Indwelling urinary catheters and drainage systems: preventing, detecting and managing urine infections

Greenwich and Bexley Continence Advisory Service

Many people need to use a catheter at some stage of their life. There are many reasons for this, including health conditions and after some types of surgery. People with catheters need to keep their bladders and bowels healthy to reduce the risk of complications such as infections.

What is a urinary catheter?
A catheter is a hollow flexible tube, which drains urine from the bladder. The catheter reaches the bladder either by passing through the urethra, or through a channel made in the abdominal wall, just above the pubic bone (this is called suprapubic catheterisation). Once a catheter is in place a small balloon at the catheter tip is inflated to prevent the catheter from falling out. As urine fills the bladder it drains down the catheter into a drainage bag or catheter valve. There are both short-and long-term catheters and different types of drainage systems.

- Short-term catheters can be left in for up to 28 days.
- Long-term catheters can be used for up to 12 weeks (these are made from materials which resist the build up of encrustation).

Drainage systems

Catheter valves (flip-flow)

- The flip-flow catheter valve is like a tap device, which fits into the end of the catheter (both short-and long-term) and offers an alternative to a drainage bag. The bladder continues to store urine and can be emptied intermittently helping to maintain normal function. Many people like this as it is discreet and may reduce the risk of infection.
- The valve should be opened whenever there is a feeling that urine needs to be passed, before bed, first thing in the morning (and during the night if necessary), at least once every four hours during the day and before opening the bowels.
- The flip-flow valve should be changed every five-seven days and earlier if it is damaged. It can also be used with a night bag at night or a leg bag during the day.

Drainage bags

There are two types of drainage bags.

- Leg bags are worn under clothing during the day.
- Night bags, which are connected to the leg bag overnight. This link system should be used to help overnight drainage, in order to keep the original system intact.

The catheter and leg bag form a closed drainage system, which prevents bacteria from getting into the system and reduces the risk of infection. The leg bag should only be disconnected from the catheter when the leg bag needs replacing (every five-seven days). If the night bag has a drainage tap it can be used for up to one week, wash it with water and leave it to dry. If the night bag does not have a tap a new one must be used each night.

Living with a catheter

When a catheter is first inserted it is not uncommon to feel like you need to pass urine or have muscle cramps. These usually stop within 24-48 hours and are nothing to worry about. The drainage bag should be emptied frequently.
enough to maintain flow and prevent reflux. It should be changed when clinically needed or according to manufacturer’s current recommendations.

**Personal hygiene**
- Wash the area where the catheter enters your body with mild soap and water at least twice a day.
- Dry thoroughly and never use talcum powder or ointments as they can damage the catheter.
- Try to have a bath or shower every day.
- Always wash your hands before and after draining or changing a bag.
- Do not kink or clamp the catheter tubing.
- The drainage bags must be below the level of the bladder and not in contact with the floor.

**Eating and drinking**
Drink at least 1.5 litres (eight tea cups/five mugs) of mixed fluids a day to ensure that the catheter drains well. Eat plenty of fruit, vegetables and cereals to avoid constipation.

**Problem solving**
If there is no urine draining into the bag check that:
- the catheter tubing is not blocked or kinked
- the drainage bag is below bladder level
- the drainage bag is connected correctly and does not need to be emptied
- you are drinking enough fluid
- you are not constipated.

The catheter may leak or bypass urine around the tube which will cause your skin or underwear to become wet. This can be caused by bladder spasms or a temporary blockage. If it persists tell your doctor or nurse.

**Storage**
Store catheters, catheter valves and drainage bags in original packaging in a dry, safe place away from heat and sunlight. Always keep a spare catheter at home.

**Disposal of used bags**
Always empty the bag, rinse it and place in a sealed plastic bag before putting it in the bin.

**When to seek help**
Please seek help from your doctor or nurse if:
- your urine is cloudy, smelly or feels as if it is burning and does not improve after drinking more fluids
- you have acute lower abdominal pain
- your urine is suddenly blood stained or discoloured
- the catheter falls out
- there is no urine in your bag after two-three hours
- the catheter is blocked
- you feel confused or there is a general change in your health (particularly in older people as this can be a sign of a urinary tract infection).

**Your opinion matters**
We are committed to providing the highest standards of care, so we welcome your views on the services we provide. If you would like to comment, make a suggestion or make a complaint, please speak to the person you normally see or ask to speak to the team manager. You may also like to speak to our Patient Advice and Liaison Service (PALS) by ringing the freephone number on 0800 917 7159.

**Confidentiality**
All our staff are required to abide by a strict code of conduct on confidentiality. We will only share information with those who need to know in order to provide good quality care. Occasionally there may be exceptions to this, for example to support a clinical audit or to monitor the quality of care provided. We will usually discuss this with you beforehand.

**Contact us**
Continence Advisory Service, Bostall House, Goldie Leigh, Lodge Hill, Abbeywood, London SE2 OAY
T: 020 8319 7043

Adapted from Bard A Guide for Nurses 2013, NiceGuidelines/Lists/ActionPlanDocuments/Copy of cg139-infection-control-baseline-assessment-tool2 CYPS.xls