



Ureteroscopic and Pyeloscopic Stone Extraction

What does the procedure involve?

Telescopic removal or fragmentation of stone(s) in the ureter (the tube between the bladder and the kidney) or kidney (pyeloscopy). You may require a stent after the procedure (internal plastic tube which runs between the bladder and the kidney to allow urine to flow).

What are the alternatives to this procedure?

External shock wave therapy or observation to allow spontaneous passage of stone(s).

What should I expect before the procedure?

You will usually be admitted on the same day as your surgery. You will be asked not to eat or drink for 6 hours before surgery.

Please be sure to inform your Urologist in advance of your surgery if you have any of; an artificial heart valve, coronary artery stent, heart pacemaker or defibrillator, artificial joint, artificial blood vessel graft, neurosurgical shunt, any other implanted foreign body

And/or

A prescription for any **blood thinning medications** such as *Warfarin, Aspirin or Clopidogrel (Plavix®)*

What happens during the procedure?

Normally, a full general anaesthetic will be used and you will be asleep throughout the procedure. You will usually be given antibiotics before the procedure.

A telescope is inserted into the bladder through the water pipe (urethra). The telescope is then inserted into the ureter and passed up to the kidney. The stone is disintegrated using a laser and the fragments extracted with special retrieval basket or if they are very small they are left to pass spontaneously.

Stenting

A stent is a thin tube that runs from the kidney down to the bladder. It is inserted for various reasons – but usually due to bruising of the ureter or to allow drainage of residual stone fragments. There are 2 types of stents:

1. Internal stents (commonest) which remain inside the patient for a defined period – usually 1-2 weeks. They require a further small procedure to remove. They tend to cause blood in your urine, discomfort with urination and urinary frequency. These symptoms will improve over 7-10 days but some patients find them very uncomfortable. Anti-inflammatory medications such as Voltaren are effective if you are allowed to take them.
2. External stents and catheters. These stents run from the kidney to the bladder, but then continue to come out of the body (through the urethra). They are attached to a urinary catheter. These stents are removed with the catheter within 24 hours.

What happens immediately after the procedure?

You will be able to go home once you are passing urine normally and your pain is controlled – whether that be on the day of surgery or occasionally the next day.



Are there any side-effects?

Most procedures have a potential for side-effects. You should be reassured that, although all these complications are well-recognised, the majority of patients do not suffer any problems after a urological procedure.

Common risks (greater than 1 in 10)

- Mild burning or bleeding on passing urine for short period after operation
- Temporary insertion of a bladder catheter
- Insertion of a stent with a further procedure to remove it (if required)
- The stent may cause pain, frequency and bleeding in the urine

Occasional risks (between 1 in 10 and 1 in 50)

- Inability to retrieve the stone or movement of the stone back into kidney where it is not retrievable
- Kidney damage or infection needing further treatment
- Failure to pass the telescope if the ureter is narrow
- Recurrence of stones

Rare risks (less than 1 in 50)

- Damage to the ureter with the need for open operation
- Very rarely, scarring or stricture of the ureter requiring further procedures

There are also general risks applicable to any type of surgery such as anaesthetic risks, bleeding requiring blood transfusion (very rare), deep venous thrombosis (clots in the legs) that may carry to the lungs (pulmonary embolism), hospital acquired infections.

What should I expect when I get home?

When you leave hospital, you will be given a discharge summary of your admission. This holds important information about your inpatient stay and your operation. If, in the first few weeks after discharge, you need to call your GP for any reason or to attend another hospital, please take this summary with you to allow the doctors to see details of your treatment.

When you get home, you should drink more fluid to flush your system through and minimise any bleeding. Aim for between 2.5 litres – 3 litres per day. You may experience discomfort on your side over the first 24-72 hours. Anti-inflammatory pain medication will help this pain that normally settles after 72 hours. It will take a few days for you to return to normal. It is reasonable for you to return to work when you feel comfortable. You should not drive within the first 24 hours of an anaesthetic. After 24 hours, you can drive when you are comfortable, and you can do so without pain.

What else should I look out for?

If you develop a fever, severe pain on passing urine, inability to pass urine, recurrence of your colic pain that is severe or worsening bleeding, you should contact your surgeon on the rooms number 8548 0321 during the day or the **call service 9387 1000** after hours.

Are there any other important points?

If a stent has been inserted, you will be informed before your discharge when the stent needs to be removed. Ureteric stents are usually removed in the Day Surgery Unit under local anaesthetic. **STENTS MUST NEVER BE LEFT IN FOR PROLONGED PERIODS AS THEY ENCRUST WITH STONE MAKING REMOVAL VERY DIFFICULT.**