

## Guideline Title: INDWELLING CATHETERISATION: MALE AND FEMALE

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| <b>Campus:</b>                    | Alfred Health         | <b>Control No.:</b>        | BH0509   |
| <b>Category:</b>                  | Nursing Services      | <b>Related Policy No.:</b> | BH0604   |
| <b>Responsibility for Review:</b> | Chief Nursing Officer | <b>Rev.:</b>               | 001      |
| <b>Date Approved:</b>             | May 2009              | <b>Review Date:</b>        | May 2012 |

### GUIDELINES

These guidelines should be read in conjunction with the Clinical Care Standards Policy and Alfred Health Patient Identity Verification Guideline.

### PURPOSE

It is the intent of this document to set out the expected standard, risks and requirements for inserting and managing an indwelling urethral catheter (IDC) for males and females.

### EXPECTED OUTCOMES

- Procedure performed using an aseptic technique.
- The purpose for which the IDC is inserted is achieved.
- The IDC is inserted for the minimum time required to achieve its purpose.

### BACKGROUND

An indwelling urethral catheter is a hollow tube (with retaining balloon/Foley catheter) which is inserted into the bladder via the urethra for the purpose of draining urine or instilling fluids.

An IDC is inserted for numerous purposes including:

- Drainage: Acute or chronic urinary retention  
Measuring and monitoring of urine output  
Hypotonic/atonic bladder  
Pre and post pelvic surgery  
Permitting healing of lower urinary tract
- Investigations: Obtaining an uncontaminated urine specimen  
Urodynamic or radiological investigations
- Instillations: Bladder irrigation  
Intravesical treatments
- Incontinence: Management of incontinence when all other options have been considered, when skin integrity and quality of life are affected by incontinence.

### POTENTIAL RISKS

IDC is an invasive procedure, potential risks to the patient include:

- Infection - urinary and systemic
- Anatomical damage to lower urinary tract, eg trauma, pressure necrosis, stricture formation and scarring

## SPECIFIC REQUIREMENTS

- Male and female catheterisation must only be performed by suitably trained and clinically competent Medical Officer or Registered Nurse.
- In accordance with approval by the Nursing Scope of Practice Committee, an Enrolled Nurse who has completed the Alfred Health required education program (including skill assessment) or HLTEN505A Contribute to the Complex Nursing Care of Clients Unit may participate in insertion of Female Indwelling Catheters within the parameters of the education preparation and the individual Enrolled Nurses current competency.

Consult the relevant Urologist/Urology Unit if the patient:

- Has undergone recent urological surgery such as a radical prostatectomy, transurethral resection of the prostate (TURP) or bladder neck incision (BNI)
- requires the use of an introducer to insert the catheter- only to be attended by a Urologist

## SPECIAL CONSIDERATIONS

- Certain underlying conditions may require antibiotic cover prior to catheterisation such as prosthetic heart valve, hip prosthesis, past history of rheumatic fever - consult the Medical officer involved.
- Additional consideration is required if a patient:
  - has a known urethral stricture
  - has previously been found difficult to catheterise
  - has urethral meatus bleeding or hematuria

## CATHETER OPTIONS

Short Term (1-2 weeks):

- Latex/Silicone Elastomer Coated Latex

Long term (6-12 weeks):

- 100% or All Silicone
- Hydrogel or Lubricious Coated Latex

## CATHETER AND BALLOON SIZES

The recommended guidelines for selection of catheter size for routine catheterisation are:

- 12– 14 FG for females
- 14 –16 FG for males

**Note:** Choose the smallest size catheter that can achieve the purpose for catheterisation

The recommended catheter balloon sizes for routine catheterisation is:

- 5cc and 10cc

**Note:** 30mL balloons should only be used in certain circumstances such as for haemostasis post urological procedure surgery or as indicated by a urologist

## EQUIPMENT

- Disposable sterile catheter pack.
- 1 x pair sterile gloves.
- 2 x sterile syringes to suit volume of catheter balloon (2nd syringe required if changing IDC).
- 1 x pair of non-sterile gloves (if removing previous catheter).
- Sterile lubricant – Lignocaine 2% with 0.05% Chlorhexidine in 10ml syringe with introducer for males. Water based lubricant sachet for females.
- Sterile catheter of appropriate size, balloon size and type. For female patients, a second catheter may be required if the first catheter is introduced into the vagina.

- Cleaning solution: Chlorhexidine 0.05% / Cetrimide 0.5% cleaning solution 30mL ampoule or alternatively sachet of Normal Saline.
- Sterile water for injection to volume required for catheter balloon.
- Sterile urinary drainage bag (leg bag with straps if patient is ambulant).
- Bed Protection eg Bluey.
- Rubbish bag.

