



CAUTI's

Minimising The Risk

The Principles Of Catheter Care

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Aim and Objective

Catheter Care - Embracing best practice, minimising the risk of catheter associated urinary tract infections.



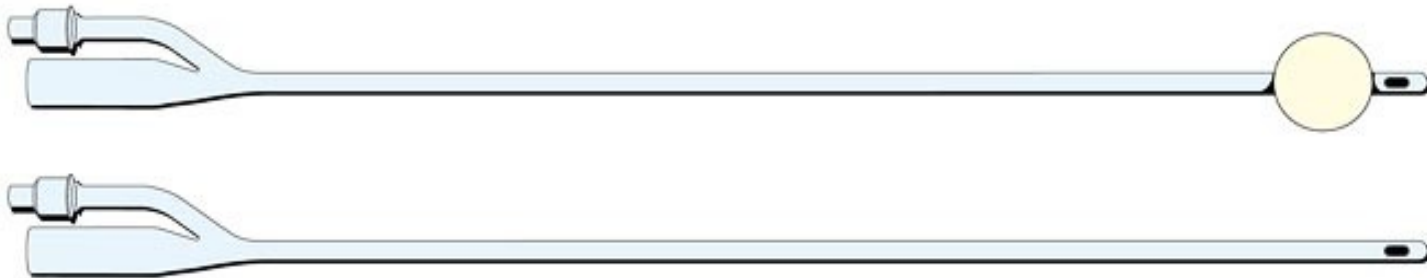
Minimising the risks of catheter associated infection

- **Urinary Tract infections account for 40% of all Healthcare associated infections 80% of these are associated with Urinary Catheters. Once established there is a risk of overwhelming infection and death.**
- **Nurses insert at least 50% of all catheters, thus they are at the forefront of good practice.**
- **Hand washing is the single most important procedure for preventing Healthcare acquired infections.**



What is a catheter?

A catheter is a hollow tube that drains urine from the bladder.



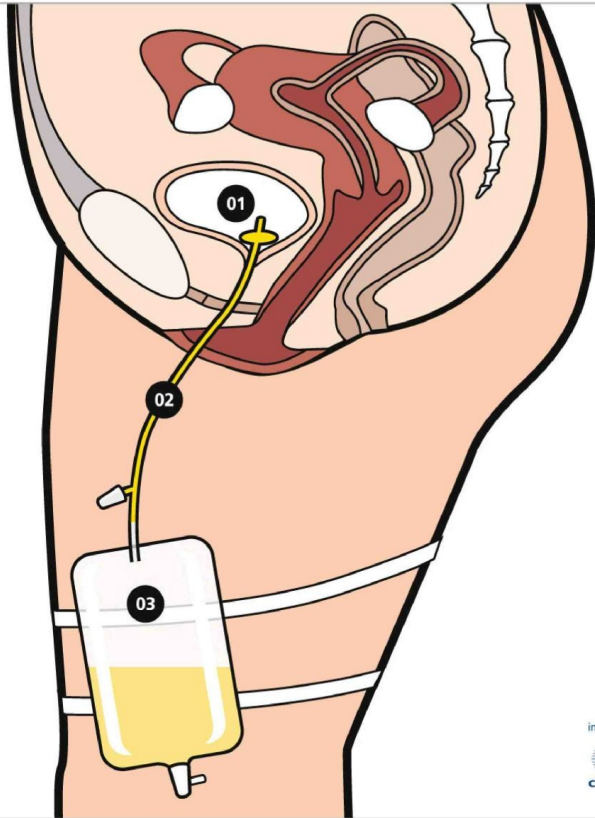
There are different types of urinary catheterisation.

- **Urethral indwelling catheterisation.**
- **Supra pubic catheterisation.**
- **Intermittent catheterisation.**
- **Clean intermittent self catheterisation.**



Urethral indwelling catheterisation

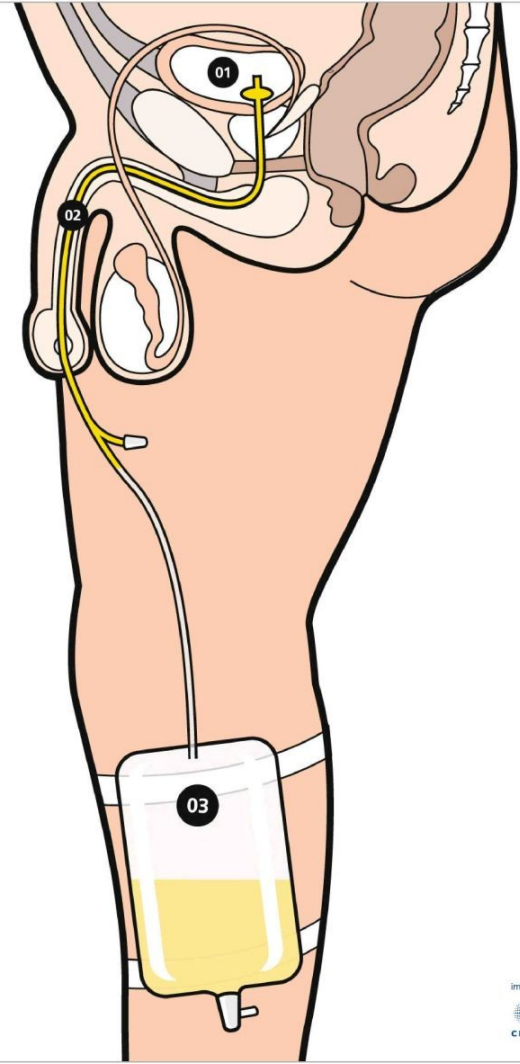
Female: Side View



- 01 Catheter with retention baloon in bladder
- 02 Catheter
- 03 Urine leg bag with supporting straps

