Antegrade Ureteric Stent Insertion
Interventional Radiology

This leaflet provides information about the procedure, what to expect on the day, the potential risks and important information for afterwards.

Prior to the procedure, you may have a pre-assessment or telephone consultation, where you will have the opportunity to ask further questions.

Please note that this leaflet is not meant to replace discussion between you and your doctor. You should raise any questions you may have with the doctor who has referred you or with the doctor who will be performing the procedure.

What is an antegrade ureteric stent?

An antegrade ureteric stent is a thin, flexible plastic tube inserted into the ureter (the tube connecting the kidney to the bladder) to allow urine to drain normally from the kidney into the bladder.

The stent is inserted through the skin of your back using X-ray and ultrasound guidance, usually via a small needle puncture into the kidney.

The stent remains entirely inside your body, with one end in the kidney and the other in the bladder.

Why do I need an antegrade ureteric stent?

A ureteric stent is used to relieve a blockage of urine flow from the kidney to the bladder. Blockages may be caused by:

- Kidney stones
- Cancer affecting the ureter, bladder, cervix, prostate, or surrounding organs
- External compression from tumours or enlarged lymph nodes
- Scarring or narrowing of the ureter (stricture)
- Infection causing swelling
- Injury to the ureter

Relieving the blockage helps protect kidney function, relieve pain and reduce the risk of infection.

Sometimes this procedure is performed after a nephrostomy tube has already been placed, in order to convert external drainage to internal drainage.

Tel: 01932 723470 **Email:** asp-tr.ir-referrals@nhs.net

How do I prepare for an antegrade ureteric stent insertion?

You will have a pre-assessment telephone consultation with a nurse before your admission and may be asked to have blood tests before the procedure.

You should stop eating 6 hours prior the procedure, however you can drink 1 cup of clear water per hour until the procedure starts.

As it's a day case procedure, you need to arrange for an adult to collect you from the department and someone to stay with you overnight.

The procedure will take place in the Interventional Radiology (IR), within the Radiology Department at St. Peter's Hospital. When you arrive, you will be given a hospital gown to change into, and a staff will insert an IV cannula.

The doctor will discuss the procedure with you; answer any questions you may have and ask you to sign the consent form if you are happy to proceed.

The procedure will likely be performed under local anaesthetic. Intravenous pain relief and light sedation may also be given, to ensure you are as comfortable as possible.

If you are feeling unwell closer to the day of the procedure, please let the team know.

How is an antegrade ureteric stent insertion performed?

You will lie on your front or side on the X-ray table.

Your skin will be cleaned, and local anaesthetic will numb the area.

Using ultrasound and X-ray guidance, the doctor inserts a fine needle into the kidney.

Contrast dye is injected to show the urinary system clearly.

A guidewire is passed down the ureter into the bladder.

The ureteric stent is then passed over the guidewire and positioned so that one end sits in the kidney and the other in the bladder.

If you already have a nephrostomy tube, the stent may be inserted through the existing tract. The procedure usually takes 30-60 minutes.

Sometimes a nephrostomy tube is temporarily left in place to ensure adequate drainage.

What are the potential risks / complications of an antegrade ureteric stent insertion?

Antegrade ureteric stent insertion is a commonly performed and generally safe procedure.

Pain or discomfort

- Mild pain in the back, abdomen, or bladder is common and occurs in **20-50% of patients**, usually improving within a few days.
- Some patients experience urinary frequency or bladder irritation due to the stent.

Blood in the urine (haematuria)

- Blood-stained urine occurs in **20-40% of patients** initially and usually settles within a few days.
- Persistent or heavy bleeding is uncommon (**<2%**).

Infection

- Urinary infection occurs in approximately **3-10% of patients** and is usually treated with antibiotics.
- Serious infection (sepsis) is uncommon (**1-3%**) but may require hospital treatment.

Stent blockage or displacement

- The stent may become blocked or move out of position in **5-10% of cases**, which may require adjustment or replacement.

Failure to place the stent

- In some cases (**5-10%**), the stent cannot be placed due to severe blockage. A nephrostomy tube may be left in place instead.

Injury to the kidney or ureter

- Damage to the urinary system is uncommon (**<1%**) due to imaging guidance.

Contrast reaction

- Allergic reaction to contrast dye is rare (**<1%**) and usually mild.

Radiation exposure

- This procedure uses X-rays. The radiation dose is kept as low as possible, and the risk of long-term harm is very small.

Serious complications or death

- Serious complications are rare. The risk of death directly related to the procedure is **very low (less than 1 in 1,000)**.

What happens afterwards?

You will be monitored in a recovery area.

Your blood pressure, pulse, and urine output will be checked.

You may notice:

- Mild back discomfort
- Blood-tinged urine
- Increased urinary frequency
- Reflux during urination

These symptoms usually improve within a few days.

You may go home the same day or stay overnight, depending on your condition.

If a nephrostomy tube remains, it may be removed later once the stent is confirmed to be working.

You should drink plenty of fluids unless advised otherwise.

Avoid heavy lifting for **48 hours**.

Living with a ureteric stent

Most people can return to normal activities.

You may occasionally notice:

- Urinary frequency
- Mild discomfort
- Blood in the urine after activity
- Reflux during urination

These symptoms are usually manageable.

Ureteric stents are **temporary** and must be removed or changed, usually every **3-6 months**, depending on the reason for insertion.

Follow-up

Follow-up arrangements, including tube changes or removal, will be discussed with your referring team or urology service.

Seek urgent medical attention if you experience:

- Fever or chills
- Severe pain
- Heavy bleeding in urine
- Inability to pass urine
- Signs of infection
- Sudden worsening flank pain

Further Information

We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty. If they cannot resolve your concern, please contact our Patient Experience Team on 01932 723553 or email asp-tr.patient.advice@nhs.net. If you remain concerned, the team can also advise upon how to make a formal complaint.

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You can use Text Relay to turn telephone communications into text. Use the Relay UK app on your phone, tablet or PC. You can also use Relay UK via Minicom or Uniphone.

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اگر آپ اس کا اردو زبان میں ترجمہ چاہتے ہیں، تو براہ کرم اس فون نمبر 01932 723553 پر رابطہ کریں

Se precisa de uma tradução por favor contacte: 01932 723553

আপনার অনুবাদের দরকার হলে এখানে যোগাযোগ করুন : 01932 723553

यदि आपको अनुवाद की ज़रूरत है तो कृपया इस नंबर पर फोन करें: 01932 723553

Jeżeli chcemy, aby te informacje w innym języku, proszę zadzwonić 01932 723553

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