

Patient information

Antegrade Ureteric Stenting

Interventional Radiology Department

Antegrade Ureteric Stenting

This leaflet tells you about the procedure known as antegrade ureteric stenting, 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 a discussion.

If the antegrade ureteric stenting is being done as a pre-planned procedure, then you should have plenty of time to discuss the situation with your consultant and the Interventional Radiologist who will be doing the antegrade ureteric stenting, and perhaps even your own family doctor (GP). If you need the stent as an emergency, then there may be less time for discussion, but none the less **you should have had sufficient explanation before you sign the consent form.**

What is antegrade ureteric stenting?

This is a procedure where a small plastic tube is placed between your kidney and your bladder. It is done to relieve the pressure that has built up upon your bladder because of a blockage.

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.

What are the benefits of having antegrade ureteric stenting?

This procedure allows urine to drain from your kidney to your bladder without the need to have a major operation.

What are the risks of having antegrade ureteric stenting?

- 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 stop it.
- Occasionally there may be infection in the kidney, or in the space around it. This can generally be treated satisfactorily with antibiotics.

Are there any complications?

Sometimes the surgeon is unable to place the stent satisfactorily in the ureter. If this happens, the surgeon will arrange for another method of overcoming the blockage, which may involve further surgery.

Important

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 scanning, then you must also tell your doctor about this.

What anaesthetic will be used?

General anaesthesia, or local anaesthesia, may be appropriate for this procedure. General anaesthesia is drug-induced unconsciousness. It is always provided by an anaesthetist, who is a doctor with specialist training. Local anaesthesia is drug-induced numbness: it may be provided by an anaesthetist, surgeon, or other healthcare professional, depending on the technique used.

Unfortunately, both local and general anaesthesia can cause side effects and complications. Side effects are common, but are usually short-lived: they include nausea, confusion and pain. Complications are very rare, but can cause lasting injury: they include awareness, paralysis and death.

The risks of anaesthesia and surgery are lower for those who are undergoing minor surgery, and who are young, fit, active and well.

If you are worried about any of these risks, please speak to your Consultant or a member of their team before you are due to have this treatment.

Getting ready for your antegrade ureteric stenting

You need to be an inpatient in the hospital.

- You will probably be asked not to eat for four hours beforehand, though you may be allowed to drink some water.
- You may receive a sedative to relieve anxiety, as well as an antibiotic.
- You will be asked to put on a hospital gown.

The procedure

The procedure will take place in the Interventional Radiology Theatres located within the main theatres department in a special “screening” room, which is adapted for these specialised procedures. A specially trained doctor called an Interventional Radiologist who has special expertise in using X-ray and scanning equipment carries out this procedure. They also need to look at these images while carrying out the procedure.

You will lie on the X-ray table, generally flat on your stomach, or nearly flat. You need to have a needle put into a vein in your arm, so that the Interventional Radiologist can give you a sedative or painkillers. Once in place, this needle does not cause any pain. You will also have a monitoring device attached to your chest and finger and will probably receive oxygen through small tubes in your nose. A general or local anaesthetic may be used.

The Interventional radiologist will keep everything sterile and will wear a theatre gown and operating gloves. Your skin will be cleaned with antiseptic, and then most of the rest of your body covered with a theatre towel.

The Interventional Radiologist will use the X-ray equipment or the ultrasound machine to decide on the most suitable point for inserting the stent into the kidney, usually in your back, just below your twelfth rib. If you are having a local anaesthetic, your skin will be anaesthetised with local anaesthetic and a fine needle inserted into the kidney.

When the Interventional Radiologist is sure that the needle is in a satisfactory position, a guide wire will be placed into the kidney, through the needle, and then passed down the ureter. Once the wire has been placed through the blockage and into the bladder, the long plastic stent can be placed over the guide-wire, and the wire withdrawn. 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 fine plastic drainage tube, called a 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 it hurt?

Unfortunately, it may hurt a little, for a very short period of time, but any pain you have should be controlled with painkillers.

If you are having a local anaesthetic, it will sting soon after you are injected, but this soon wears off, and the skin and deeper tissues should then feel numb. Later, you may be aware of the needle and then the stent passing into the kidney, and sometimes this is painful, especially if the kidney was sore to start with.

There will be a nurse, or another member of clinical staff, standing next to you and looking after you. If the procedure does become painful for you, then they will be able to arrange for you to have more painkillers through the needle in your arm. Generally, placing the stent in the ureter only takes a short time, and once in place it should not hurt at all.

How long will it take?

Every patient's situation is different, and it is not always easy to predict how complex or how straightforward the procedure will be. It may be over in 20 minutes, if you already have a nephrostomy tube in place, or very occasionally it may take longer than 90 minutes. As a guide, expect to be in the Interventional Radiology (IR) Theatres for about an hour altogether.

After the procedure

After the procedure you will be taken to theatre recovery few hours. and then transferred to your ward. 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.

If you have an external drainage catheter, then this will stay in place for the time being and will be attached to a collection bag. It is important that you try not to make any sudden movements, for example getting up out of a chair, without remembering about the bag, and making sure that it can move freely with you. The bag needs to be emptied fairly frequently, so that it does not become too heavy, but the nurses will want to measure the amount in it each time.

How long will the drainage catheter and the ureteric stent stay in, and what happens next?

These are questions, which only the doctors looking after you can answer. The drainage catheter may only need to stay in a short time. Taking this out will not hurt. You will be able to carry on a normal life with the catheter and the stent in place. The stent may stay in position for a much longer period of time, depending on the nature of the blockage and whether any operation is being considered.

Results

You will be told after the procedure if it has been successful or not.

Feedback

Your feedback is important to us and helps us influence care in the future

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

Further Information

Interventional Theatres

Tel: 0151 706 2744

Text phone number: 18001 0151 706 2744

Author: Interventional Theatres Imaging Department

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