

## **Urinary Catheters**

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## 1. Purpose

The purpose of this document is to:

- Assess the patient need for catheterisation;
- Select the appropriate urinary catheter;
- Ensure aseptic catheter insertion;
- Ensure correct catheter maintenance;
- Catheterisation **must** only be undertaken by staff who are trained and competent to do so.

## 2. Related documents

This procedure describes the management of Urinary Catheters section of the <u>Infection Prevention</u> <u>and Control Policy</u>



The <u>Standard (Universal) Precautions for Infection Prevention and Control</u> defines the universal standards for IPC which you **must** read, understand and be trained in before carrying out the procedures described in this document.

This procedure also refers to:-

- ✓ Aseptic Technique policy
- ✓ Hand Hygiene

## 3. Selection of Catheter

## 3.1. Туре

When choosing a catheter there are certain factors to consider:

- Length of catheter
- Material of catheter
- Duration of catheterisation
- Charrier size
- Balloon size
- Lumen size and shape
- Site of catheter e.g. supra-pubic
- Latex allergy
- Comfort and dignity

## 3.2. Length

Length	Reason
<ul> <li>Standard (male) and short (female) length catheters <b>must</b> be available.</li> </ul>	Enables the correct catheter to be used.
<ul> <li>Short (female) length catheters must only be used on ambulant females.</li> </ul>	Misuse can lead to the back flow of urine.

## 3.3. Material / Duration in situ

Material / Duration	Reason
For short-medium term you <b>must</b> use a non-toxic Teflon coated catheter:	• Limits cytotoxic effects and irritation.
<ul> <li>Teflon coated catheters can only be used up to 28 days;</li> <li>Siliconised catheters are catheters coated with silicone, can only be used up to 7 – 14 days;</li> <li>Pre-filled balloon Teflon-coated.</li> </ul>	
Short term catheters require:	
<ul> <li>Protocols for catheter insertion;</li> <li>Use of bladder ultrasound scanners to assess and manage urinary retention;</li> <li>Reminders to review the continuing use or prompt the removal of catheters;</li> <li>Audit and feedback of compliance with practice guidelines and continuing professional education;</li> </ul>	Use quality improvement systems to support the appropriate use and management of short-term urethral catheters and ensure their timely removal.

For long term use you must use a pure silicone or hydrogel catheter:	Limits encrustation and debris.
Pure silicone or hydrogel catheters may be used for up to 12 weeks.	
Staff must be aware of any patient allergy or intolerance to materials such as latex;	• Reduce the risk of possible allergic reaction to coated catheters.
100% silicone catheters must be used when there is latex allergy.	
The size chosen must be the smallest possible.	Limits bladder spasm, irritation, the bypassing of urine and urethral trauma.
<ul> <li>A size 12 – 14 Ch must be used unless otherwise advised by a specialist.</li> </ul>	Larger sizes are associated with leakage and discomfort.



In circumstances when the urine produced contains large amounts of debris or clots a larger charrier size would be indicated.

A 'urinary catheterisation patient held record' should be completed for every patient with a catheter in situ.

No patient should be discharged or transferred with a short-term indwelling urethral catheter without a plan documenting the:

- Reason for the catheter;
- Clinical indications for continuing catheterisation;
- Date for removal or review by an appropriate clinician overseeing their care

## 3.4. Balloon Size

Balloon Size	Reason
• You must only use a 10ml balloon.	Limits irritation at the bladder trigone.
	Reduces residual urine and discomfort.

### 3.5. Lumen Size and Shape

Lumen size and shape	Reason
The best shape is circular.	<ul> <li>Helps prevent a buildup of encrustation on the inside of the catheter leading to narrowing and obstruction of the lumen.</li> </ul>
<ul> <li>Pure silicone catheters have a 'D' shaped lumen or a 'crescent' shaped lumen.</li> </ul>	
• The size chosen must be the smallest possible.	<ul> <li>Limits bladder spasm, irritation, the bypassing of urine and urethral trauma.</li> </ul>

## **3.6. Comfort and Dignity**

Comfort and dignity	Reason
<ul> <li>Patient should be encouraged to be independent and should be treated with respect</li> </ul>	<ul> <li>Staff must be aware of the potential embarrassment which the patient may experience related to continence problems</li> </ul>
<ul> <li>Ensure the environment is dignified and comfortable for the patient</li> <li>Staff should ensure they closing curtains and doors, keeping the patient warm and covered as appropriate</li> </ul>	<ul> <li>Act in a professional respectful and caring manner.</li> </ul>

## 4. Aseptic Urethral Catheter Insertion

Catheterisation is a skilled aseptic procedure, which **must** only be performed by a competent person who has undergone formal training and education. Their practice **must** 

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be continually monitored and updated.