## PROCESS

1. Explain procedure to patient and assist into a comfortable, supine position with arms by sides.
2. Wash hands. Prepare equipment; open catheter tray, add cleaning solution, catheter, lubricant, syringe, sterile water for injection (for catheter balloon) and sterile gloves.
3. If removing a previous catheter, don pair of non-sterile gloves, deflate the balloon of current catheter using the 2<sup>nd</sup> sterile syringe, taking note of the amount of water extracted. Gently remove catheter. Inspect the catheter for encrustation and any abnormalities.
4. Cleanse the genital area and upper thighs with mild soapy water as required and discard gloves

## Male

1. Attend a procedural hand wash and apply sterile gloves.
2. Arrange equipment. Lubricate first 10cm of catheter from tip with lignocaine gel and place in tray with lignocaine syringe. Fill syringe with sterile water (to volume specific on catheter) and add to tray. Moisten swabs with cleaning solution in other tray.
3. Position white drape, and retract foreskin if present. If phimosis (tight foreskin) is an issue, the foreskin may be difficult to retract, do not force it.
4. Thoroughly cleanse penis then pubic/scrotal area with moisten swabs using single downward strokes. Note any physical abnormalities (eg urethral filleting, excoriation, inflammation, discharge).
5. Remove outer gloves.
6. Position fenestrated green drape. Place tray containing catheter, syringe with sterile water and remaining gel onto sterile field close to penis.
7. Insert the lignocaine gel into the urethra. Allow approximately 2 minutes for effect. Gently maintain pressure to tip of penis or hold lignocaine syringe in the urethral meatus to retain gel in the urethra.
8. Hold the penis at right angles to the body. Encourage the patient to relax, breathe slowly, and keep their hands by their side. Slowly insert the catheter.
9. Resistance may occur at the external urethral sphincter, maintain gentle pressure with the catheter and encourage the patient to relax, try coughing or bearing down. This resistance should subside and the catheter can then pass into the bladder.

**Note: Urethral trauma can occur if excessive force is used. Terminate procedure and notify Medical Officer if you are unable to pass the catheter.**

10. Insert the catheter up until the catheter bifurcation if possible or at least 25cm. Ensure urine is draining. Urine may not be present immediately if the patient is having a change of catheter and has been on continuous drainage or if gel is blocking the catheter lumen.
11. Measure volume of urine drained. Collect urine specimen if required.
12. Instil sterile water for injection into the balloon port of the catheter according to the volume indicated on the catheter. Withdraw the catheter until slight resistance is met.
13. Connect catheter to appropriate sterile drainage bag. Secure bag and catheter.

14. Return the retracted foreskin to its correct position, if present.

## Female

1. Attend procedural hand wash and apply sterile gloves.
2. Arrange equipment on the tray. Lubricate first 10cm of catheter from tip lubricant and place in tray. Fill syringe with sterile water for injection (to volume specified on catheter) and add to tray. Moisten swabs with cleaning solution in other tray.
3. Position white drape.
4. Thoroughly cleanse perineum with moisten swabs. Hold outer (majora) labia apart, clean inner (minora) labia with single downward movements and separate swabs, and identify and cleanse the urethral meatus. Note any physical abnormalities (eg prolapse, excoriation, inflammation, discharge, etc).
5. Remove outer gloves.
6. Position fenestrated green drape. Place tray containing catheter and syringe with sterile water onto sterile field close to perineum.
7. Separate the labia and slowly insert the catheter into urethral meatus.
8. Insert the catheter approximately 8-10cm and wait for urine to flow. Ensure urine is draining. Urine may not be present immediately if the patient is having a change of catheter and has been on continuous drainage or if gel is blocking the catheter lumen.
9. If no urine appears, the catheter may be in the vagina. Leave this catheter in situ. Re-identify the urethral meatus and insert a further catheter before removing the first.
10. Measure volume of urine drained. Collect urine specimen if required.
11. Instil sterile water for injection into the balloon port of the catheter according to the volume indicated on the catheter. Withdraw the catheter until slight resistance is met.
12. Connect catheter to appropriate sterile drainage bag. Secure bag and catheter.

## DOCUMENTATION

Document the procedure in the patient's progress notes, including:

- Date of insertion
- Catheter type
- Catheter size
- Volume of sterile water inserted in the balloon
- Reason for insertion
- Any difficulties encountered with insertion
- Urinalysis results if tested or if urine specimen collected
- Volume of urine drained, especially if urinary retention is suspected

## ONGOING CATHETER CARE

Refer to Caulfield Hospital and The Alfred 'Catheter Care Booklet' for information on caring for a catheter at home if the patient is to be discharged with the IDC in situ.

### To maximise catheter function

- Encourage fluid intake to at least 1.5 litres per day unless otherwise indicated by Medical Officer.
- Avoid constipation.

- Encourage urethral meatus/personal hygiene cleansing at least daily.
- Ensure drainage bag is below the height of the bladder to allow drainage.
- Empty leg bag 3-4 hourly or when two thirds full.
- Change drainage bags weekly.
- Maintain a sterile closed link system whenever possible.
- Careful hand washing and use of non-sterile gloves and non touch technique when handling IDC or drainage bag.
- Use a link up system by connecting single use only night bag to leg bag for overnight use and discard in morning.
- Ensure night bag is not in contact with floor but on holder, stand or disposable bowl.

## RELATED DOCUMENTATION

Clinical Care Standards Policy

[Intranet](#)

Caulfield Hospital and The Alfred 'Catheter Care Booklet'

## REFERENCES

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The Joanna Briggs Institute for Evidence Based Nursing and Midwifery (2005) *Aged Care Practice Manual*, "Urethral catheterisation – Female", May, 2005.

The Joanna Briggs Institute for Evidence Based Nursing and Midwifery (2004) "Urethral Catheterisation" Evidence Based Practice Information Sheets for Health Professionals.

Charter of Human Rights and Responsibilities Act 2006 (Vic)<sup>1</sup>

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<sup>1</sup> REMINDER: Charter of Human Rights and Responsibilities Act 2006 – All those involved in decisions based on this guideline have an obligation to ensure that all decisions and actions are compatible with relevant human rights.