

# Cystoscopy and Ureteroscopy

*National Kidney and Urologic Diseases Information Clearinghouse*



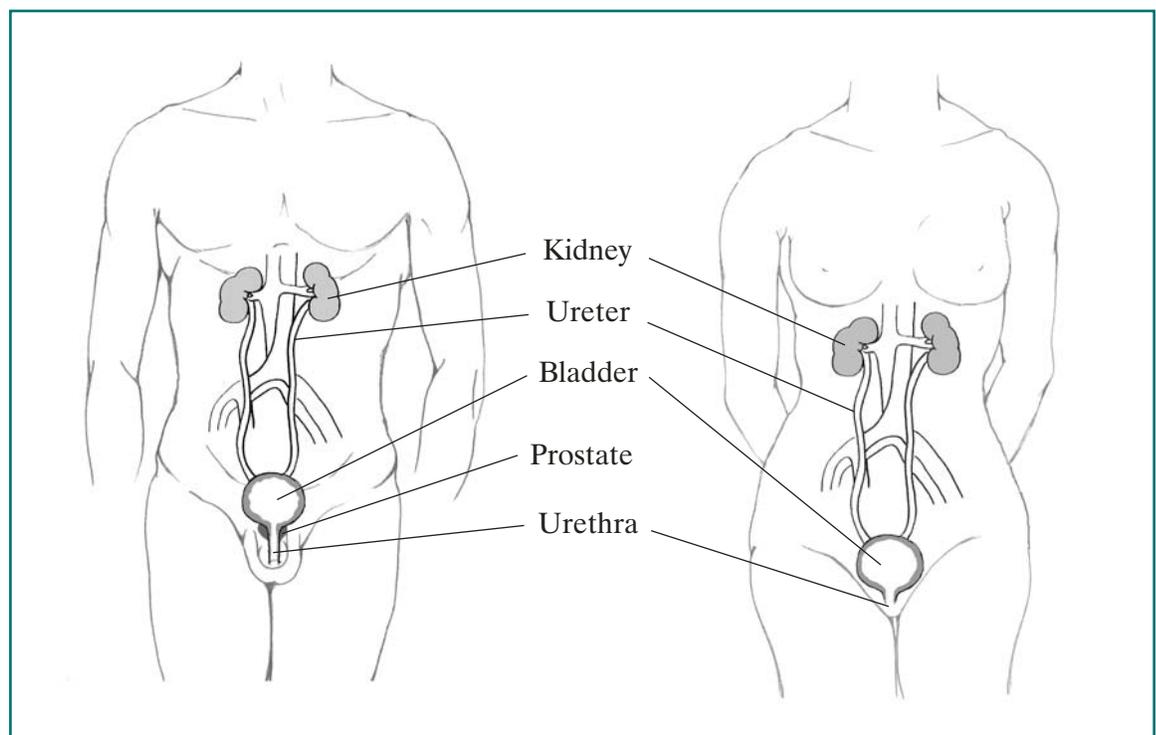
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When you have a urinary problem, your doctor may use a cystoscope to see inside your bladder and urethra. The urethra is the tube that carries urine from the bladder to the outside of the body. The cystoscope has lenses like a telescope or microscope. These lenses let the doctor focus on the inner surfaces of the urinary tract. Some cystoscopes use optical fibers (flexible glass fibers) that carry an image from the tip of the instrument to a viewing piece at the other end. The cystoscope is as thin as a pencil and has a light at the tip. Many cystoscopes have extra tubes to guide other instruments for procedures to treat

urinary problems. Your doctor may recommend cystoscopy for any of the following conditions:

- frequent urinary tract infections
- blood in your urine (hematuria)
- loss of bladder control (incontinence) or overactive bladder
- unusual cells found in urine sample
- need for a bladder catheter
- painful urination, chronic pelvic pain, or interstitial cystitis



*Male and female urinary tracts.*



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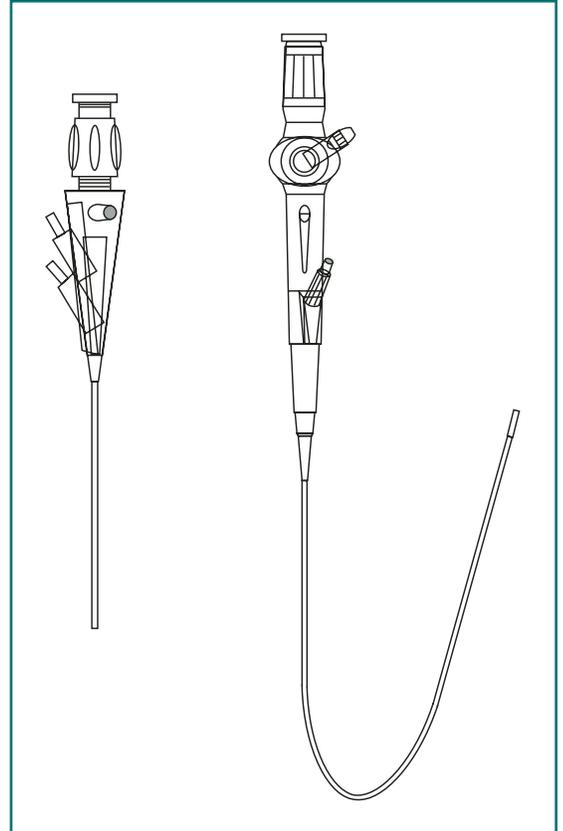
- urinary blockage such as prostate enlargement, stricture, or narrowing of the urinary tract
- stone in the urinary tract
- unusual growth, polyp, tumor, or cancer