- Principles of good practice, clinical guidance and expert opinion agree that urinary catheters **must** be inserted using sterile equipment and an aseptic technique.
- Expert opinion indicates that there is no advantage in using antiseptic preparations for cleansing the urethral meatus prior to catheter insertion.
- Urethral trauma and discomfort will be minimised by using an appropriate sterile, single use lubricant or anaesthetic gel

### 4.1. Hygiene

Principles	Reason
<ul> <li>You <b>must</b> thoroughly wash your hands prior to and after the procedure.</li> </ul>	Reduces bacterial numbers on hands and greatly reduces the risk of infection transfer.
<ul> <li>You <b>must</b> use an aseptic technique throughout (using sterile gloves and plastic apron).</li> </ul>	The bladder is a sterile organ.
✓ You must use anaesthetic gel from a single use container for male and female catheterisation.	To reduce pain and discomfort and minimise risk of infection.

### 4.2. Equipment for Urethral Catheterisation

$\checkmark$	Sterile catheter pack.
$\checkmark$	Sterile gloves x 2 pairs and apron.
$\checkmark$	Appropriate catheter.
$\checkmark$	Sterile lubricating jelly (Instillagel).
$\checkmark$	0.9% sodium chloride for cleaning.
$\checkmark$	Specimen pot
$\checkmark$	Water for injection and 10ml syringe if needed for balloon inflation.
$\checkmark$	Drainage bag and holder.

## 5. Insertion of Male Urethral Catheter



Where possible urinary catheterisation **must** be performed in a clinical room or in patients own room.

Prior to catheterisation the trolley (see 4.2) must be cleaned with detergent and disinfectant wipes.

## **5.1. Procedure / Checklist**

	Action	Yes	Reason
		(~)	
1	Explain and discuss the procedure with the patient.		To ensure that the patient understands the procedure and gives his valid consent.
2	<ul> <li>a. Screen the bed, or prepare the treatment room.</li> <li>b. Assist the patient to get into the supine position with the legs extended.</li> <li>c. Do not expose the patient at this stage of the procedure.</li> </ul>		To ensure privacy. To allow dust and airborne organisms to settle before the field is exposed. To ensure the appropriate area is easily accessible. To maintain that patient's dignity and comfort.
3	Wash and dry hands as per Trust <u>Hand</u> <u>Hygiene policy.</u>		To reduce the risk of infection.
4	Prepare equipment. (See 4.2).		To ensure all equipment is available.
5	Take the equipment to the patient's bedside. Where possible catheterisation must be done in the treatment or clinical room on the ward or in the patient's own room.		To minimise the airborne contamination.
6	Wash and dry hands as per Trust <u>Hand</u> <u>Hygiene policy</u> and put on plastic apron.		To reduce the risk of infection.
7	Open the outer cover of the catheterisation pack and slide the pack onto the top shelf of the trolley if applicable.		To prepare equipment.
8	Using the aseptic non-touch technique open the supplementary packs.		To reduce the risk of introducing infection into the bladder.

