

Having a Ureteric Stent: What to expect and how to manage

This leaflet explains: In patients who have, or might have, an obstruction (blockage) of the kidney, an internal drainage tube called a 'stent' is commonly placed in the ureter (the tube between the kidney and the bladder). The stent is placed there in order to prevent or temporarily relieve the obstruction. If a long term stent is required it will have to be changed on a 6 monthly basis. Your urologist has recommended a 'ureteric stent' for you.

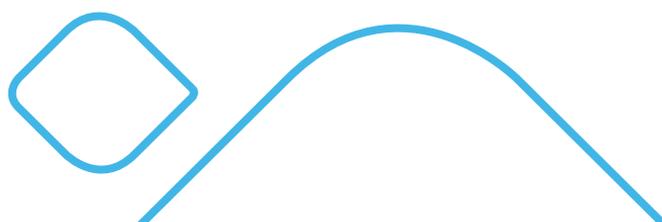
This booklet is designed for use by patients who are going to have a stent inserted. It will also be of help to health care professionals involved in your care or anyone who wishes to know more about ureteric stents.

The leaflet contains general information about ureteric stents, explains their benefits and describes some of the drawbacks that patients might experience.

This booklet is divided into two parts

The first part explains the urinary system, obstruction of the kidneys and treatment of this obstruction using ureteric stents.

- The second part describes what to expect while the stent is in place and any possible side effects.
- Your urologist will explain the specific details applicable to you.



Part 1- The urinary system and ureteric stents

The urinary system and the ureter

The kidneys produce urine. Normally there are two kidneys situated in the upper part of the abdomen, towards the back. The urine formed in the kidney is carried to the bladder by a fine muscular tube called a ureter. The urinary bladder acts as a reservoir for the urine and when it is full it is emptied via the urethra (water pipe).

How does the kidney become obstructed?

Common causes of obstruction of the kidneys and ureter are:

- A kidney stone or its fragment moving into the ureter, either spontaneously, or occasionally following such treatment as shock wave therapy.
- Narrowing (stricture) of the ureter anywhere along its path. This can be due to various causes e.g. scarring of wall of the ureter, narrowing of the area where ureter leaves from the kidney (pelvi-ureteric junction).
- Temporarily, following an operation or after an instrument has been inserted in the ureter and kidneys.
- Occasionally, obstruction can occur because of diseases of the prostate or pelvic tumours.

Your urologist will provide further details applicable to you.

What are the effects of obstruction

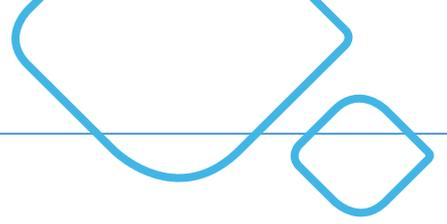
Whenever there is an obstruction, pressure builds up behind the kidney. Due to high pressure, the function of the kidneys starts to suffer over a period of weeks.

The obstruction can also cause stagnation of the urine, which can lead to infection and further damage to the kidneys. It is, therefore, important to relieve or prevent obstruction of the kidneys.

Temporary relief of the obstruction

It is not always possible to identify what has caused an obstruction and to treat this immediately. It is therefore essential to relieve the obstruction on a temporary basis before investigation or treatment is carried out.

Also, following an operation on the ureters, it takes time for the ureters to heal and a temporary measure to prevent obstruction becomes essential. This is commonly achieved by inserting a ureteric stent to make a channel for the urine to pass into the bladder and allow the kidneys to drain.



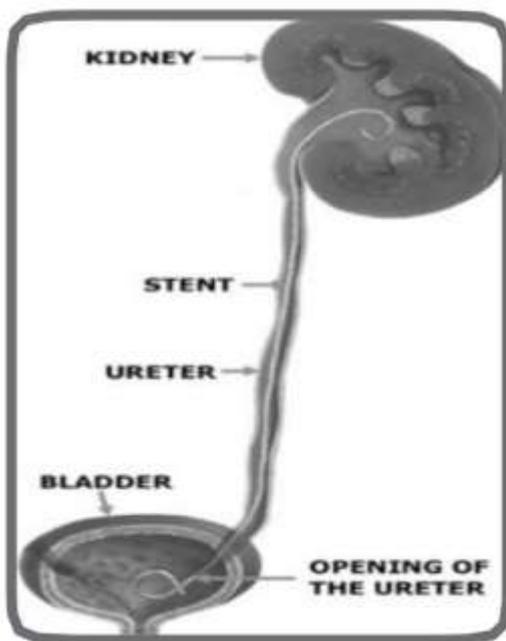
What is a ureteric stent?

A ureteric stent is a specially designed hollow tube, made of a flexible plastic material that is placed in the ureter. The length of the stents used in adult patients varies between 24 and 30cm. Although there are different types of stents, all of them serve the same purpose.

How does a stent 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.

How is a ureteric stent put in place?



Usually a stent is placed under a general anaesthetic using a special telescope (cystoscope) which is passed through the urethra into the bladder. The stent is then placed in the ureter and kidney via the opening of the ureter in the bladder. The stent may be inserted as an additional part of an operation on the ureter and kidney (e.g. ureteroscopy). Occasionally they are placed from the kidney down to the bladder using special x-ray techniques. The correct position of a stent is checked by taking a x-ray. If both kidneys are involved then two stents will be required

How long will the stent stay in the body?

This depends on the cause of obstruction and the nature of its treatment. In the majority of patients, the stents are required for only a short duration, from a few weeks to a few months. However, a stent in the right position can stay in for up to six months without the need to replace it.

