HEALTH BASICS

Urinary catheters

A urinary catheter is a tube or device used to drain urine.

WHAT IT IS
A tube or device that drains urine

WHERE IT COMES UP
Surgery, urinary retention, serious illness, or bladder-emptying problems

WHY IT MATTERS
It drains the bladder but can cause complications

WHAT IT IS NOT
Not a disease or diagnosis

WHO TO ASK
A nurse, doctor, continence service, or urology team

HOW IT IS CHECKED
Urine flow, tubing, drainage bag, and surrounding skin

Overview

A urinary catheter helps urine leave your bladder. The bladder is the organ that stores urine before you pass it. A catheter is a medical device, not a disease or diagnosis.

Catheters are used when someone cannot empty their bladder, needs urine output measured closely, or is having certain operations or treatments. They may also be used for comfort in selected situations.

The main types are:

An indwelling catheter is sometimes called a Foley catheter. A small balloon filled with sterile water holds it inside the bladder.

- Indwelling urethral catheter: a flexible tube passed through the urethra, the normal outlet for urine, into the bladder
- Suprapubic catheter: a tube placed into the bladder through a small opening in the lower abdomen
- Intermittent catheter: a tube inserted long enough to empty the bladder, then removed

- External catheter: a device that collects urine without entering the bladder, such as a sheath worn over the penis or a suction-based device placed against the vulva

How it works

Urine flows from the bladder through the catheter. With an indwelling or suprapubic catheter, tubing usually carries the urine into a drainage bag. A smaller leg bag may be used during the day, while a larger bag may be used overnight.

The bag needs to stay below bladder level so gravity can help urine drain. Kinked tubing, a bag positioned too high, or a blockage can slow or stop the flow.

An intermittent catheter does not remain in place. It is inserted at planned times to empty the bladder. Some people learn to do this themselves. The schedule and technique should be based on their individual care plan.

External catheters collect urine after it leaves the body. Because they do not enter the bladder, they work differently from urethral and suprapubic catheters. They still need correct positioning and regular skin checks.

A clinician selects the catheter type and size for the reason it is needed. Insertion of an indwelling catheter uses clean or sterile equipment and infection-control steps. Do not try to insert, remove, flush, or change one unless you have been trained and told to do so.

Why it matters for your health

A catheter can prevent the bladder from becoming painfully overfilled when urine cannot pass normally. This problem is called urinary retention . Catheters can also allow a healthcare team to measure urine accurately when that information affects treatment.

During or after some operations, a catheter keeps the bladder empty while anaesthesia, pain, or reduced movement makes normal urination difficult. In some long-term bladder or nerve conditions, intermittent or indwelling drainage may be part of ongoing care.

The benefit needs to be balanced against the chance of infection, blockage, leakage, and injury. An indwelling catheter is generally reviewed regularly and removed when it is no longer needed.

Having bacteria in the urine becomes more likely the longer an indwelling catheter remains in place. This does not always mean there is an infection needing antibiotics like amoxicillin or doxycycline . Cloudy or strong-smelling urine alone cannot confirm a urinary tract infection.

What can go wrong

A catheter-associated urinary tract infection , or CAUTI, is an infection involving the urinary system in someone with a catheter or who recently had one. Possible signs include fever, chills, new pain over the bladder or in the back, and feeling generally unwell. In older adults, a sudden change in alertness may need assessment, but confusion has many possible causes.

Other catheter-related problems include:

Contact your catheter service or seek same-day medical advice if drainage stops, urine repeatedly leaks around the catheter, new blood appears, the catheter falls out, or you develop fever, chills, new bladder or back pain, or worsening illness. A blocked catheter with increasing lower abdominal pain or swelling needs prompt assessment.

Call emergency services for severe bleeding, collapse, difficulty breathing, inability to stay awake, or severe rapidly worsening illness. These signs do not prove the catheter is the cause, but they require emergency assessment.

- Blockage: sediment, blood clots, encrustation, or bent tubing stops drainage
- Leakage around the catheter: urine passes beside the tube because of blockage, bladder contractions, constipation, or poor positioning
- Bladder spasms: the bladder tightens suddenly, causing cramps or leakage
- Urethral injury: insertion, pulling, or poor support damages the urine passage
- Skin damage: moisture, pressure, adhesive, or an external device irritates the skin
- Accidental removal: pulling dislodges the catheter and may cause bleeding or injury
- Bladder stones: mineral deposits may form in some people with long-term catheters

What you can do

Ask why the catheter is needed, which type you have, and when its need will be reviewed. If you are leaving a hospital or clinic with one, make sure you know who to contact during the day and outside normal hours.

For an indwelling catheter:

Do not put antiseptic into the drainage bag or routinely apply antiseptic around the catheter unless your care team has given a specific reason. Do not flush a catheter to clear a blockage unless you have been trained and this is part of your plan.

Drink according to your usual medical advice. Some people have fluid limits because of heart,

kidney, or other conditions, so increasing fluids is not appropriate for everyone.

Check the urine is flowing and notice major changes in amount, colour, or visible blood. If you have been asked to measure output, record the amount and time. Otherwise, there is usually no need to measure every bag.

For intermittent or external catheters, follow the cleaning, replacement, and skin-care instructions for that particular product. Tell the service supplying it if the fit is poor, the device repeatedly leaks, or the skin becomes sore.

- Wash your hands before and after touching the catheter or drainage system
- Keep the tubing free of bends and the bag below your bladder
- Secure the tubing as shown to reduce pulling
- Keep the drainage bag off the floor
- Avoid disconnecting the tubing unless your care plan requires it
- Wash the surrounding area each day with ordinary soap and water, then dry gently
- Empty the bag as taught, without letting its outlet touch the toilet or container

Common questions

Does catheter insertion hurt?

It can cause pressure, stinging, or brief discomfort. Lubricating or anaesthetic gel may be used for urethral insertion. Tell the clinician if you have severe pain or if previous catheter insertion has been difficult.

How long can a catheter stay in?

This is based on why it is needed, the catheter type, and the person's care plan. Some are removed within hours or days. Others are changed at planned intervals by a trained person. Ask for the review or change plan rather than relying on a fixed general timetable.

Is cloudy or smelly urine an infection?

Not by itself. Concentrated urine, diet, medicines, catheter sediment, and bacteria without infection can change its appearance or smell. A clinician may assess other symptoms and decide whether a urine test is useful.

Can I shower with a catheter?

Many people can shower, but instructions may differ after surgery or with a suprapubic catheter site. Keep the bag below bladder level and avoid pulling the tubing. Ask your care

team about bathing, swimming, dressings, and waterproofing.

Can I remove a catheter myself?

Only if you have been specifically trained and given a removal plan. An indwelling catheter has a balloon inside the bladder. Pulling it out while the balloon is inflated can cause injury.

What if the catheter falls out?

Do not force it back in. Contact the responsible catheter service promptly. Some suprapubic catheter openings can begin to close quickly, so loss of a suprapubic catheter needs urgent advice.

Sources

- Centers for Disease Control and Prevention. Summary of Recommendations: Guideline for Prevention of Catheter-Associated Urinary Tract Infections
- National Institute for Health and Care Excellence. Healthcare-associated infections: prevention and control in primary and community care, CG139
- NHS. Urinary catheters
- Infectious Diseases Society of America. Clinical Practice Guideline for the Management of Asymptomatic Bacteriuria, 2019