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	Action	Yes	Reason
		(•⁄)	
9	Remove cover that is maintaining the patient's privacy and position a disposable pad under the patient's buttocks and thigh.		To ensure urine does not leak onto the bedclothes.
10	Wash and dry hands as per Trust <u>Hand</u> Hygiene policy.		To reduce the risk of infection as hands may have become contaminated by handling the outer packs.
11	Put on sterile gloves.		To reduce the risk of cross-infection.
12	Place sterile towels across the patient's thighs and under buttocks.		To create a sterile field.
13	Wrap sterile gauze around the penis. Retract the foreskin, if necessary, and clean the glans penis with 0.9% sodium chloride.		To reduce the risk of introducing infection to the urinary tract during catheterisation.
14	Insert the nozzle of the lubricating jelly into the urethra. Squeeze the gel into the urethra, remove the nozzle and discard the tube. Massage the gel along the urethra.		Adequate lubrication helps to prevent urethral trauma. Use of a local anaesthetic minimises the discomfort experienced by the patient.
15	Squeeze the penis and wait approximately 5 minutes.		To prevent anaesthetic gel from escaping. To allow the anaesthetic gel to take effect.
16	Discard gloves and wash and dry hands as per Trust <u>Hand Hygiene policy.</u>		To prevent the risk of infection. The procedure of cleansing the meatus could cause risk of infection.
17	Put on another pair of sterile gloves.		To reduce the risk of cross-infection.
18	Grasp the penis behind the glans raising it until it is almost totally extended. Maintain grasp of penis until the procedure is finished.		This manoeuvre straightens the penile urethra and facilitates catheterisation. Maintaining a grasp of the penis prevents contamination and retraction of the penis.
19	Place the receiver containing the catheter between the patients leg. Insert the catheter for 15-20cms until urine flows.		The male urethra is approximately 18cms long.
20	If resistance is felt at the internal sphincter, increase the traction on the penis slightly and apply steady gentle pressure on the catheter. A cough from the patient may help		Some resistance may be due to spasms. Straining gently helps to relax the external sphincter.

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	Action	Yes	Reason
		(√)	
21	<ul> <li>Either remove the catheter gently when urinary flow ceases or:</li> <li>a. When urine begins to flow, advance the catheter almost to bifurcation</li> <li>b. Gently inflate the balloon according to the manufacturer's directions, having ensured that the catheter is draining properly beforehand</li> <li>c. Withdraw the catheter slightly and attach it to the drainage system</li> <li>d. Support the catheter by using specially designed support. Ensure that the catheter does not become taut when the penis becomes erect. Ensure that the catheter lumen is not occluded by the fixation device. If using overnight urine collecting bag, position the catheter below the level of the bladder on a clean stand that prevents any part of the catheter drainage system coming into contact with the floor</li> </ul>		Advancing the catheter ensures that it is correctly positioned in the bladder. Inadvertent inflation of the balloon in the urethra causes pain and urethral trauma. To maintain patient comfort and to reduce the risk of urethral and bladder next trauma.
22	Ensure that the glans penis is clean and then reduce or reposition the foreskin.		Retraction and constriction of the foreskin behind the glans penis (paraphimosis) may occur if this is not done.
23	Make the patient comfortable. Ensure the area is dry.		If the area is left wet or moist, secondary infection and skin irritation may occur.
24	Measure the amount of urine.		To be aware of bladder capacity for patients who have presented with urinary retention. To monitor renal function and fluid balance. It is not necessary to measure the amount of urine if the patient is having the urinary catheter routinely changed.
25	Dispose of equipment in clinical waste bag and seal the bag.		To present environmental contamination.
26	Remove Personal Protective Equipment (PPE) Gloves followed by apron and wash hands as per Trust <u>Hand Hygiene policy.</u>		

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	Action	Yes	Reason
		(~)	
27	Ensure patients clothing and bedding is appropriately arranged. Return the patient to the ward area.		To ensure privacy and dignity.
28	Record information in relevant documents; this should include reasons for catheter insertion, as per policy.		To provide a point of reference or comparison in the event of later queries.
29	File catheter record into patients nursing notes on PARIS.		To provide a point of reference or comparison in the event of later queries.
30	Ensure the patient is well informed about their catheter and understand the need for good hygiene, adequate fluid intake and the use of supportive devices. Continue to monitor fluid balance if appropriate.		To ensure patient is well hydrated, and prevent or recognise complications occurring from catheterisation.

## 6. Insertion of Female Urethral Catheter



Where possible urinary catheterisation **must** be performed in clinic room or patients own room.

Prior to catheterisation the trolley (see 4.2) **must** be cleaned with detergent and disinfectant wipes.

