

Cystoscopy Information Sheet

General indications for the proposed procedure/treatment:

Cystoscopy is a test that allows the doctor to look at the inside of the bladder and the urethra using a thin, lighted instrument called a cystoscope.

The cystoscope is inserted into the patient's urethra and slowly advanced into the bladder. Cystoscopy allows the doctor to look at areas of your bladder and urethra that usually do not show up well on X-rays. Tiny surgical instruments can be inserted through the cystoscopes that allow the doctor to remove samples of tissue (biopsy) or samples of urine.

Small bladder stones and some small growths can be removed during cystoscopy. This may eliminate the need for more extensive surgery.

Cystoscopy may be done to:

- Find the cause of symptoms such as blood in the urine (hematuria), painful urination (dysuria), urinary incontinence, urinary frequency or hesitancy, an inability to pass urine (retention), or a sudden and overwhelming need to urinate (urgency).
- Find the cause of problems of the urinary tract, such as frequent, repeated urinary tract infections or urinary tract infections that do not respond to treatment.
- Look for problems in the urinary tract, such as blockage in the urethra caused by kidney stones, or tumors.
- Evaluate problems that cannot be seen on X-ray or to further investigate problems detected by ultrasound or during intravenous pyelography, such as kidney stones or tumors.
- Remove tissue samples for biopsy.
- Remove foreign objects.
- Place ureteral catheters (stents) to help urine flow from the kidneys to the bladder.
- Treat urinary tract problems. For example, cystoscopy can be done to remove urinary tract stones or growths, treat bleeding in the bladder, relieve blockages in the urethra, or treat or remove tumors.
- Place a catheter in the ureter for an X-ray test called retrograde pyelography. A dye that shows up on an X-ray picture is injected through the catheter to fill and outline the ureter and the inside of the kidney.

Description of Procedure:

The patient should tell their doctor if they are allergic to any medicines, including anesthetics, have had bleeding problems or take blood-thinning medicine, such as aspirin or warfarin, or may be pregnant.

The patient should talk to their doctor about any concerns they have regarding the need for the test, its risks, how it will be done, or what the results may mean.

Cystoscopy can be performed with local, spinal, or general anesthesia. The patient should empty their bladder just before the test. She may be given medicine to prevent a urinary tract infection that could be caused by the test.

Cystoscopy is performed by an urologist, with one or more assistants. The test is done in a special testing room in a hospital or the doctor's office.

About an hour before the test, the patient may be given a sedative to help her relax. An intravenous (IV) needle may be placed in a vein in the arm to disperse other medicines and fluids. The patient will lay on her back on a special table with her knees bent, legs apart, and her feet or thighs may be supported by stirrups. Her genital area is cleaned with an antiseptic solution, and the abdomen and thighs are covered with sterile cloths. If a local anesthetic is used, the anesthetic solution or jelly is inserted in the patient's urethra. If a general anesthetic is used, the patient will be put to sleep either with a medicine given through an IV or by inhaling gases through a mask, or both methods may be used. If a spinal anesthetic is used, the area on the back where the needle will be inserted is first numbed with a local anesthetic, then the needle is guided into the spinal canal and the anesthetic is injected. A spinal anesthetic may prevent movement of the legs until the anesthetic wears off.

After the anesthetic takes effect, a well-lubricated cystoscope is inserted into the patient's urethra and slowly advanced into the bladder. If the urethra has a spot that is too narrow to allow the scope to pass, other smaller instruments are inserted first to gradually enlarge the opening.

After the cystoscope is inside the bladder, either sterile water or saline is injected through the scope to help expand the bladder and to create a clear view. A medicine may also be injected through the scope to reduce chances of infection. Tiny instruments may be inserted through the scope to collect tissue samples for biopsy; the tissue samples then are sent to the laboratory for analysis.

The cystoscope is usually in the bladder for only 2 to 10 minutes. But the entire test may take up to 45 minutes or longer if other X-ray tests are done at the same time. If a local anesthetic is used, the patient may be able to get up immediately after the test. If a general anesthetic is used, the patient will stay in the recovery room until she is awake and able to walk (usually an hour or less). The patient can eat and drink as soon as she is fully awake and can swallow without choking. If a spinal anesthetic was used, the patient will stay in the recovery room until sensation and movement below the chest returns (usually about an hour).

Most people report that this test is not nearly as uncomfortable as they had expected. If a general anesthetic is used, the patient will feel nothing during the test, but after the anesthetic wears off the muscles may feel tired and achy. Some people experience nausea after receiving a general anesthetic.

If a local anesthetic is used, the patient may feel a burning sensation or an urge to urinate when the instrument is inserted and removed. Also, when the bladder is irrigated with sterile water or saline, the patient may feel a cool sensation, an uncomfortable fullness, and an urgent need to urinate.

If a spinal anesthetic is used, the patient may find it uncomfortable to lie curled up on her side while the anesthetic is injected. There will probably feel a brief stinging sensation when the anesthetic is injected. The patient may feel tired and have a slight backache the day after the test.

Risk of the Procedure:

Cystoscopy generally is a very safe test. If a general anesthetic is used, there are some risks of general anesthesia. There is no risk of loss of sexual function.

The most common side effect is a temporary swelling of the urethra, which may make it difficult to urinate. A catheter inserted in the bladder can help drain the urine until the swelling goes away. Bleeding sometimes occurs, but it usually stops on its own.

The patient may have a mild infection in the urinary tract after cystoscopy. This can usually be prevented or treated by taking medicine before and after the test. In rare cases, the infection can spread through the body, and in very rare circumstances, usually with seriously ill people; the infection can be life-threatening. Another rare complication is a puncture of the urethra or bladder by one of the instruments, which requires surgery to repair.

After the test

After the test, the patient may need to urinate frequently, with some burning during and after urination for a day or two. A pinkish tinge to the urine is also common for several days after cystoscopy, particularly if a biopsy was performed. But the patient should call their doctor immediately if:

- Urine remains red or she sees blood clots after having urinated several times.
- She has not been able to urinate 8 hours after the test.
- The patient experiences fever, chills, or severe pain in their flank or abdomen. These may be signs of a kidney infection.
- She has symptoms of a urinary tract infection. These symptoms include:
 - Pain or burning upon urination.
 - An urge to urinate frequently, but usually passing only small quantities of urine.
 - Dribbling or leakage of urine.
 - Urine that is reddish or pinkish, foul-smelling, or cloudy.
 - Pain or a feeling of heaviness in the lower abdomen.

Procedure Alternatives, if any:

Other X-ray tests, such as retrograde pyelography or cystourethrography, may also be done during cystoscopy.

Probable consequences of Refusing Procedure:

The patient may have a condition that can continue to go undiagnosed.

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Person(s) Performing the Procedure:

The key portions of the procedure will be performed by a physician who is a member of the medical staff of Rush University Medical Center and/or a resident/fellow who is observed by a physician who is a member of the medical staff. Residents/Fellows are licensed physicians in approved residency or post residency training programs. Parts of the procedure which they perform will be based on their level of competency.