image courtesy of CLINISUPPLIES

Male: Side View



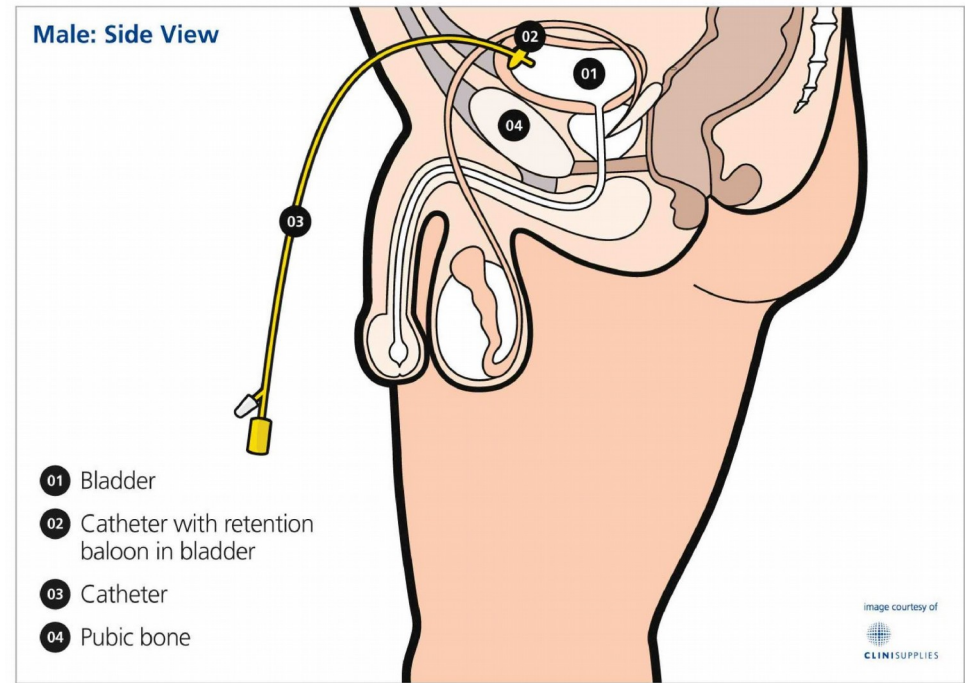
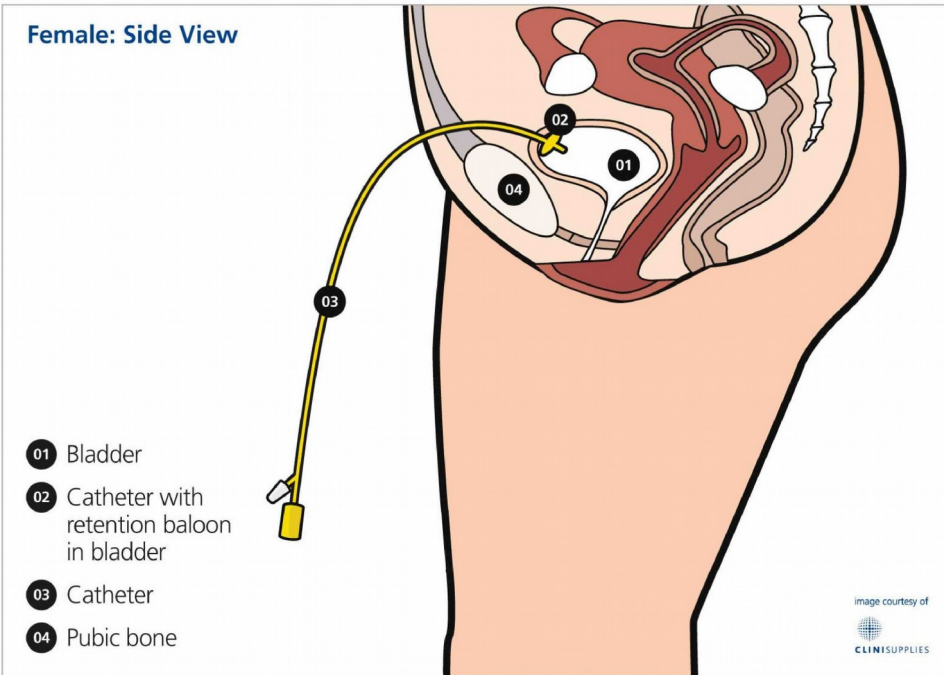
- 01 Catheter with retention baloon in bladder
- 02 Catheter in urethra
- 03 Urine leg bag with supporting straps

image courtesy of CLINISUPPLIES

Looking after you locally



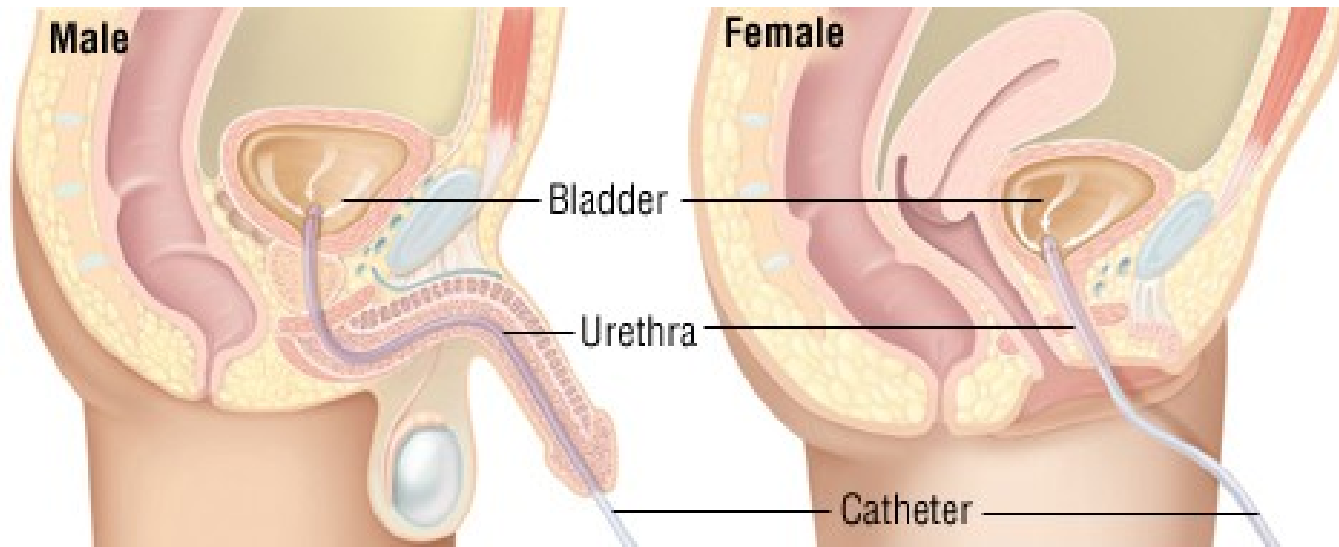
Supra pubic catheterisation





Intermittent catheterisation

Clean intermittent self catheterisation





Reasons for catheterisation

- **Acute Retention.**
- **Chronic retention.**
- **Pre / Post operative situations.**
- **Bladder function tests.**
- **Irrigation of the bladder.**
- **Accurate fluid balance.**
- **Blood clot removal (Severe haematuria).**
- **Administration of intravesical chemotherapy or medication.**
- **Skin integrity.**
- **Intractable incontinence – all other types of management have failed.**
- **Restore active social life.**
- **Terminally ill.**