## 6.1. Procedure / Checklist

	Action	Yes	Reason
		(√)	
1	Explain and discuss the procedure with the patient.		To ensure that the patient understands the procedure and gives her valid consent
2	Prepare treatment/clinical room or patient's bed area.		To ensure patients privacy. To allow dust and airborne organisms to settle before the sterile field is exposed
3	Prepare the equipment take to clinical room or patients own room.		To ensure all equipment is available.
4	Ensure that a good light source is available.		To enable genital area to be seen clearly.
5	Assist the patient to get into the supine position and knees bent, hips flexed and feet resting about 60cm apart.		To enable genital area to be seen.
6	Do not expose the patient at this stage of the procedure.		To maintain the patients dignity and comfort.
7	Wash and dry hands as per Trust Hand Hygiene policy.		To reduce the risk of cross infection.
8	Put on a disposable apron.		To reduce the risk of cross infection from micro-organisms on uniform.
9	Open the outer cover of the catheterisation pack and slide the pack onto the top shelf of the trolley.		To prepare equipment.
10	Open the supplementary packs using the aseptic technique.		To reduce the risk of introducing infection to the urinary tract.
11	Remove the cover that is maintaining the patient's privacy and position a disposable pad under the patient's buttocks.		To ensure urine <b>does not</b> leak onto the bed clothes.

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	Action	Yes	Reason
		(√)	
12	Place sterile towels across the patient's thighs.		To create a sterile field.
13	Using gauze swabs, separate the labia minora so that the urethral meatus can be seen. One hand <b>must</b> be used to maintain labial separation until catheterisation is completed.		This maneuver provides better access to the urethral orifice and helps prevent labial contamination of the catheter.
14	Clean around the urethral orifice with 0.9% sodium chloride, using single downward strokes.		Inadequate preparation of the urethral orifice is a major cause of infection following catheterisation. To reduce the risk of cross infection.
15	Insert the nozzle of the lubricating jelly into the urethra. Squeeze the gel into the urethra, remove the nozzle and discard the tube.		Adequate lubrication helps to prevent urethral trauma. The use of a local anaesthetic minimises the patient discomfort.
16	Remove sterile gloves and wash hands as per Trust <u>Hand Hygiene</u> policy.		Preparation of the patient could result in infection if the gloves are not changed.
17	After washing hands put on another pair of sterile gloves.		To reduce the risk of infection.
18	Place the receiver containing the catheter between the patient's legs.		To provide a temporary container for urine as it drains.
19	Introduce the tip of the catheter into the urethral orifice in an upward and backward direction. If there is any difficulty in visualising the urethral orifice due to vaginal atrophy, the index finger of the 'dirty' hand may be inserted into the vagina and the urethral orifice can be palpated on the anterior wall of the vagina. The index finger is then positioned just behind the urethral orifice. This then acts as a guide so the catheter can be positioned correctly. Advance the catheter until $5 - 6$ cms has been inserted.		The direction of insertion and the length of catheter inserted should bear relation to the anatomical structure of the area.
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	Action	Yes	Reason
		(√)	
20	a. Advance the catheter 6 – 8 cms.		This prevents the balloon from becoming trapped in the urethra. Inadvertent inflation of the balloon within the urethra is painful and causes urethral trauma.
	<ul> <li>Inflate the balloon according to the manufacturer's directions, having ensured that the catheter is draining adequately.</li> </ul>		
	<ul> <li>Withdraw the catheter slightly and correct it to the drainage system.</li> </ul>		To maintain patient comfort and to reduce the risk of urethral and bladder
	<ul> <li>d. Support the catheter by using a specially designed support. Ensure that the catheter does not become taut when the patient is mobilising. Ensure the catheter lumen is not obscured by the fixation / support devise. If using overnight collection bag, position the catheter below the level of the bladder on a clean stand that prevents any part of the catheter drainage system coming into contact with the floor.</li> </ul>		neck trauma.
21	Make the patient comfortable and ensure the area is dry.		If the area is left wet or moist, secondary infection and skin irritation may occur.
22	Measure the amount of urine.		To be aware of bladder capacity for patients who have presented with urinary retention. To monitor renal function and fluid balance. It is not necessary to measure the amount of urine if the patient is having the catheter routinely changed.
23	Dispose of equipment in an orange plastic clinical waste bag and seal the bag before moving the trolley.		To prevent environmental contamination.
24	Remove Personal Protective Equipment (PPE) Gloves followed by apron and wash and dry hands as per Trust Hand Hygiene.		