If you have a stone lodged in your ureter or have an area that needs more study in your ureter, your doctor may recommend a ureteroscopy, usually with general or regional anesthesia. The ureter is the tube that carries urine from the kidney to the bladder. The ureteroscope is a special, very thin instrument used to look directly at and visualize the inside of the ureter. Some ureteroscopes are flexible like a small, very long straw. Others are more rigid and firm. Through the ureteroscope, the doctor can see the stone. The doctor can then move the stone, either by removing it with a small basket at the end of a wire inserted through an extra tube in the ureteroscope or by extending a flexible fiber that carries a laser beam to break the stone into smaller pieces that can then pass out of the body in your urine. How and what the doctor will do is determined by the location, size, and composition of the stone. The doctor may leave a stent, a flexible tube that keeps the ureter open for drainage after the procedure.

## Preparation

Ask your doctor about any special instructions. In most cases, you will be able to eat normally and return to normal activities after the test.

Since any medical procedure has a small risk of injury, you will need to sign a consent form before the test. Do not hesitate to ask your doctor about any concerns you might have.



*Rigid cystoscope and semirigid ureteroscope.*

You may be asked to give a urine sample before the test to check for infection. Avoid urinating for an hour before this part of the test.

You will wear a hospital gown for the examination, and the lower part of your body will be covered with a sterile drape. In most cases, you will lie on your back with your knees raised and apart. A nurse or technician will clean the area around your urethral opening and apply a local anesthetic.

If you are going to have a ureteroscopy, you may receive a spinal or general anesthetic. If you know this is the case, you will want to arrange a ride home after the test.

## Test Procedures

The doctor will gently insert the tip of the cystoscope into your urethra and slowly glide it up into the bladder. Relaxing your pelvic muscles will help make this part of the test easier. A sterile liquid (water or saline) will flow through the cystoscope to slowly fill your bladder and stretch it so that the doctor has a better view of the bladder wall.

As your bladder reaches capacity, you will feel some discomfort and the urge to urinate. You will be able to empty your bladder as soon as the examination is over.

The time from insertion of the cystoscope to removal may be only a few minutes, or it may be longer if the doctor finds a stone and decides to remove it. Taking a biopsy (a small tissue sample for examination under a microscope) will also make the procedure last longer. In most cases, the entire examination, including preparation, will take about 15 to 20 minutes.

## After the Test

You may have a mild burning feeling when you urinate, and you may see small amounts of blood in your urine. These problems should not last more than 24 hours. Tell your doctor if bleeding or pain is severe or if problems last more than a couple of days.

To relieve discomfort, drink two 8-ounce glasses of water each hour for 2 hours. Ask your doctor if you can take a warm bath to relieve the burning feeling. If not, you may be able to hold a warm, damp washcloth over the urethral opening.

Your doctor may give you an antibiotic to take for 1 or 2 days to prevent an infection. If you have signs of infection—including pain, chills, or fever—call your doctor.

## For More Information

More information is available from

**American Urological Association, Inc.**  
1000 Corporate Boulevard  
Linthicum, MD 21090  
Phone: 1-866-RING-AUA (746-4282) or  
410-689-3700  
Email: [aua@auanet.org](mailto:aua@auanet.org)  
Internet: [www.urologyhealth.org](http://www.urologyhealth.org)

**Interstitial Cystitis Association (ICA)**  
110 North Washington Street  
Suite 340  
Rockville, MD 20850  
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301-610-5300  
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The National Kidney and Urologic Diseases Information Clearinghouse (NKUDIC) is a service of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). The NIDDK is part of the National Institutes of Health under the U.S. Department of Health and Human Services. Established in 1987, the Clearinghouse provides information about diseases of the kidneys and urologic system to people with kidney and urologic disorders and to their families, health care professionals, and the public. The NKUDIC answers inquiries, develops and distributes publications, and works closely with professional and patient organizations and Government agencies to coordinate resources about kidney and urologic diseases.

Publications produced by the Clearinghouse are carefully reviewed by both NIDDK scientists and outside experts. This fact sheet was also reviewed by Michael B. Chancellor, M.D., University of Pittsburgh Medical Center, and William D. Steers, M.D., University of Virginia.

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This fact sheet is also available at  
[www.kidney.niddk.nih.gov](http://www.kidney.niddk.nih.gov).



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