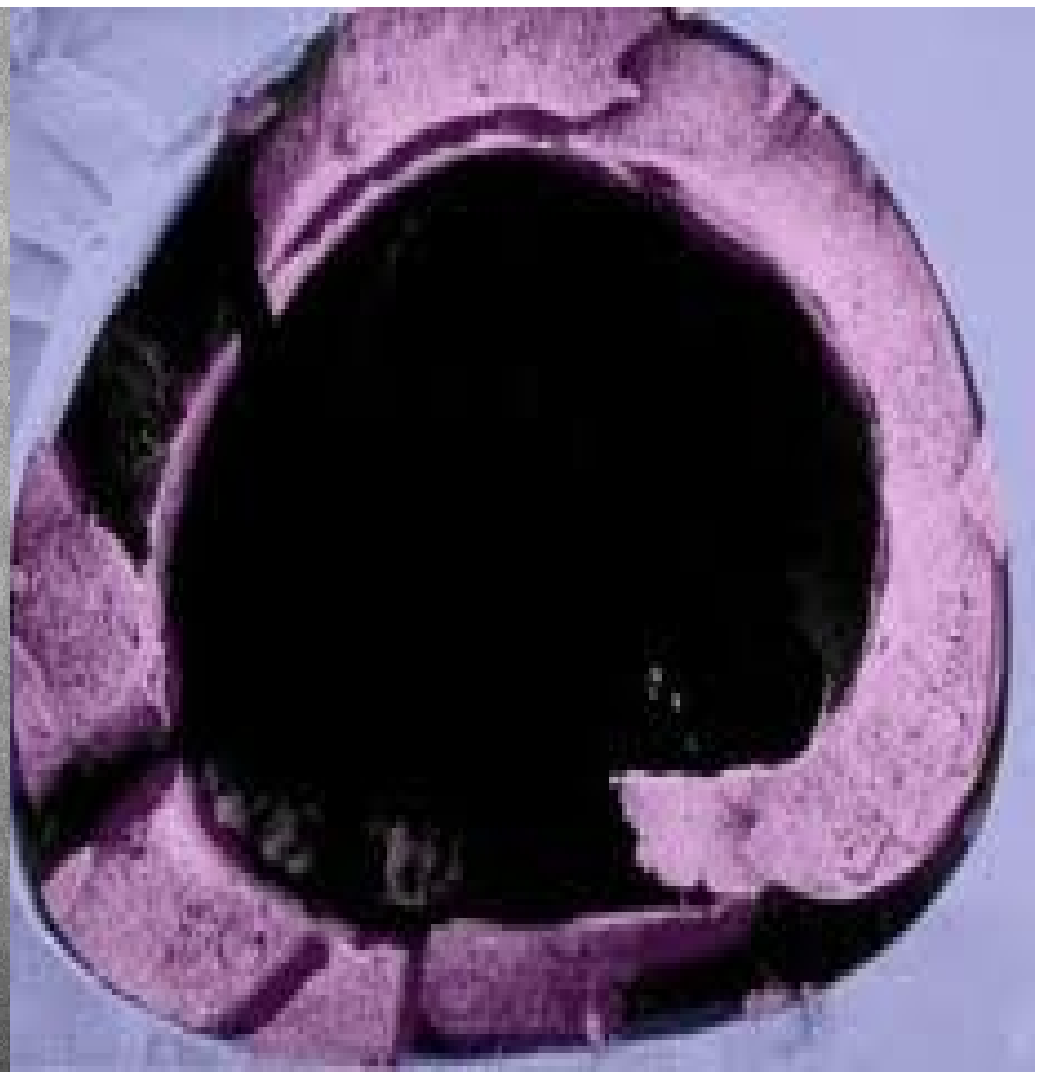


Problems associated with long term catheters

- Infection.
- Blockage.
- Urethritis.
- Meatal Erosion.
- Bladder neck necrosis.
- Catheter expulsion.
- Pain / Discomfort.
- Reduction of bladder capacity.
- Allergy / Sensitivity.
- Psychological.
- Altered body image.
- Sexual implications.



