



## URETEROSCOPY / PYELOSCOPY, LASERTRIPSY

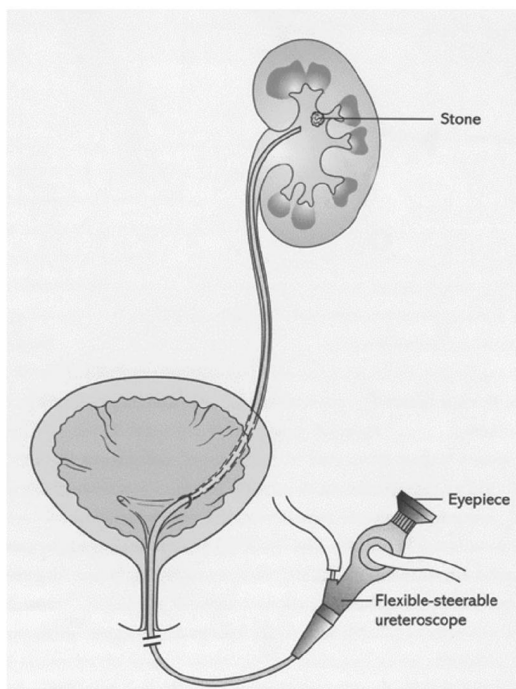
Laser fragmentation of a stone within the urinary tract

The procedure is usually performed under general anesthetic.

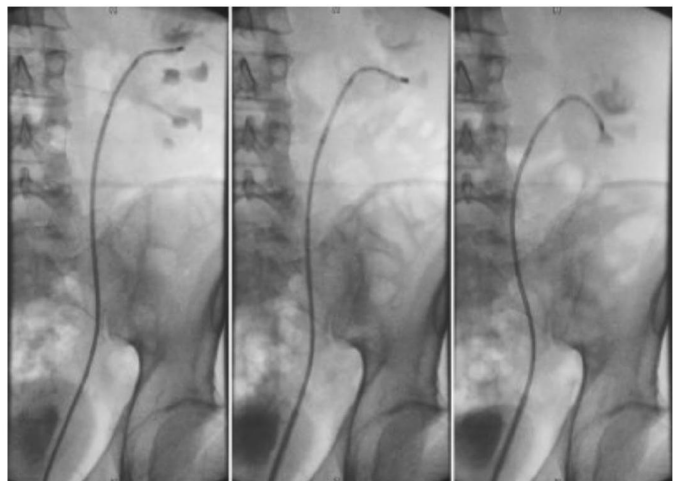
### TECHNIQUE

The operation involves the following steps:

- A cystoscope (camera that can see inside the bladder) is introduced into the bladder
- Through the cystoscope, dye is flushed through the ureter (the tube that drains the kidney) to the kidney itself. An x-ray is taken which can see the dye filling the kidney (this part of the procedure is called a retrograde pyelogram or 'RGPG'). Using the x-rays from the RGPG as a road map of your ureter and kidney, a wire is inserted up the ureter to your kidney.
- A ureteroscope (an even smaller camera which can see inside the ureter and kidney) is passed up the ureter over a wire until the stone is seen.
- A tiny laser (just over 0.2mm in diameter) is passed through the ureteroscope and the stone or is fragmented/destroyed with laser energy
- Fragments and debris are washed out of the kidney or ureter with the irrigation fluid
- A ureteric stent (a tiny hollow plastic tube which runs from the kidney to the bladder) is placed to ensure the kidney drains and that swelling or fragments don't cause a blockage. The stent is temporary and is removed under local anesthetic or sedation in a week or two



Above: A flexible ureteroscope is running from the bladder to the kidney



Above : An xray image showing the ureteroscope within the kidney.

Right: A view through a ureteroscope of a stone stuck in the ureter. This stone probably measures about 4-5mm.





## INTENDED BENEFITS

Treatment of stones in the kidney or ureter

## POTENTIAL RISKS/COMPLICATIONS

Common	Stent related bladder discomfort, urgency, frequency (passing urine more often than usual), haematuria (blood in the urine) and loin pain. 80% of patients experience some combination of these symptoms but they are usually not very severe and are not cause for concern.
Occasional	Infection requiring antibiotics (oral or intravenous) failure of initial attempt to treat the stone requiring a second procedure at a later date
Uncommon	Ureteric narrowing at site where the stone has been stuck. This may cause blockage of the ureter in the future.
Very Rare	The connection between ureter and bladder may be disrupted (avulsion) and require open surgical repair or long-term drainage via a stent or nephrostomy tube (tube in the kidney)

*Complications occur more commonly in patients who are smokers, diabetic, overweight or those with significant infection pre-operatively.*

*If your surgeon thinks that your ureter is too tight to admit the flexible ureteroscope, they will place a ureteric stent and allow a few weeks for the ureter to widen before attempting a repeat laser procedure. This dramatically reduces the risk of ureteric injury.*

## AFTER THE OPERATION

The procedure is usually a day case but an overnight stay may be required in some cases, particularly if you have large stones or your operation takes place later in the afternoon.

You may have a urinary catheter (tube draining your bladder) when you wake up - this will be removed when you are fully awake and mobile.

Long term follow-up depend on the findings at the time of the procedure. Patients who are recurrent stone formers or who have a large number of stones may be offered a metabolic workup for stone formation risk factors.

If you have any further questions, please ask - we are here to help you. You have the right to change your mind at any time, including after you have signed the consent form.