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	Action	Yes	Reason	
		(√)		
25	Ensure the patients clothing or bedding is appropriately arranged. Return patient to ward area.		To ensure privacy and dignity.	
26	Record information in relevant documents; this should include reasons for catheter insertion, as per policy.		To provide a point of reference or comparison in the event of later queries.	
27	File catheter record into patients nursing notes on PARIS.		To provide a point of reference or comparison in the event of later queries.	
28	Ensure the patient is well informed about their catheter and understand the need for good hygiene, adequate fluid intake and the use of supportive devices. Continue to monitor fluid balance if appropriate.		To ensure patient is well hydrated, and prevent or recognize complications occurring from catheterisation.	
1	Beware of the patient having a vaso-va being stimulated. This results in a slow faint. If this happens lie the patient dow staff.	ing dowi	n of the heart rate leading to a syncope	

## 7. Problematic Catheter Drainage checklist

	Yes (✓)	No (×)
Is the tubing kinked?		
Is the drainage bag below the level of the bladder and above the floor?		
Is the leg/overnight bag empty when ¾ full?		
Is the patient constipated (treat as necessary)		
Does the patient have a suspected urinary tract infection (obtain a Catheter Specimen of Urine (CSU) see paragraphs 11 and 11.1)		
Is there debris/mucous in urine? (Seek advice).		
Was encrustation noted on removal of catheter? If patient is on long term catheterisation – re-catheterise, monitor urine Ph.		
Is there blood in the urine? (After catheterisation small amounts of blood may be seen, monitor and inform medical staff if bleeding persists or increases in volume. Encourage fluid intake.		
Are there bladder spasms?		

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Check the amount of water in the catheter balloon, adjust to correct amount. (Over or under filling of the balloon can cause the catheter tip to deviate to one side and irritate the trigone or bladder wall).	
Check the catheter is not blocked; does the patient have abdominal pain?	



Always seek advice if unsure about what the problem could be with catheter drainage.

## 8. Catheter maintenance and management

There is limited clinical evidence regarding the use of catheter maintenance solutions and they should not be used routinely. They are available on prescription for treatment of specific conditions.

Catheter maintenance solutions should only be used following thorough assessment. Where assessment indicates a catheter maintenance solution may be beneficial, the prescribed solution must be appropriate for the condition being treated

You must maintain a continuously closed urinary drainage system as this is central to the prevention of catheter associated infection. Care of the urinary drainage system is very varied, leading to errors in practice. Modern 'closed' sterile drainage systems have significantly reduced the incidence of bacteriuria.

## 8.1. Breaches in the 'closed' system

This may include unnecessary emptying of the urinary drainage bag or taking a urine sample. This will increase the risk of catheter related infection and **must** be avoided.

Hand washing must take place and non-sterile gloves worn before manipulation.

## 8.2. Principles

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Principles	Reason	
<ul> <li>✓ You must wear a plastic apron and non-sterile gloves.</li> <li>✓ You must also thoroughly wash hands prior to and after any procedure.</li> </ul>	Reduces bacterial numbers on hands and greatly reduces the risk of cross infection.	
<ul> <li>Bladder Washouts</li> <li>✓ You must always seek medical advice re bladder washouts.</li> <li>✗ You must not use prophylactic bladder washouts.</li> </ul>	Breaks the 'closed' system. Certain preparations encourage bacterial resistance. The range available often causes confusion and misuse. Research does not show that prophylactic bladder washouts prevent infection blockage.	
	Research suggests that the physical force of bladder washouts may damage bladder	

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	mucosa and dispose of repeated infection.
<ul> <li>Catheter fixation</li> <li>✓ You can fix a standard length catheter to a patient's leg if more comfortable using appropriate straps.</li> <li>✓ A variety of supports are designed for use with these bags including:</li> <li>G straps</li> <li>Leg straps</li> </ul>	Reduces unnecessary trauma to the bladder and urethra by tugging and dragging.
Meatal cleaning	
<ul> <li>✓ Must be part of daily hygiene.</li> </ul>	There is no evidence to suggest more rigorous techniques reduce bateriuria.
<ul> <li>Must use unperfumed soap and water.</li> </ul>	
<b>NB.</b> Daily routine bathing or showering is all that is needed to maintain meatal hygiene.	

