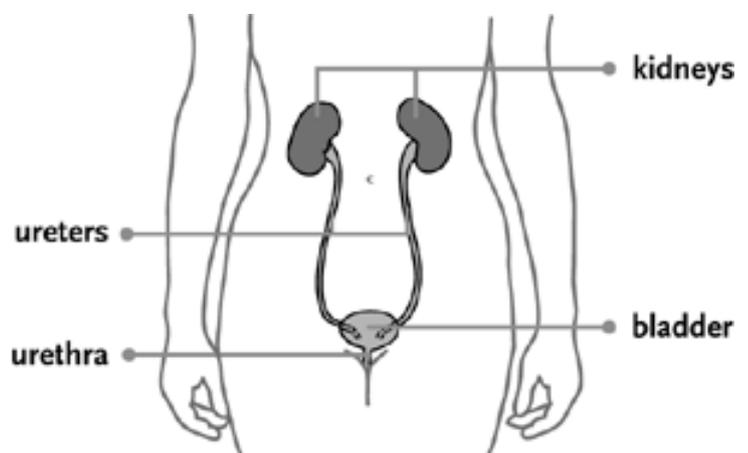


## Having a ureteroscopy and stone removal

This leaflet has been designed to give you information about undergoing a ureteroscopy and answer some of the questions that you may have. If you have any further questions about the operation, please contact the nursing staff on 0118 322 7384 / 6546.

### What is a ureteroscopy?

The urinary system is made up of the kidneys, ureter (the tube that links the kidney and bladder), bladder and urethra (the tube that urine passes through from the bladder before exiting the body). A ureteroscopy is a procedure that looks into the ureter and kidney. It involves inserting a special telescope, called a ureteroscope, into the urethra and then passing it through to the bladder and then on into the ureter and kidney.



The operation is usually performed under general anaesthetic. This means that you are asleep during the procedure. There are risks associated with having a general anaesthetic, but they are small. The ureteroscope is about the thickness of a pencil and has a tiny camera on one end, so the doctor can view an image of your urinary system on a screen. It is usually used to help make a diagnosis, to see if a treatment has been successful, or to access the kidney or ureter to treat kidney stones.

### Why do I need a ureteroscopy?

You may have been advised to have a ureteroscopy to try to find the cause of your symptoms. Sometimes, this will be clear from X-rays or tests of your blood or urine, but often the only way your doctor can be sure what is going on is to look inside your bladder and ureter.

Ureteroscopy is also performed to treat stone disease or cancers in the ureter and kidney and it can also help to diagnose the cause of:

- Abnormal cells in your urine
- Blood in your urine (haematuria)
- Pain (loin/back).

## What are stones?

The waste products in the blood can occasionally form crystals that collect inside the kidneys. Over time, the crystals may build up to form a hard stone-like lump. After a kidney stone has formed, your body will try to pass it out of the body in urine. This means it will often travel through the urinary system (the kidneys, kidney tubes and bladder), causing pain and urine problems.

## Stone removal

Stones located at almost any position in the ureter and kidney can be treated using the ureteroscope. The ureteroscope is passed into the ureter and up to the stone; X-ray guidance can be used to locate the stone.

Smaller stones may be removed with forceps and can very occasionally be removed in one piece. Larger stones need to be fragmented (broken into tiny pieces) to allow them to be removed or for you to pass them from the kidney or ureter. Fragmentation may be done using a laser which breaks the stone into smaller pieces that can then be passed out of the body in the urine.

If you receive treatment for kidney or urinary tract stones during the ureteroscopy, the smaller pieces will usually pass spontaneously. However, this may cause pain, nausea, vomiting and/or infection. They can also cause obstruction, which may lead to kidney damage. If the stones cannot be passed naturally, or you have experienced any of the symptoms mentioned, further procedures may be required.

