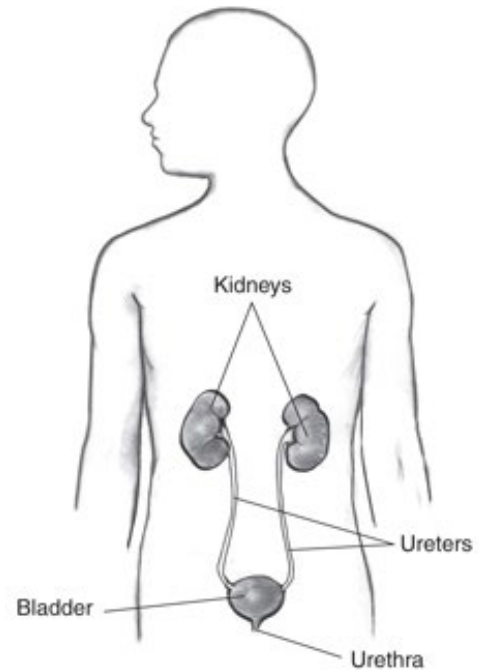




# Ureteroscopy

## What is a Ureteroscopy?

A ureteroscopy is a “minimally invasive” procedure. This means that a urologist inserts a tube-like device with a light and a lens for viewing (ureteroscope) through the urethra (natural urinary channel) instead of making cuts. Urologists use this procedure to treat kidney stones as well as stones located in the ureter (the tube that carries urine from the kidney to the bladder.) Urologists can also use this procedure to treat patients who must remain on anticoagulation therapy.



## What happens during the procedure?

The urologist inserts the thin ureteroscope upstream through the urethra. The ureteroscope helps deliver shock waves to the stone if necessary. **No incisions are made.** Once the urologist identifies the stone they break it up and remove it.

It is typically an outpatient procedure meaning you go home the same day. The urologist performs it in the operating room with general anesthesia (medicine to produce loss of feeling and deep sleep) or spinal anesthesia (medication to produce loss of feeling in part of the spine)

## What steps should I take to prepare for the procedure?

1. **Do not eat any solid food** (including gum, hard candy or mints) after 12am (midnight) the night before surgery.

2. **Do not drink any milk products** after 12am (midnight). **You may drink water** only and any routine medications up to 4 hours before your surgery.
3. Wear loose, simple clothing which can easily be changed. Leave all jewelry and valuables at home.
4. **Bring along to the hospital a responsible adult companion who will:** remain in the hospital, be available to hospital personnel during your procedure, and assist you upon discharge by driving you home with close observation of your condition.

### **What should I expect before the procedure?**

1. You will have lab tests and X-rays to ensure your safety during the procedure.
2. Arrive at the Information Desk, at the location you were given and at the time requested. Please allow time to register and change your clothing. Hospital personnel will assist you and escort you to the designated area.
3. You may receive an antibiotic, either by mouth or through an IV, right before the procedure.
4. The anesthesia team attaches monitoring devices to you to monitor your general or spinal anesthesia for this procedure.

### **What should I expect during the procedure?**

1. Once you are under anesthesia, you are positioned on your back with legs elevated.
2. Your urologist examines the inside of the bladder using a thin tube inserted through the urethra with a light and a lens for viewing (optical cystoscope).
3. We may take an X-ray of the ureters (image taken of the inside of your body) to outline the urethra and stone location. We may inject contrast (a type of dye) to show any abnormal areas in the X-Ray scan.
4. The urologist then passes the ureteroscope through the urethra, into the bladder, up the ureter, and into the kidney to reach the stones.

5. The urologist passes a small wire basket through the middle of the ureteroscope to grasp and remove the stone.
6. If the stone is too large to be easily removed, the urologist will break it up by delivering laser or shock waves through a fiber inserted through the ureteroscope.
7. The procedure time varies based on the amount of stone present but generally takes 1-2 hours.
8. After the procedure, you are monitored in the post-operative recovery area, usually for about 2 hours, before being discharged home.

### **What should I expect after the procedure?**

- In some people the urologist places a temporary, internal, plastic tube called a stent within the ureter at the end of the procedure to ensure that swelling does not block the drainage of urine.
  - Generally, the urologist removes the stent 1 to 2 weeks after ureteroscopy with a minor procedure in their office.
  - Sometimes the urologist attaches a thread to the end of the stent in your bladder and tape it to your skin near the opening of the urethra. This will allow you to remove your own stent at home 3-5 days after the procedure.
- You can expect your urine to be bloody for several days after the procedure or until the urologist removes the ureteral stent (if one was placed).
- You will receive non-narcotic tablets for pain relief at home. You may also receive other medications to relax the ureter such as Flomax (tamsulosin). Or medications to reduce swelling and pain (examples include Pyridium (phenazopyridine) and Motrin (ibuprofen)).
- Avoid strenuous activity or heavy lifting for several days after the procedure or until you or your urologist removes the stent. Most people can then resume normal activities without pain.

- Do not drive any motor vehicle or operate motorized equipment for at least 24 hours after your procedure.
- Do not make any complex decisions, sign legal documents, or participate in activities potentially harmful to others, e.g., cooking, nursing infants, without supervision for at least 24 hours after your procedure.
  - This is to allow time for the anesthetic to leave your body.
- Do not drink alcohol for at least 24 hours after your procedure.
- Begin eating food slowly. Start with sips of liquids, followed by the addition of solid foods as tolerated.
  - If you do not feel like eating solids, take liquids
  - Nausea and/or vomiting commonly occurs during this period and is not considered abnormal unless severe or persistent beyond the first day.
- You will have a follow up visit with your urologist either:
  - Within 1-2 weeks so your urologist can remove your stent, if one was placed without a thread.
  - Within 4-6 weeks after surgery if your urologist did not require a stent or you removed it at home. At that time, we will take an X-ray to determine the procedure's success and to look for any complications.
- Depending on your risk of stone reappearance, your urologist may offer further testing to help prevent future stones.

Disclaimer: This document contains information and/or instructional materials developed by Michigan Medicine for the typical patient with your condition. It may include links to online content that was not created by Michigan Medicine and for which Michigan Medicine does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan.

Author: William Roberts MD, John Hollingsworth MD, Sapan Ambani MD, Casey Dauw MD, Khurshid Ghani MD, Anna Silvenis RN, Breanna Frederick RN

Patient Education by [Michigan Medicine](#) is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International Public License](#). Last Revised 07/2019