



Department of Radiology

Antegrade Ureteric Stent Insertion

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.

While an operation may become necessary, it is possible to relieve the blockage by inserting a long plastic tube called a stent, through the kidney, down the ureter and into the bladder. This stent allows urine to drain normally, from the kidney into the bladder.

Benefits

While a nephrostomy can be a permanent solution, a ureteric stent allows an internal solution without the need for a tube or an external drainage bag. It will almost certainly result in a great improvement in your medical condition.

Risks

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

- Urinary tract infection
- The stent may become obstructed
- Bleeding from the kidney
- Leak of urine from the kidney

Preparation

Antegrade ureteric stenting is usually carried out as a day case procedure.

If you are an inpatient, please skip, refer to fasting.

If you take medication to thin the blood, please contact your Consultant this medication must be stopped for a specific length of time before the procedure. It is advisable to bring all your medications with you.

Fasting

You must not eat for six hours before the procedure; however you may drink clear fluids such as water until two hours before.

Within 2 hours of the procedure prescribed medications, especially pre-medication can be taken with a small drink of water (30ml).

If you are a diabetic and need advice about fasting, please contact the hospital's Diabetic Advice team prior to admission on (028) 9056 1426.

Admission

During admission you will be asked about your medical history will be taken. A small plastic port (cannula) will be placed in a vein and blood samples will be taken. You will also be asked to change into a gown before transfer to the Department of Radiology.

Procedure

This procedure is usually completed in one hour.

You will meet a number of staff who will look after you during the procedure. You must have a clear understanding of what the procedure involves including the risks and benefits. If you have not already done so, you will be asked to sign a consent form and the Radiologist will answer any questions you may have.

Following transfer to the X-ray table you will be required to lie on your stomach. The skin near the point of insertion will be cleaned with an antiseptic solution and then numbed with a local anesthetic.

Using image guidance the Radiologist will place a fine needle into the kidney. If a nephrostomy tube is already in situ, this will be used to gain access to your kidney. A guide wire will be introduced into the kidney and passed into 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. You may be aware of some pushing as the stent is delivered to the correct position. Urine should now be able to pass down the stent and into the bladder.

As a temporary measure, it may be necessary to leave a drain in the kidney to let urine drain externally. This catheter will then be fixed to the skin surface and attached to a drainage bag. This is called a nephrostomy. It can usually be removed a few days after the procedure. This usually done in the Department of Radiology and typically takes only a few minutes.

Recovery

After the procedure you will be transferred to the ward and nursing staff will carry out routine observations. You should remain in bed for several hours until you have recovered and are ready to go home.

How long the tube will stay in can only be answered by the doctors looking after you as everyone has a stent inserted for different reasons. Ureteric stents are routinely changed every 3-6 months by the urology team and require a general anesthetic.

Alternatives

Ureteric stents allow the passage of urine along the natural route. A nephrostomy is an alternative procedure where the urine is drained from the kidney through the skin and into an external drainage bag. Surgical intervention can sometimes be undertaken to avoid nephrostomy or ureteric stenting.

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DOR	LFT/IRR/15	Author: E Kennedy	V3	Issue: August 2020	Review: August 2023
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