

Ureteric stent

Department of Urology

What is a ureteric stent?



A ureteric stent is a specially designed hollow tube, made of a flexible plastic material that is placed in the ureter (tube that connects a kidney to the bladder). The length of the stents used in adult patients varies between 24 to 30 cm. Although there are different types of stents, all of them serve the same purpose. Your urologist can explain in detail about the different types of stents.

Why is it inserted?

Ureteric stents are inserted for many reasons but the commonest are blockage of the ureter (the tube draining urine from the kidney to the bladder) or as a prelude to lithotripsy (shockwave treatment) for a kidney stone.

How does it stay in place?

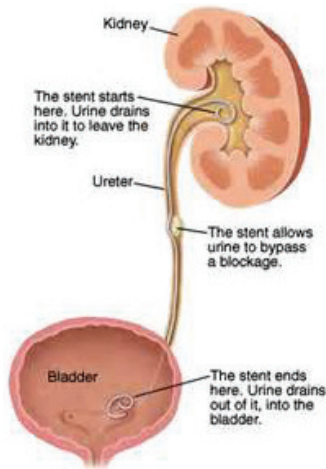
The stents are designed to stay in the urinary system by having both the ends coiled. The top end coils in the kidney and the lower end coils inside the bladder to prevent its displacement. The stents are flexible enough to withstand various body movements.

How is a stent inserted?

Insertion of a ureteric stent is usually performed under a general anaesthetic. In most cases, the surgeon needs to pass an instrument via the urethra (the water pipe leading to the bladder) and use X-rays to be sure that the stent is correctly positioned.

The procedure takes approximately 30 minutes to perform.

Occasionally they are placed from the kidney down to the bladder by a radiologist under local anaesthetic.



Picture Courtesy:
www.princetonhcs.kramesonline.com/HealthSheets

What should I expect afterwards?

When you first pass urine, it may sting or burn and be slightly blood-stained. You may also experience a need to pass urine frequently with some discomfort in the lower part of your tummy. Men can experience pain at the tip of the penis and some women develop symptoms similar to those of cystitis. These symptoms will, in most patients, settle within 24 – 48 hours. Some people with ureteric stents get pain in one (or both) kidney(s) when they pass urine. This is quite common and is not a cause for concern. For the first few days after insertion of a ureteric stent, it is important to drink plenty of fluids, two to three litres (four to five pints) each day, in order to flush your system through.

How long can a stent stay in the body for?

This will depend on the reason for the stent insertion. Many stents have a lifespan of up to 12 months. Generally however they are placed as a short term measure to relieve a blockage as an emergency, following which a definitive surgical solution (such as stone removal) is planned. This may take a couple of weeks to months.

How is a stent removed?

Stent removal is usually performed under local anaesthetic using a flexible telescope (pictured). Local anaesthetic jelly is used to numb and lubricate the urethra. This ensures that insertion of the telescope is as comfortable as possible. The end of the stent is grasped with forceps and the stent removed. If you require a general anaesthetic for stent removal, you will normally be admitted to the day surgery unit. Sometimes a stent can be left with a thread attached to its lower end that stays outside the body through the urethra (tether). Such stents can be easily removed in the outpatient clinic by pulling on the thread. Some patients will also be able to perform this at home!

Is there an alternative option to the use of a stent?

There is no simple alternative option. In some patients, a tube draining the urine to the outside called a 'nephrostomy tube', may be placed in the kidney. However, this involves carrying a urine collection bag attached to your back, which requires proper care.

What are the possible side effects associated with a stent?

Many patients do not experience problems with the stents. In the majority of the patients experiencing side effects they are minor and tolerable. However sometimes they can be moderate to severe in nature.

Urinary symptoms

- an increased frequency of passing urine
- the need to rush to pass urine (urgency)
- blood in the urine. This is quite common and can improve with a greater fluid intake.
- the stents can also result in a sensation of incomplete emptying of the bladder.
- very occasionally, especially in women, there is a slight risk of incontinence episodes.

These effects resolve when the stent is removed.

Discomfort or pain

Stents can cause discomfort or pain, commonly in the bladder and kidney (loin) area, but sometimes in other areas such as the groin, urethra and genitals. The discomfort or pain may be more noticeable after physical activities and after passing urine.

Urinary tract infection

The presence of a stent, along with the underlying kidney problem, makes it more likely that you could get a urinary tract infection. Some of the symptoms that you may experience if you get a urinary tract infection are raised temperature, increased pain or discomfort in the kidney or bladder area, a burning sensation while passing urine and feeling unwell. This usually requires treatment with antibiotics.

Stent encrustation or migration

These are rare complications of stents. Migration can occur when a stent moves from where it supposed to be situated. This is not normally a problem or dangerous, but if your stent 'falls out' please gets in touch with your consultant.

Stent encrustation occurs when stone crystals grow on the outside surface of the stent. This may occur if stents are left inside the body for too long.

Is there anything I can take to help ease side effects?

Your doctor may prescribe you some simple pain relief to help with any discomfort that you may experience. Occasionally for patients experiencing moderate to severe side effects, drugs can be prescribed that relax the ureters and bladder. For some patients this will help alleviate symptoms.

Can I carry on as normal with a stent?

In general there are no restrictions that are in place when you have a stent in. However if you experience side effects then this may affect some daily activities. There is no reason that you cannot work, drive, exercise, and there are no restrictions on your sex life. Of course if you are in pain or having increased urinary frequency then you may find that some of these may be limited. It is possible to travel with a stent, however the presence of a stent may make this and any holiday less enjoyable.

What care do I need to take?

You should drink at least 1½ to 2 litres (approximately four pints) of fluids, mainly water, a day. This will help to cut down the risk of getting an infection and will reduce the amount of blood in the urine. It will also help in the treatment of stones. If you experience bothersome pain you can take painkillers for relief, on the advice of a doctor. If you have got a stent with a thread coming down from the urethra outside the body, then more care will be needed so as not to dislodge the thread.

When should I call for help?

You should contact a doctor or a hospital:-

- if you experience a constant and unbearable pain associated with the stent.
- if you have symptoms of urinary tract infection as mentioned above (e.g. a raised temperature, pain during passing urine and feeling unwell).
- the stent gets dislodged or falls out.
- if you notice a significant change in the amount of blood in your urine.

Who to contact if you have any further questions?

If you have any further questions or concerns please contact the Urology Specialist Nurses, Urology Department

The Princess Royal Hospital

Ansty ward 01444 441881 Ext. 8240/8241
The Urology Nursing Team 01444 441881 Ext. 5457

Urology Consultants:

Mr Nawrocki's secretary 01444 441881 Ext. 5962
Mr Coker's secretary 01444 441881 Ext. 8043
Mr Symes 01273 696955 Ext. 7809
Mr Alanbuki's secretary 01273 696955 Ext. 7810
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