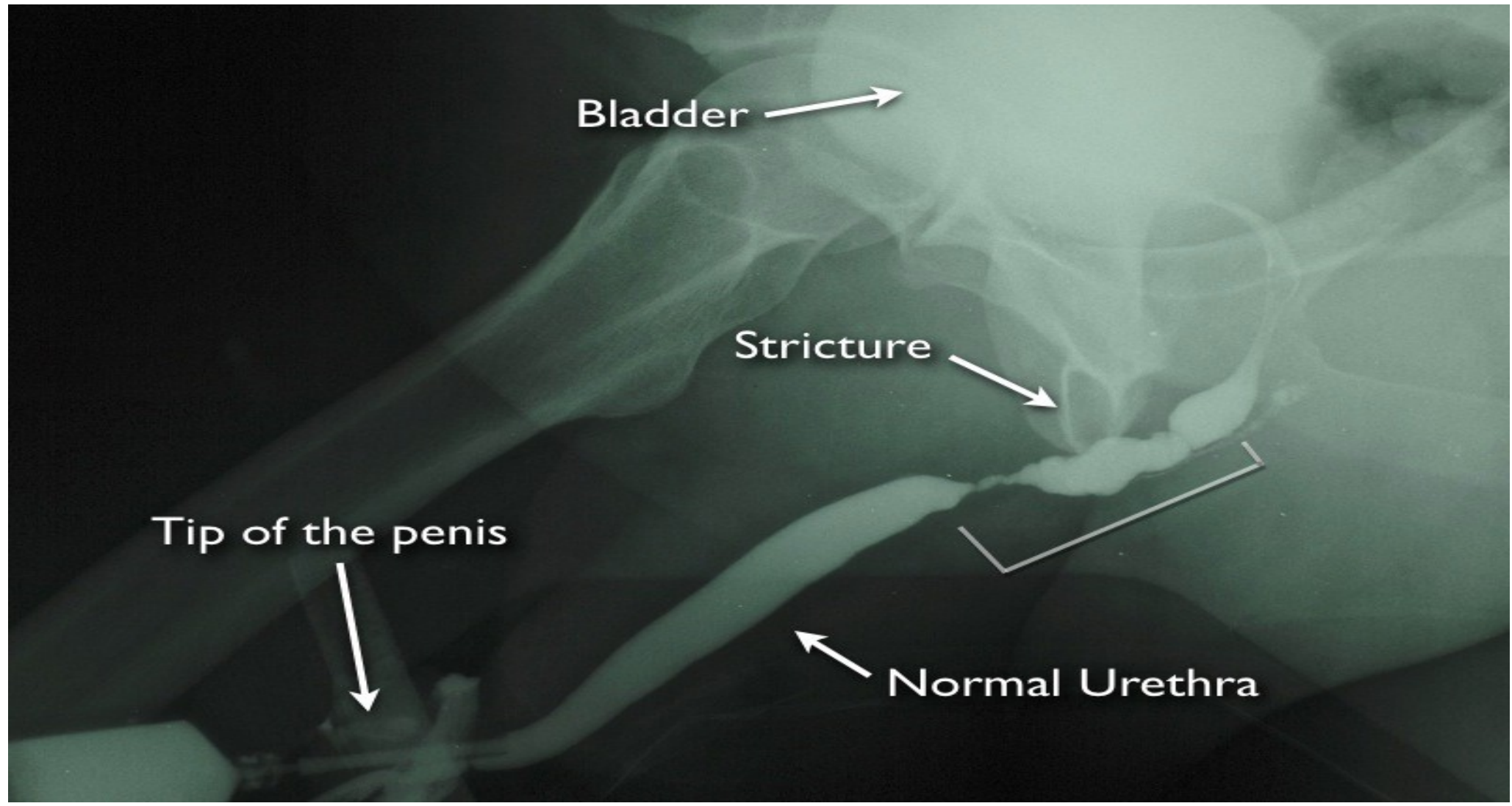
Encrustation





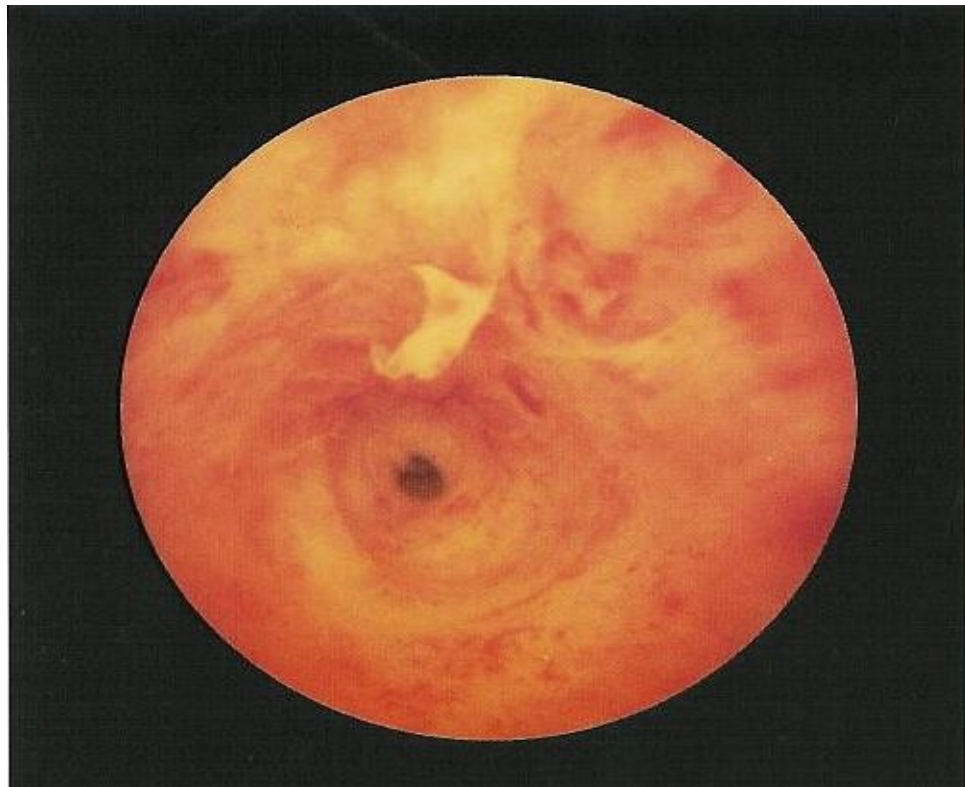
Urethral Stricture

(Gelman, 2010)