#### Emptying the catheter drainage bag 9.

	Action	Reason
✓	You <b>must</b> wear non-sterile gloves and apron, after task wash hands.	Reduces the risk of cross-infection and contamination.
✓	You <b>must</b> use a clean disposable jug for each patient.	Reduces the risk of cross-infection and contamination.
✓	Empty carefully into a bodily fluid disposal unit e.g.; toilet/macerator/slop hopper	Reduces the risk of cross-infection and contamination.
~	You <b>must</b> swab the drainage tap with 70% alcohol (IMS) prior to and after emptying	Will help remove bacterial debris and surplus urine.
✓	You <b>must</b> deal with spillages immediately.	Urine is an excellent medium for bacterial growth. Will reduce the risk of cross-infection and contamination.
✓	You <b>must</b> have a 'closed' urine drainage system.	Significantly reduces the incidence of bacteriuria.
✓	You <b>must</b> keep disconnection to an absolute minimum.	Reduces the risk of introducing bacteria.
~	You <b>must</b> use sterile drainage bags which attach directly to the catheter. The drainage bag must remain in place for 5 –	

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7 days. Unless otherwise indicated the 'named nurse' will instruct the patient how to care for the urinary catheter and drainage system within their own environment.	
<ul> <li>You must keep the drainage bag below the level of the patient's bladder at all times and above the floor. (or emptied before the procedure e.g. bathing, turning, physiotherapy)</li> </ul>	Prevents back flow of urine into the bladder.
✓ You must encourage 2 – 3 litres of fluid per day.	Best method of bladder irrigation. Reduces blocking and debris formation.
<ul> <li>You must never replace a used bag once it has been disconnected from the catheter. A new bag must always be used.</li> </ul>	
<ul> <li>You must never take a sample directly from a urinary catheter. You must always use the allocated sampling port.</li> </ul>	This will allow urine out and bacteria in. The inflation channel may be punctured.
<ul> <li>You must never clamp the urinary catheter.</li> </ul>	Damages the inflation channel, prevents deflation of the balloon.

#### 9.1. Intermittent self catheterisation



This is a specialised procedure (only trained staff **must** undertake this procedure) and a continence advisor or an appropriate qualified person **must** instruct patients.

#### 9.2. Suprapubic urinary catheter



Patients with this catheter type may usually require a dry dressing around the catheter site, which **must** be changed as necessary.

- A suprapubic catheter is surgically inserted directly into the bladder via the abdomen. It is indicated when urethral catheterisation is contraindicated.
- Clinical staff **must** be trained and competent in changing a suprapubic catheter and understand the risks involved.
- To prevent closure of the catheter site between catheter changes it is essential staff insert the new catheter immediately after removal of the old catheter. This is especially important on the patient's first catheter change, which is usually done in an acute hospital.
- **Do not** remove the catheter unless you are prepared to change it immediately or it is to be removed permanently.

- The catheter site can become colonised with bacteria very easily so staff need to ensure the wound site is kept clean by washing the site and outer catheter tube with soap and water.
- Dressings are best avoided unless the catheter site is discharging. In this situation an absorbent sterile dressing should be applied aseptically and monitor closely. <u>See</u> <u>Woundcare Guidelines</u>
- Patients can bath and shower as normal.

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#### 9.3. Principles for changing a suprapubic catheter

The same as a urethral catheter, except no lignocaine Gel is required and to check the catheter can be used as a suprapubic catheter.

- Once the catheter site has been cleaned with normal saline (Normasol) deflate the balloon fully, you may have to wait several minutes.
- Rotate the catheter gently and remove at a 90° angle and observe how far the catheter was in. Urine may leak from the site.
- Wash and dry hands and apply sterile gloves.
- Insert correct new catheter without further delay by gently inserting a little further in than the one you removed.
- Inflate balloon according to manufacturer's guidelines.
- Connect the catheter to a closed drainage system and ensure it is well supported.
- Dispose of equipment as per Trust guidelines (hyperlink).
- Document procedure on Paris.

## **10. Urinary Drainage Systems**

- ✓ You **must** position the catheter to avoid kinks and trauma on the bladder neck.
- $\checkmark$  You **must** do this by using a catheter support strap.