## What are the risks?

A ureteroscopy is usually performed with no problems whatsoever. However, there are risks associated with any operation. Your doctor will explain these risks to you before you sign the consent form. If you are unsure of anything, please make sure you ask your doctor. Possible risks include:

- Discomfort – you may feel a stinging sensation when you urinate, but this should only last a day or two. Taking a normal pain-relieving tablet (Paracetamol or Ibuprofen) as prescribed may help.
- Bleeding – you will have some bleeding which can be variable and last a few days as a result of the procedure – this is completely normal. Drinking plenty of water (about three litres spaced out over 24 hours) can help to clear the urine. If your urine remains pink after a few days, please contact us (using the numbers on the back page) or your GP.
- Infection – a urine infection can cause a fever and pain when you pass urine. The risk of this can be reduced by drinking plenty of water after the procedure. You will be given an injection of antibiotics when you have the anaesthetic.
- Stent insertion – you may need a stent (a fine plastic tube) put in. The stent is inserted if there are concerns that the ureter may get blocked post procedure. A stent is also inserted

if the ureter is too tight and safe access is not possible. The stent allows urine to drain from your kidney into your bladder when you have a blockage (such as a stone or growth) in your ureter (the narrow, muscular tube that connects your kidney to your bladder). The stent is only temporary and will be removed at a later date. Unable to pass the telescope – in some patients the ureter is too tight to allow the telescope to pass. This occurs in approximately one in 20 cases. To avoid damaging the pipe, you will have a stent (explained below) inserted and the procedure will be re-booked. The stent widens the pipe so the second procedure should be more straightforward.

- Need for further procedures – sometimes the amount of stone present will mean that a further procedure is required. Your doctor will discuss this with you.
- Ureteric stricture – a narrowing can form in the pipe as a result of the procedure. This is very uncommon and occurs in less than one in 100 cases.

### Are there any alternatives?

A ureteroscopy is the only way to have a close enough look at the upper urinary system to diagnose certain ureter and kidney conditions. There are other ways to fragment stones including lithotripsy (shockwave treatment), percutaneous nephrolithotomy (PCNL) or laparoscopic (keyhole) or open surgery. These procedures would require a longer hospital stay and are usually performed if the other therapies have failed. Your doctor will discuss the possible options with you.

### What is a ureteric stent?

A ureteric stent is a thin plastic tube inserted into your kidney. It allows urine to drain from your kidney into your bladder if you have a blockage in your ureter (the narrow, muscular tube that connects your kidney to your bladder). A stent is often inserted for people who have stones blocking their kidney and may be required post ureteroscopy as described above, to protect the pipe where the telescope has been.

### Are there any risks associated with having a ureteric stent?

- The stent may irritate your bladder, causing you to feel a need to pass urine frequently.
- You may see blood in your urine on some occasions. This is made worse by physical activity such as going to the gym, walking, hoovering or carrying heavy bags. Even if your urine has a lot of blood in it, as long as you are passing urine this is fine. The blood in the urine may be cleared by drinking the recommended amount of daily fluids and will decrease as the days following the surgery pass.
- It is common to feel pain in your back (on the side of your body where the stent is) when passing urine. For most patients the symptoms are minor and can be tolerated.

- Occasionally, the stent may develop a crystal coating on its surface and maybe difficult to remove. Usually this is not a significant problem but is the reason that we try not to leave the stent in for any longer than is needed.
- Very occasionally, a stent may get displaced, usually slipping towards the bladder, and sometimes it may even fall out. This is very unusual and there have been rare cases where the stents have come out when the patient is passing urine. If this happens, you should contact the hospital on the numbers listed on the back page of this leaflet, or your GP.
- Having a stent, along with an underlying kidney problem, makes it more likely that you could develop a urinary tract infection. Some of the symptoms of urinary infection include a raised temperature, increased pain or discomfort in the kidney or bladder area, a burning sensation while passing urine and generally feeling unwell. Urinary tract infections require treatment with antibiotics, which your GP can prescribe for you.

### How long should the stent stay in for?

The length of time a stent needs to stay in for is different for every patient and your doctor will discuss this with you. Commonly, after a ureteroscopy, the stent is left in for about two to four weeks. It can occasionally be left for much longer if needed. It is very important that the stent is removed at the correct time. If you are concerned that you have not had your stent removed, please contact the stone team using the number on the back of this leaflet.