Urethral perforation - False passages



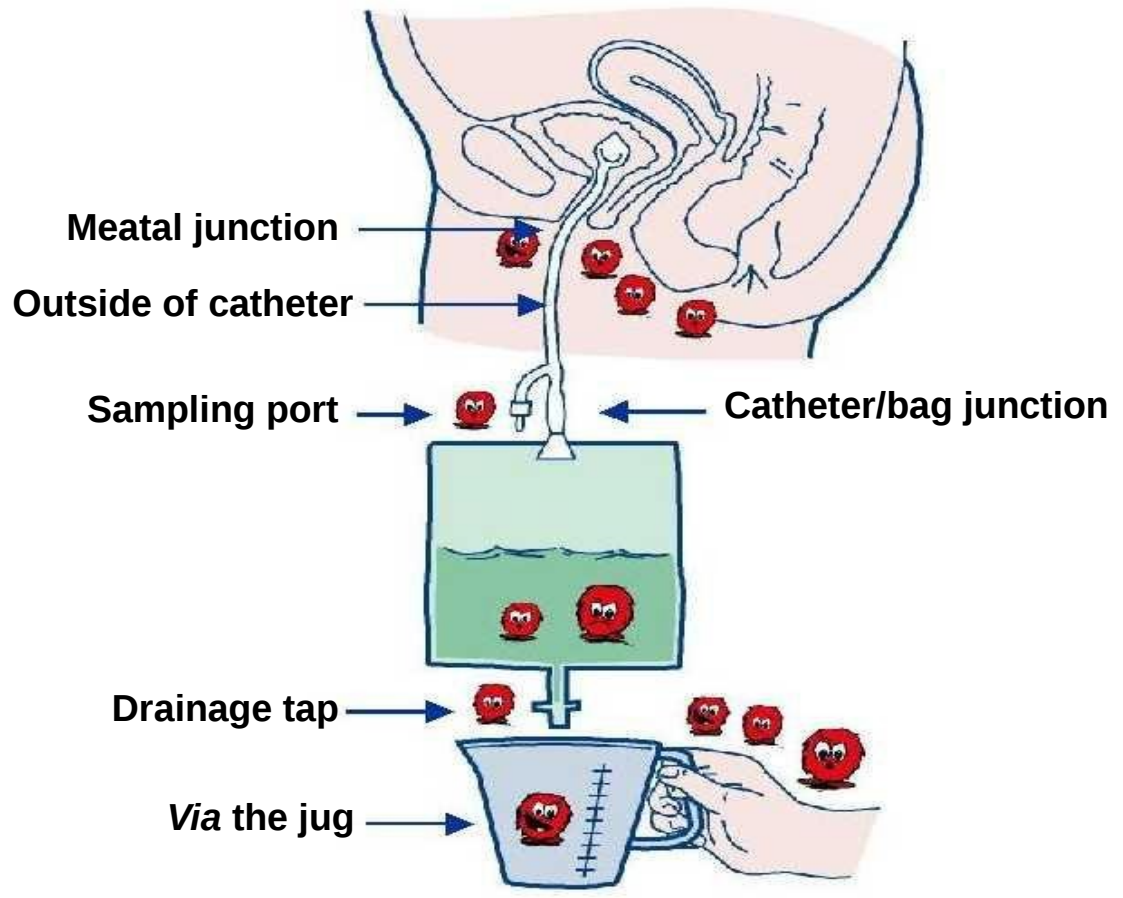


CAUTI's

- **Catheter associated urinary tract infections are the second leading cause of device related bacteraemia.**
- **Presence of an indwelling urethral catheter bypasses many of the bladders natural defences. Provides a direct connection from the colonised perineum to the usually sterile bladder.**
- **Enables organisms to gain entry to the bladder via the external surface or intraluminal pathway.**
- **Organisms causing CAUTI's are either endogenous, from the patients own colonic flora, or caused by cross infection through poor infection control practices.**



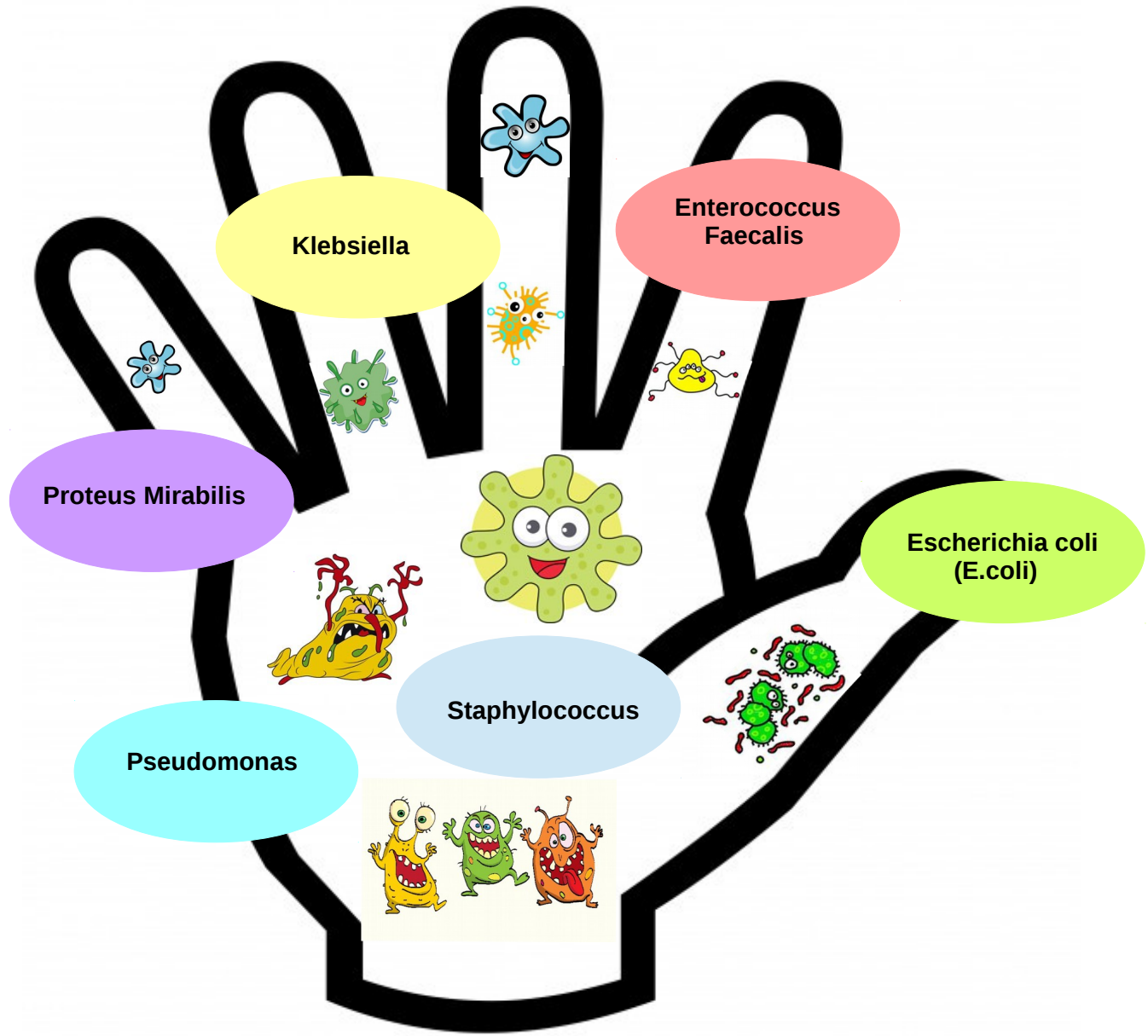
Catheter associated urinary tract infections



Entry points for bacteria



Cross contamination





Hand washing



STEP 1
Rub palms together.



STEP 2
Rub the back of both hands.



STEP 3
Interlace fingers and rub hands together.



