- 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 (if there is one) will be numbed with local anaesthetic.
- The nephrostomy tube (if there is one) will be removed over a guide wire to allow the introduction of a special plastic tube (catheter).
- The blockage will be identified and a new guide wire 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. Any pain you have should be controlled with painkillers and sedative. A nurse, or another member of clinical staff, will be close by throughout the procedure. You will be awake during the procedure and able to tell the radiologist if you feel any pain or discomfort.

How long will it take?

Every patient is different, and it is not always easy to predict; however, expect the procedure to take approximately one hour.

What happens afterwards?

- We will take you back to the ward or day care area on a trolley or a bed
- Nurses on the ward will carry out routine observations, such as checking your pulse and blood pressure. They will also check the treatment site to make sure that there are no problems.
- You will generally stay in bed for a few hours, until you have recovered
- Generally you can eat and drink normally after the procedure.

Contact details

If you have any questions or concerns about your procedure, or you are unable to attend for this appointment, please call:

The Radiology Department: 0207 808 2571

Further information

British Society of Interventional Radiology

Website: www.bsir.org/patients/ureteric-stenting/

The Royal College of Radiologists

Website: www.rcr.ac.uk

