

Urethral catheter care

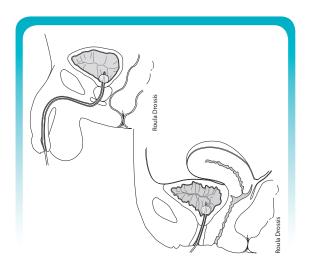
Proper catheter care will reduce discomfort and prevent complications.

rine is produced by the kidneys and carried into the bladder where it is stored until emptying is appropriate. Normally, the bladder empties by coordinated contraction of the bladder muscle and relaxation of the control muscles (urethral sphincters) to expel urine through its outlet, the urethra.

When the bladder cannot empty on its own, it must be drained to prevent urine build up, discomfort and possible kidney damage. Bladder drainage may be required due to obstruction of its outlet (often from prostate enlargement in men) or inadequate bladder muscle contraction. After surgery or serious injury, continuous bladder drainage is often needed until recovery is well underway.

A **urethral catheter** is a narrow, flexible tube passed into the bladder through the urethra to drain urine. The catheter can be left in place for several days or weeks until you are ready to void spontaneously. In some, bladder emptying by catheter may be required for longer periods or permanently. Temporary catheter drainage may be used to accurately measure urine output or when urine leakage (incontinence) causes skin problems.

A small balloon inflated with water on the catheter tip prevents it from slipping out of the bladder.



When catheter removal is appropriate, the balloon is deflated with a syringe applied to a valve on the catheter.

An in-dwelling catheter drains urine continuously into a drainage bag. When it fills, the bag can be emptied directly into a toilet. During the day, most active men and women will prefer to use a small collection bag strapped to the leg (leg bag) and worn discretely under the clothing. A larger capacity drainage bag can be connected at bedtime and hung at the bedside or placed on the floor. You will be instructed how to connect and drain your bags.

The size (diameter), material and type of your catheter will be determined by your physician according to your needs. Generally, a narrower catheter will cause less irritation.

In some cases, a patient can be taught to insert a catheter to drain the bladder after which the catheter is removed rather than leaving it in-dwelling. This **intermittent-self-catheterization** decreases the discomfort of carrying a catheter continuously and reduces the risk of infection. A **suprapubic catheter** is an in-dwelling bladder drainage tube inserted directly into the bladder through a small incision in the lower abdomen. This allows bladder drainage while avoiding the urethra.

Hygiene and catheter care

The catheter should be taped or strapped to the thigh with a Velcro strap (available through most medical supply stores) to prevent pulling and irritation of the urethral opening. Avoid over-tightening the catheter and leg bag straps. The drainage bag should always be kept below the level of the bladder to prevent urine from backing up. Your catheter bag should be emptied at least every 8 hours.

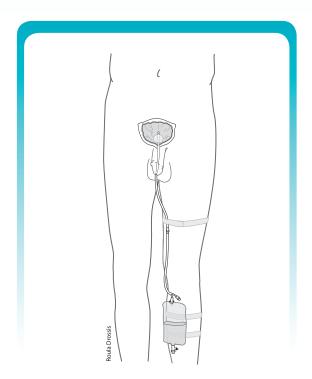
It is important to maintain good hygiene to prevent infection. Wash your hands before and after emptying or changing your drainage bag. When changing bags, the connections should be wiped with an alcohol swab (available at any pharmacy).

Urethral catheter care

Debris may accumulate where the catheter exits from the urethral opening. This area and about 5 cm (2 inches) of the catheter should be washed daily with a clean washcloth, soap and water and then dried with a clean towel.

You may shower with a catheter, but, soaking in water (bathing, hot tubs, swimming...) should be avoided. You should not have sexual intercourse while using an in-dwelling urethral catheter. Avoid constipation. Use a mild laxative or stool softener such a docusate (e.g. ColaceTM), if necessary.

There may be a small amount of urine leakage alongside the catheter, particularly at the time of bowel movement. This occurs because the control muscles may not make a watertight seal around the catheter. If there is a lot of leakage, ensure that the catheter is not blocked or kinked.



You may be asked to record your urine output. When you empty your drainage bag, record the time and volume of urine in milliliters or ounces using a measuring cup. Drink plenty of fluids (about 8 to 10 glasses daily), to produce about two liters of urine daily unless advised otherwise. Limit consumption of carbonated beverages, which may promote stone formation.

Those requiring long-term catheter drainage should have the catheter changed about once every month. The catheter drainage bag(s) and tubing can be kept clean by rinsing and washing in warm water and dish soap at least weekly. Periodic soaking for 20 minutes in half-strength white vinegar or bleach will limit growth of bacteria. After rinsing thoroughly with water, the bag should be left to air dry with the outlet valve open. The dry bag can be stored in a clean plastic bag. Damaged or cracked tubing or drainage bags should be replaced.

Problems

It is important to ensure that urine can flow freely through your catheter. **Catheter obstruction** by debris, blood or kinking will cause bladder discomfort, which will not be relieved until the catheter is unplugged. If frequent plugging with debris becomes a problem, you may be instructed to have your catheter flushed with water using a syringe.

While a catheter is in place it is not unusual to have the urge to void. This is caused by mild irritation of the bladder and urethra by the catheter. **Bladder spasms** occur when the bladder contracts around the catheter balloon. When bladder spasms are frequent and bothersome they can be controlled with medication prescribed by your doctor.

Irritation of the urethral opening can cause discomfort, redness, swelling, raw areas or skin breakdown. This can be prevented with daily cleaning and ensuring that the catheter is not pulling on the opening. The application of a small amount of antibacterial ointment (e.g. PolysporinTM) around the catheter at the urethral opening may help keep this area lubricated and clean.

Urethral catheter care

Having a catheter in the bladder will irritate the bladder lining and urethra. In some cases, this will result in **bloody urine**. Tugging on the catheter can also cause bleeding. If this occurs, make sure that the catheter is secure, increase your fluid intake and reduce your activity. Contact your physician if bleeding is heavy or continuous for more than three days.

When a catheter is left in for more than a few weeks, it is not unusual for bacteria to be found in the urine. **Infection** manifested by fever, sweats and/or chills requires prompt medical attention and antibiotic treatment.

Debris may deposit on the catheter when the urine is concentrated, particularly if infection is present. Over time, this debris may turn into **stones** in the bladder which will require surgical removal. Debris buildup can be minimized by keeping the urine dilute and maintaining good hygiene.

Contact your physician or home care nurse if you have:

- Fever (over 37.8°C or 100°F), chills or sweats
- On-going bloody urine or blood clots
- Increasing urethral discomfort, redness and/or swelling
- Catheter dislodgement or inadvertent removal
- Inadequate catheter drainage

You will be informed regarding the timing of catheter removal or changing.

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