STEP 4
Interlock fingers and rub the back of fingers of both hands



STEP 5
Rub thumb in a rotating manner followed by the area between index finger and thumb for both hands.



STEP 6
Rub fingertips on palm for both hands.



STEP 7
Rub both wrists in a rotating manner. Rinse and dry thoroughly.

- Hand washing is the single most effective intervention that prevents ALL infections.
- Hand washing must be performed before and after any care and wearing of gloves.

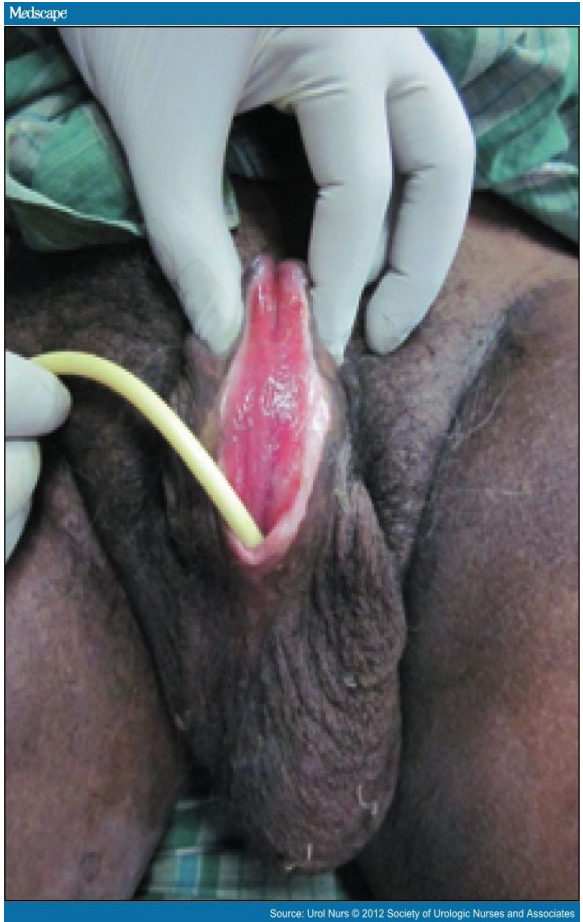
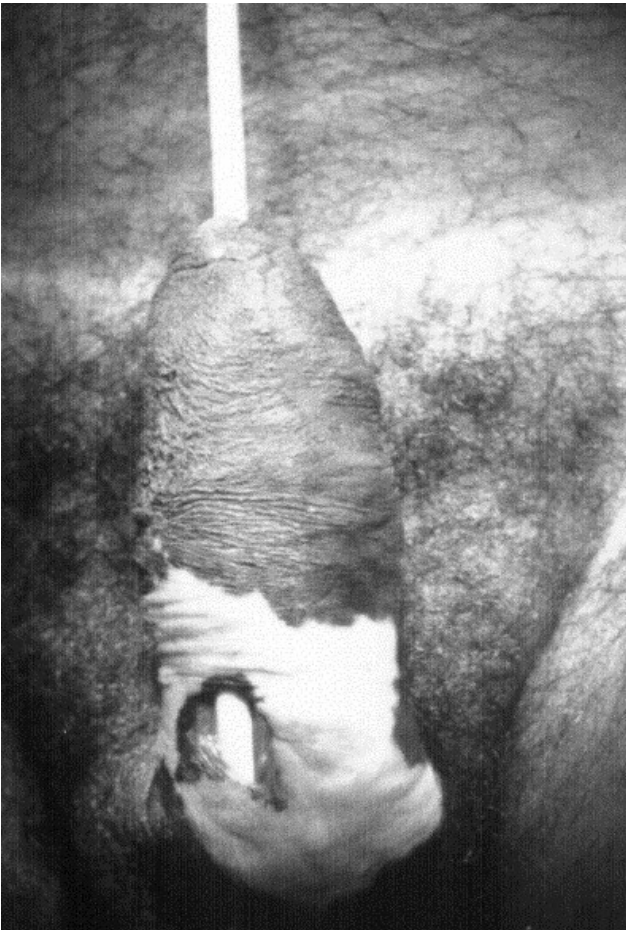


Maintain a closed drainage system

- **Maintaining a closed drainage system reduces the number of bacteria that can enter the catheter system to cause an infection.**
- **Before manipulating the catheter or drainage system – adhere to hand hygiene procedures before and after care.**
- **Personal protective equipment – wear an apron and non sterile gloves during all care procedures.**
- **Ensure a steady flow of urine, secure the drainage bag below the level of the bladder day and night.**
- **Use a catheter stabilisation device to minimise catheter movement, pistoning and to maximise comfort.**
- **Empty the drainage bag when $\frac{3}{4}$ full, use a single use container and DO NOT let the drainage tube touch the container.**
- **Change the leg bag weekly or as per manufacturers instructions, using non – touch technique.**
- **At night – connect a single use, 2 litre drainage bag to outlet of leg bag. Hang on an appropriate stand. Discard each morning.**