#### **10.1.** Leg bags and overnight drainage bags

- $\checkmark$  Leg bags must be drainable, and connected directly to the catheter from a sterile pack.
- ✓ Overnight bags must be non-drainable unless the patient is bed bound, then a drainable overnight bag can be directly connected to the catheter from a sterile pack.
- ✓ Overnight non-drainable bags **must** be connected to the leg bag.
- Overnight non-drainable bags must be discarded after each use and a new bag attached each night.
- ✓ You **must** use sterile gloves.

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All mobile patients **must** use a leg bag.

#### 10.2. Choice of bag

The choice of bag **must** take into account:

- Comfort of the patient.
- Ability of the patient to be independent for self care. Is the patient able to empty his or her own catheter bag?
- Consider capacity of bag e.g. 350, 500, 600 or 750mls.
- Consider length of inlet tube e.g. direct inlet, 10cms or 30cms.

#### **10.3.** Fixation of the leg bag

✓ You **must** use straps or drainage bag support.

#### 10.4. Emptying of Urine bag

 $\checkmark$  You **must** empty the bag at  $\frac{3}{4}$  (75%) bag capacity.

#### **10.5.** Change of Urine collection bag

- ✓ You must record the date change of the leg bag on the bag and in the care plan and PARIS.
- ✓ You **must** change the bag according to manufacturer's instructions or earlier if clinically indicated (generally 7 days).

#### 10.6. Bed bound patients only

✓ You **must** use 2 litre overnight drainage bags with drainable ports.

These bags must be supported by the bed or floor stand to avoid trauma on the bladder neck caused by weight of the drainage bag pulling on the tubing and prevent contamination of the drainage port.

Drainage bags **must** be kept below the level of the bladder to ensure drainage. Where urine samples are required, consider the need for a sample port to avoid needle stick injury.

## 11. Collection of a catheter specimen of urine

#### Equipment:

- 1. Swab saturated with isopropyl alcohol 70%.
- 2. Sterile syringe
- 3. Universal specimen container.
- 4. Non-sterile gloves.

### **11.1. Procedure / checklist**

	Action	Yes (√)	Reason
1	Explain and discuss procedure with the patient		To ensure patient understands procedure and gives his / her valid consent
2	Screen the bed		To ensure the patient's privacy
3	Wash hands using liquid soap and water. Put on gloves and apron		To reduce the risk of infection
4	Clean the access point for 30 seconds with a swab saturated with 70% isopropyl alcohol and allow to dry.		To reduce risk of cross-infection
5	Use a sterile syringe (if necessary), aspirate the required amount of urine from the access point		If the catheter bag or tubing is punctured
6	Reclean access point with a swab saturated with 70% isopropyl alcohol		To reduce contamination of access point and to reduce risk of cross- infection
7	Place the specimen in a sterile container		To ensure that only organisms for investigation are preserved
8	Remove gloves followed by apron, wash and dry hands with liquid soap and water		To reduce risk of cross-infection
9	Dispose of waste		Follow Trust guidelines.
10	Label container and dispatch it (with the completed request form) to the laboratory as soon as possible after sample is taken to allow more accurate results from culture.		To ensure the best possible conditions for laboratory tests

## 12. Definitions

Term	Definition	
Bacteriuria	The presence of bacteria in the urine with or without associated symptoms of infection. In the absence of symptoms this is referred to as asymptomatic bacteriuria (or in the case of a patient with an indwelling catheter as catheter colonisation).	
Healthcare Associated Infection (HAI)	If an infection occurs 48 hours after admission, or follows an invasive or manipulative procedure, then the term 'healthcare associated infection is used, (Parker, 1997).	
Urinary Tract Infection (UTI)	The successful invasion, establishment and growth of microbes within the urinary system of the host. Any factor interfering with the normal flow of urine can increase susceptibility to infection.	
	In catheter related infection microbes gain access to the bladder via the outer surface of the catheter and through the lumen, particularly in males, and once a catheter has been in situ for a few days bacteriuria is almost inevitable and recurrent symptomatic urinary tract infections and sepsis are very real risks.	
	With a catheter in situ a diagnosis of UTI can only be presumptive and is a medical diagnosis based on the presence of fever > 38°C that has no other recognised cause. Other factors such as discomfort, pain, pus cells and bacteria found in a Catheter Specimen of Urine (CSU) are also useful in diagnosis	

## 13. References and further reading

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## 14. Document control

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This document replaces:	IC/0014/v3 Guidelines for the care of Urinary Catheter Management		
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