



Ureteroscopy for Urolithiasis

Ureteroscopy (URS) is a form of minimally invasive surgery using a small telescope that is passed through the urethra and into the ureter to remove a stone. Often the stone requires fragmentation with a laser which then allows the smaller fragments to be removed with a grasping device. Only about 10-15% of ureteral stones require surgical intervention. URS is approximately 95% successful in removing stones in the lower ureter and about 85-90% successful in treating and removing stones in the upper ureter and kidney.

Procedure

URS is an outpatient procedure meaning that patients generally go home the same day. The procedure is typically done using general anesthesia however sometimes regional anesthesia can be used successfully in select cases. A preoperative antibiotic is usually given to prevent infection. The procedure can vary in length—sometimes as short as 20 minutes for small un-complicated stones, to one (1) or longer for larger, more complicated stones.

Post-Procedure

After the procedure, patients are awakened in the operating room and taken to the recovery room. Once all hospital discharge criteria are met, patients are allowed to go home. A friend or family member is required to accompany you home after the procedure. There are no limitations on physical activities upon discharge. We often recommend taking the day off from work after your procedure.

Stents

A ureteral stent is a soft hollow tube that acts like a straw to permit urine to pass from the kidney down the ureter into the bladder. It is very common to have a stent placed into your ureter at the end of a URS. Stents are placed for a variety of reasons, all to help keep the ureter open after the procedure. A “string” is typically left attached to the stent and dangles out the urethra. The string is used to remove the stent 2-5 days post-operatively.

It is common to have some side effects related to the stent such as irritative urinary symptoms (frequency and urgency to urinate) or pain in the kidney/flank area immediately or shortly after urinating. These symptoms resolve promptly after the stent is removed.

Occasionally we recommend that a stent remain the ureter for up to 4 weeks, especially if there has been any degree of injury to the ureter either from the stone or the procedure to remove the stone. If this is done, a string is typically NOT left attached to the stent and removal of the stent will require passage of a small flexible telescope into the urethra and bladder (cystoscopy) in the office to grasp and remove the stent.

Complications

As with any surgical procedure, complications can occur, albeit they are rare. Examples of complications from URS include, but are not limited to:

- failure to remove stone
- perforation of the ureter
- injury to other structures such as bladder, urethra, ureter, kidney
- urinary infection
- need for additional procedures
- scar or stricture of ureter (<5% will require surgical repair)
- blood in the urine
- immediate surgical repair of an injured ureter (<<1% cases)

Most patients have no problems after URS. However, if you should have any questions, develop excess pain, nausea or vomiting not relieved with medications, chills and fever >101 F, inability to urinate, bloody urine with large clots or any other unusual problems, you should contact **Washington Urology** at **703-717-4200** during business hours or report to the ER if after hours.