Stents are temporary – they will either need to be removed or exchanged on a regular basis. Your urologist will tell you how long they expect your stent to remain in place.

How is a stent removed?

This is a short procedure and consists of removal of the stent using a flexible cystoscope, usually under local anaesthesia. Sometimes a stent can be left with a thread attached to its lower end that stays outside the body through the urethra (water pipe). Nurses can remove such stents by just pulling this thread.

Part 2- Living with a ureteric stent.

Introduction

Ureteric stents are designed to allow people to lead as normal a life as possible. However, they are often not without side effects.

In placing a stent, there is a balance between its advantages in relieving the obstruction and any possible side effects. Most side effects are not a danger to your health or your kidneys, although they can be a nuisance. Below, we have described the possible side effects associated with a ureteric stent.

What are the possible side effects associated with a stent?

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

Commonly noted side effects:

- The majority of patients with a stent in place will be aware of its presence most of the time.

Urinary side effects might be:

- An increased frequency of passing urine
- The need to rush to pass urine (urgency).
- A small amount of blood in the urine. This is quite common and the situation can improve with a greater fluid intake.
- The stents can also result in a sensation of incomplete emptying of the bladder. You should try and pass urine every 2-3 hours, if possible
- Very occasionally, especially in women, there is a slight risk of episodes of incontinence. Especially if the thread is left in place.

These effects are possibly due to the presence of the stent inside the bladder causing mechanical irritation. These effects should disappear 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.

Complete understanding of these side effects and their causes is not clear at present. It has also not been possible to predict, before placement of a stent, which patients are likely to experience side effects and what they will be.



Duration of side effects associated with a stent – can they improve?

[If you are using this template to write a patient information fact sheet, use the Information text font style – Arial 12pt] There is some evidence that some of the symptoms, such as pain while passing urine and blood in the urine, may improve with time. However, this remains unpredictable. It has been reported that around 20-70% of patients with stents experience one or more of these side effects.

If urinary frequency and urgency are very bothersome – please discuss this with your GP as a medication called Tamsulosin 400mcg may help whilst the stent is in place.

Can the side effects interfere with my day to day life?

Let us look at this in relation to various daily activities:

Physical activities and sports

You can carry on with various physical activities while the stent is in place provided the underlying kidney condition and your health allows you to do it. However, you may experience some discomfort in the kidney area and passing of blood in your urine, especially if sports and strenuous physical activities are involved. Sometimes side effects associated with a stent can make you feel more tired than normal.

Work activities:

You can continue to work normally with the stent inside your body. However, if the work involves lots of physical activities, you may experience more discomfort. Occasionally side effects, such as urinary symptoms and pain associated with the stent, may make you feel tired. If the stent causes significant problems, you can discuss it with your manager and colleagues so that possible temporary adjustments can be made at your work place.

Social life and interactions

The presence of a stent should not affect this in a significant way. If you get urinary symptoms such as, increased frequency and urgency, you may need to use toilets more frequently. Occasionally you may need a little more help from family members or colleagues, because of any pain or tiredness you may feel.

Travel and holidays

It is possible to travel with a stent in place, provided the underlying kidney condition and your general health allow this. However, presence of significant side effects associated with the stent may make travel and holidays less enjoyable. Also there is a small possibility that you may require additional medical help while the stent is in place.

Sex

There are no restrictions on your sex life due to the presence of a stent. Few patients experience discomfort during sexual activities. Occasionally the side effects associated with the stent may have an effect on the sexual desire.

If you have a stent with a thread coming outside the body through the urethra, sexual activities may be difficult. Care will be required so as not to dislodge the thread, which could then in turn displace the stent.

What other complications are possible?

Very occasionally a stent may get displaced, usually slipping towards the bladder, and it may even fall out.

If this happens, you should go to the RUH Emergency Department.

Is there a possibility of a 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.

What care do I need to take?

Very occasionally a stent may get displaced, usually slipping towards the bladder, and it may even fall out. If this happens, you should go to the RUH Emergency Department.

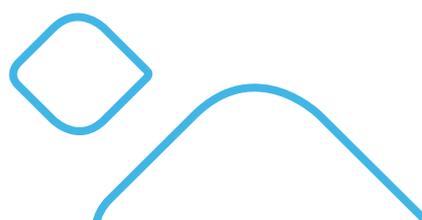
- It is essential that you drink at least 1.5 to 2 litres (approximately 4 pints) of fluids, mainly water, a day. This will help to cut down the risk of getting an infection and will reduce the amount of blood in the urine. It will also help in the treatment of stones
- If you experience bothersome pain 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.

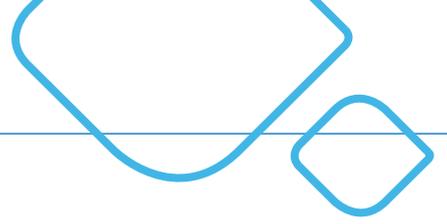
If you are in any doubt, please contact the urology department on 01225 825990/ 01225 824034

When should I call for help?

You should contact your GP or the hospital if:

- You experience a constant and unbearable pain associated with the stent.
- 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.
- You notice a significant change in the amount of blood in your urine





If you need further information or have any questions, please contact:

**Monday to Friday 9am to 5pm:
Urology Outpatients Reception 01225 825990
Urology Nurse Specialists 01225 924034**

Out of hours: Please call NHS 111 or attend your nearest Emergency Department.

Royal United Hospitals Bath NHS Foundation Trust
Combe Park, Bath, BA1 3NG
01225 428331 | www.ruh.nhs.uk

If you would like this leaflet in email form, large print, braille or another language, please contact the Patient Support and Complaints team on 01225 825656.

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