### What do I need to do to prepare for the procedure?

You may be asked to attend a pre-operative assessment. This is to have blood tests and a physical examination, to make sure you are fit for the procedure.

You must **not**:

- Eat anything for 6 hours before your procedure.
- You may drink still water (unflavoured only) until 2 hours before your procedure.
- If you have food or drink in your stomach when you have the anaesthetic, there is a higher risk of you being sick while unconscious.
- If you need to take blood pressure tablets, you can do so with small sips of water.
- You should try to avoid smoking as this will increase your risk of developing a chest infection, which means you will have to stay in hospital for longer. If you need help to stop smoking, please speak to your nurse or call the NHS smoking helpline on 0800 169 0 169 or Smokefreelife Berkshire [www.smokefreelifeberkshire.com](http://www.smokefreelifeberkshire.com) 0800 622 6360.

### Being involved in your care

We want to involve you in all the decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This confirms that you agree to have the procedure and understand what it involves.

### What are the arrangements for coming to hospital?

Your admission to hospital for your ureteroscopy will either be:

- Onto the Greenlands Admission Suite located next to Hopkins Ward, usually the day of your operation.
- Directly to the Adult Day Surgery Unit (ADSU) on the day of your operation.
- You will be told in advance, either at your pre-admission appointment or by letter, which one will apply to you.
- You will be told when to stop eating and drinking prior to the procedure.
- You will need to have a shower or bath before arriving at the hospital.
- Please remove all jewellery. If you have jewellery that cannot be removed, please let us know so that we can put tape on it. This is so that it does not interfere with our equipment.
- When you arrive you will be shown to a waiting area within the Admission Suite or ADSU and the nurse will prepare you for theatre, in order of the scheduled theatre list.
- You will be asked to change into your gown/nightwear.
- A nurse will check your urine, blood pressure, temperature and pulse.

### What happens before the operation?

Before your procedure you will be visited by the anaesthetist who will discuss the type of anaesthetic you will be given and the different types of pain relief available to you after the procedure when the anaesthetic has worn off.

You will walk to theatre, unless your mobility is limited, in which case you will travel there in a chair or on a trolley, accompanied by a nurse.

### What happens after the operation?

Although you will be awake a minute or two after the procedure is finished, you are unlikely to remember anything until you are back in your bed. You may feel sick or be sick for up to 24 hours after the operation. This is an after effect of the anaesthetic. If this happens, we will give you some anti-sickness medication. You may have an intense feeling of wanting to pass urine, but this should settle after a couple of hours. Occasionally, you may have a urinary catheter (drains urine from the bladder) left in temporarily. You will be encouraged to start drinking as soon as possible, as long as you are not feeling sick. You may eat a light meal as soon as you feel able to once on the ward. You should be eating and drinking normally in around 2-3 days.

The anaesthetic may make you clumsy, slow and forgetful for about 24 hours. Although you may feel fine, your reasoning, reflexes, judgment, coordination and skill can be affected for 48 hours after your surgery. If you are discharged from the hospital less than 48 hours from your surgery, please rest when you get home and do not go to school or work on the day after your surgery. For 48 hours after your surgery for your safety please **DO NOT**:

- Drive any vehicle, including a bicycle.

- Operate any machinery.
- Attempt to cook, use sharp utensils or pour hot or boiling liquids.
- Drink alcohol.
- Smoke.
- Take sleeping tablets.
- Make any important decisions or sign any contracts.

### Useful contacts

British Association of Urological Surgeons [www.baus.org.uk](http://www.baus.org.uk)

Visit the Trust website [www.royalberkshire.nhs.uk](http://www.royalberkshire.nhs.uk)

### Useful numbers

Adult Day Surgery Unit:	0118 322 7622
Pre-Operative Assessment:	0118 322 6546
Greenlands Admission Suite:	0118 322 6931 / 6932
Royal Berkshire Hospital:	0118 322 5111
West Berkshire Community Hospital:	01635 273492

This document can be made available in other languages and formats upon request.

Urology Department, November 2018

Review due: November 2020