Urethral erosion





Stabilisation devices





Collection of catheter urine samples

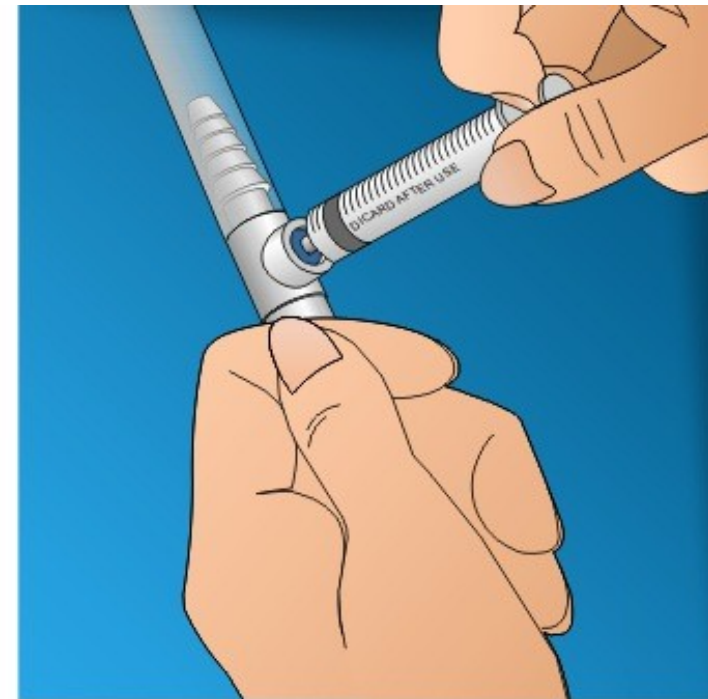
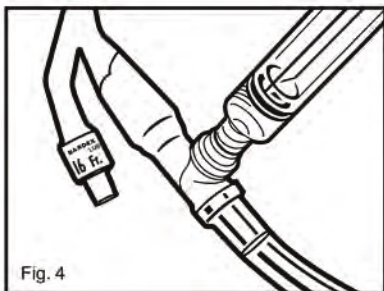
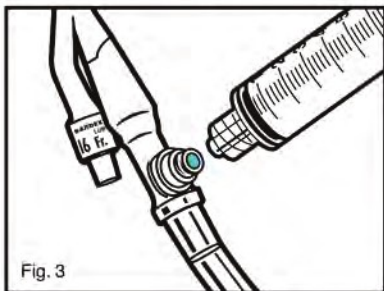
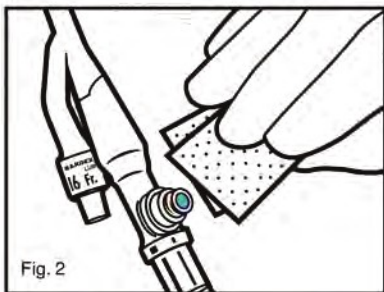
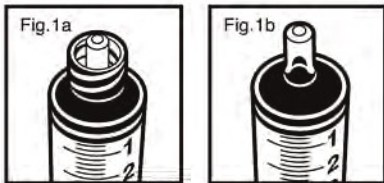
Urine samples should be taken using an Aseptic Technique from the self sealing access port, located at the top end connection of the drainage bag that connects directly into the catheter.

When to collect a urine sample:-

- **Development of a high temperature (fever) of 38C (Celsius) or above.**
- **Uncontrollable shivering.**
- **Strong odour or cloudy urine.**
- **Haematuria.**
- **Lower back pain.**
- **Disorientation or change in cognitive status.**
- **Hallucinations or delusions.**
- **Unusually sleepy or withdrawn.**
- **Falls.**



Examples of needleless sample ports



Please be aware

These pictures are for demonstration purposes only.

An Aseptic Technique should be used when obtaining urine samples from catheters.

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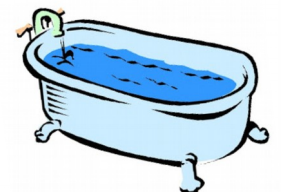


Daily personal hygiene

- Wash the skin, in the area where the catheter enters the body, with mild soap and water at least twice a day.



- Avoid use of talc, antiseptic, bubble bath or bath salts and creams. These can cause irritation.
- Do not remove the leg bag when the individual has a bath or shower – maintain closed drainage system.





Paraphimosis





Necrosis as a result of paraphimosis





Balanitis



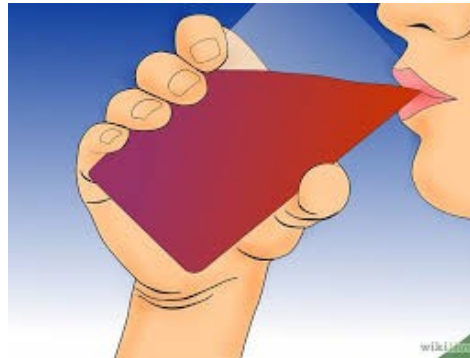


Fluids

Maintain an adequate fluid intake:- prevention of dehydration, constipation, concentrated urine and irritated bladder.

Unless the doctor has prescribed otherwise, drink 1.5 litres – 2 litres in 24 hours, or as tolerated (24mls per kg of an individuals weight).

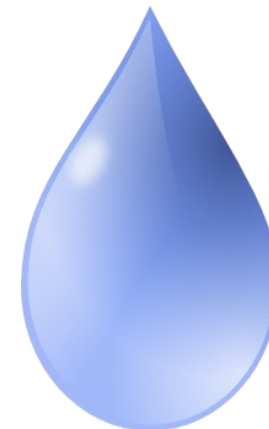
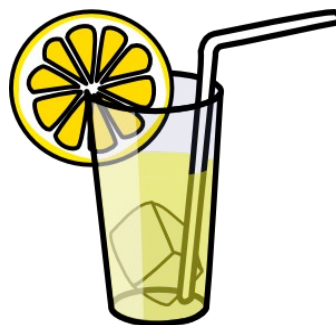
This will also help to reduce a build up of deposits that may block the catheter from draining properly.





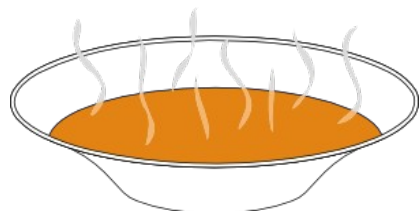
You can have the following

- Decaffeinated tea
- Decaffeinated coffee
- Water
- Squash



Fluids are also contained in foods. For example...

- Soups and stews
- Ice cream
- Ice lollies
- Jelly



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Troubleshooting Blockage of the catheter

Check:

- that the catheter tubing is not kinked or restricted by tight clothing.
- that the catheter bag is connected correctly and ensure the straps that secure the leg bag are positioned behind the leg bag tube.
- that the drainage bag is not too full.
- the leg bag, or night drainage bag, is positioned below the level of the bladder.
- for constipation, which can restrict the catheter from draining effectively.

If the catheter remains blocked, seek advice from a healthcare professional.



Reducing the risk of CAUTI's

- **Avoid inserting a catheter.**
- **Use an aseptic technique on insertion.**
- **Adhere to evidence based ongoing catheter care.**
- **Promptly remove catheter, as appropriate.**



Catheter passport

The image shows the cover of a booklet titled 'Patient Urinary Catheter Passport'. At the top left is a blue butterfly logo made of medical icons. To its right is the text 'Norfolk Community Health and Care NHS Trust'. Below this is the title 'Patient Urinary Catheter Passport' and the subtitle 'Looking after your urinary catheter'. The central image is a photograph of an elderly woman with white hair and glasses, wearing a dark blue cardigan over a white shirt, sitting on a beige sofa and holding a white mug. At the bottom of the cover, there is a blue bar with the website 'www.norfolkcommunityhealthandcare.nhs.uk' and the slogan 'Looking after you locally'.

The catheter care passport provides:

- An educational resource of information for individual patients.
- Continuity of care.
- A resource for health care professionals, ensuring up to date documentation and catheter history.

Catheter care leaflet



Maintaining a closed drainage system

Maintaining a closed drainage system reduces the number of bacteria that can enter the catheter system. These bacteria can cause an infection.

Ensure a steady flow of urine and secure the drainage bag below the level of the bladder day and night.

Use a catheter fixation device to minimise catheter movement and to maximise comfort.

Empty the drainage bag when three-quarters full, use a single use container and do not let the drainage tube touch the container.

Change the leg bag weekly or as per manufacturer's instructions.

At night connect a single use, two-litre drainage bag to the outlet of the leg bag, ensuring the tap is open to allow drainage of urine. Hang on an appropriate stand. Remove and discard each morning, ensuring the outlet of the leg bag is closed.

Drainage bags may be disposed of in the dustbin, providing they have been emptied and wrapped in a suitable bag.

Catheter valves are sometimes used as an alternative to a leg bag and are connected directly to the catheter outlet. It is possible to attach an overnight bag to a valve.

Blockage of the catheter

Check:

- that the catheter tubing is not kinked or restricted by tight clothing.
- that the drainage bag is connected correctly, and ensure the straps that secure the leg bag are positioned behind the leg bag tube.
- that the drainage bag is not too full.
- that the leg bag or night drainage bag is positioned below the level of the bladder.
- Constipation can restrict the catheter from draining effectively.

If the catheter is still blocked, seek advice from a healthcare professional.

You can receive help with queries about NCH&C services from
Patient Advice and Liaison Service
Telephone: **0800 088 4449**
Email: **pals@nchc.nhs.uk**
(Monday-Friday 9am-5pm)



If you would like this leaflet in large print, audio, Braille, alternative format or in a different language please contact: **01603 697492.**

Leaflet produced by Norfolk Community Health and Care NHS Trust (January 2016)
Leaflet Review Date: (January 2017)

Catheter care

Advice for carers



Looking after you locally

Looking after you locally



Catheter care leaflet

Introduction

This leaflet aims to provide advice and support to carers about indwelling catheters (retained inside the body for a certain period of time).

What is a urinary catheter?

A catheter is a thin, flexible, hollow tube designed to drain urine from the bladder.



The catheter is kept in place by a small balloon at its tip, filled with sterile water, which prevents it from falling out.

It is inserted into the bladder through the urethra. This is a small opening above the vagina in women, and runs through the length of the penis in men.

Some people have a catheter inserted into the bladder through an incision in the abdominal wall. This is known as a supra pubic catheter.

Why do people need a catheter?

Some people find it difficult to pass urine and may not be able to empty their bladder, so a catheter is inserted to drain the urine. Catheters are also used before and after surgery, to introduce medication into the bladder and sometimes to manage urinary leakage if this cannot be managed effectively in any other way.

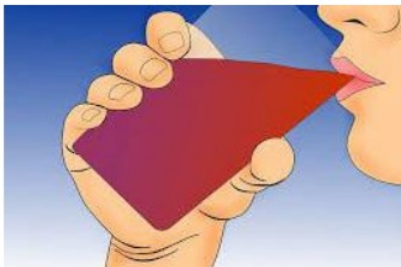
Caring for an indwelling catheter

Fluid intake

It is important to maintain an adequate fluid intake to prevent dehydration, constipation, concentrated urine and irritation of the bladder. Unless the doctor has prescribed otherwise, it is important to drink 1.5 litres to 2 litres in 24 hours or as tolerated.

This will also help to reduce a build-up of deposits that may block the catheter from draining properly.

It is advisable to avoid caffeine, which is found in coffee, tea, cola and chocolate. It is important to reduce caffeine gradually as the person may suffer withdrawal symptoms.



Fluids are also contained in foods such as soups, stews, ice cream, ice lollies and jelly.

Dietary intake

A healthy balanced diet is recommended and will help to maintain a regular bowel pattern. Constipation can prevent a catheter draining freely. A full bowel can press on the catheter and is a common cause of urinary leakage around the catheter.

Personal hygiene

Good personal hygiene is important when a person has a catheter to prevent urinary infections.

Before handling the catheter or drainage system, ensure you wash your hands and wear protective clothing and non-sterile gloves.

Wash the skin in the area where the catheter enters the body with mild soap and water at least once a day.

Males – carefully wash under the foreskin (unless circumcised). Dry the area thoroughly and ensure the foreskin is replaced over the end of the penis.

Females – always wash the genital area from front to back, to prevent contamination from the back passage. Dry the area thoroughly.

Avoid using talcum powder, antiseptic, bubble bath or bath salts and creams. These can cause irritation.

Before a shower or a bath, empty the drainage bag.

Do not remove the leg bag when the individual has a bath or shower as it is important to maintain a closed drainage system.

For supra pubic catheters, initially the person may need to wear a dry dressing around the incision site, however once healed this is not necessary.



Daily Catheter Care

Quick Reference Guide For Care Homes

- Maintain an adequate fluid intake:- prevention of dehydration, constipation, concentrated urine and irritated bladder.
- Use a catheter stabilization device to minimise catheter movement and maximise comfort.
- Ensure good daily personal hygiene procedures. Do not use talcum powder.
- Before manipulating the catheter or drainage system, adhere to hand hygiene procedures, wear protective clothing and non-sterile gloves.
- Maintain a closed drainage system, ensuring a steady flow of urine. Secure the drainage bag below the level of the bladder, day and night.
- Empty the drainage bag when 3/4 full, use a single use container and DO NOT let the drainage tube touch the Container.
- Change the leg bag weekly or as per manufacturers instruction, using non-touch technique.
- At night – connect a single use, 2 litre drainage bag to outlet of leg bag. Hang on an appropriate stand. Discard each Morning.
- Collection of urine samples should be taken using an ASEPTIC TECHNIQUE from the self sealing access port, located at the top end connection of the drainage bag that connects directly into the catheter.

Continence Advisory Service. 2015. AP/JC.



Further reading and references

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Further reading and references

Continued

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(Supplement): S3-S4.



Further reading and references

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Thank You



Any questions?

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