



CLINICAL GUIDELINE	
Urethral Catheterisation	
Scope (Staff):	Nursing and Medical Staff
Scope (Area):	NICU KEMH, NICU PCH, NETS WA

This document should be read in conjunction with this [DISCLAIMER](#)

Contents

Aim	1
Risk.....	1
Key Points.....	2
Indications for an IDC	2
Contraindications/Precautions.....	3
Procedures	3
Preparation and Equipment.....	3
Female Catheter Insertion.....	4
Male Catheter Insertion	5
IDC Specimen Collection	6
IDC Removal	7
Nursing Management and General Care	8
References	9

Aim

- To provide guidance and instruction on the technique for insertion and management of the neonate requiring an indwelling urinary catheter.
- To ensure the insertion and care of the urinary catheter is performed in a way that is safe and reduces the risk of trauma, pain and infection

Risk

- Insertion of an intermittent or indwelling urinary catheter (IDC) is an invasive procedure that places the patient at risk of complications including trauma to the urethra, pain and infection. Adherence with aseptic technique, handwashing protocols and vigilant assessment and maintenance of an IDC can minimise these risks.
- Foleys balloons are generally NOT inflated in neonates. IDC's inserted in theatre may have their balloons inflated. Patients returning from theatre with an IDC insitu

should have the balloon checked. The decision to deflate the balloon should be made in consultation with the Neonatal Consultant and Surgical team.

- ALWAYS check the balloon is not inflated prior to removal of IDC.
- Ensure the catheter wire is removed prior to insertion for all neonates.
- Catheter size should be determined based on age, weight, medical condition and the reason for insertion. Refer to [table 1](#).
- Catheterisation of extreme preterm and VLBW neonates comes with a **HIGH RISK** of complications and should only be performed after consultation with senior medical staff. Bladder ultrasound should be performed to assess whether there is urinary retention or whether there is no urine production. Consider surgical consultation in neonates under 28 week's gestation.

Key Points

- Urethral catheterisation is a medical order.
- Urethral Catheterisation should only be done by staff deemed competent in the procedure.
- Insertion of an intermittent or indwelling catheter by clinical staff requires compliance with aseptic technique.
- If any difficulty inserting an IDC seek review by senior medical staff. Surgical review may be required.
- Doctors or nurses deemed competent can insert IDC's for FEMALE and MALE patients.
- Catheter insertion is a potentially painful and upsetting procedure. Sucrose should be considered. Comfort and restraint techniques should be used where appropriate.
- Parents or carers should have the procedure and indication for an IDC explained to them prior to or soon after insertion.
- An IDC should be removed when no longer clinically indicated.
- Parents of neonates with a need for intermittent catheterisation should be taught how to carry out the procedure.
 - Consultation with the spinal CNC should be made as soon as practical for ongoing care and discharge planning.
- **This is a 2 person sterile aseptic technique.** See [Practice Principles for Indwelling Urinary Catheter](#)

Indications for an IDC

Indwelling catheters are indicated for continuous bladder drainage:

- Before, during or after some surgical procedures.
- Risk of, or demonstrated, urinary retention associated with paralytic agents and opioid infusions.
- To accurately monitor urine output in critically unwell infants.

Intermittent catheterisation may be indicated for:

- Immediate relief of bladder distension.
- Collection of urine sample for diagnostic purposes.
- Patients with nerve-related bladder dysfunction to empty the bladder at frequent intervals throughout the day.
- To assess bladder residual volumes.

Contraindications/Precautions

- Nursing staff should seek medical advice before catheterising any patient who has known urinary tract abnormalities or has undergone urological/renal tract surgery. Catheterisation of these babies should be done by the specialist surgical team.
- **Feeding tubes are not recommended for urethral catheterisation due to the high risk of bladder perforation.**
- Flushing of an IDC should only be performed by a senior medical practitioner deemed competent in catheter care.

PROCEDURES

Preparation of Child and Family

- As per our FICare policy, families/primary care givers should be given a thorough explanation of the procedure. Nursing staff should discuss and plan the procedure and use of pain relief with the family prior to commencing the procedure.
- Involve the parents where possible when providing non-pharmacological pain relief, distraction and restraint.
- Consider the use of pharmacological pain relief such as sucrose as appropriate.
- Ensure the patient's privacy is maintained throughout the procedure.
- Consider thermoregulation needs, particularly for preterm neonates.

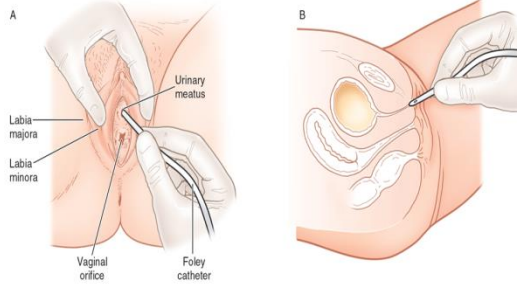
Preparation of Environment and Equipment

- Ensure there is adequate light to perform the procedure
- Prepare the following equipment:
 - Clean Dressing Trolley
 - Dressing pack
 - Sterile gloves
 - Sterile Gown
 - Sterile Plastic Drape
 - Sterile Scissors
 - Sterile Kidney Dish
 - Appropriate sized catheters ([see Table 1](#))
 - Sterile lubricating jelly
 - 0.2% Chlorhexidine irrigation solution (Catheterisation preparation solution: Chlorhexidine gluconate 60mg/30mL).
- IDC drainage bag and connector
- Slek tape and a safety pin (only if no safety clip on IDC bag drainage tubing).
- Specimen container
- Waste Bag
- Small Hydrocolloid cut to size for fixation point to skin
- Small Leukostrips / adhesive tape like fixomull/Tegaderm. Or large Leukostrips in the premature neonate

Table 1- Catheter Size Guide – Male and Female

Age	Weight	Catheter Size
Neonate	<1200g	3.5 Fr umbilical catheter
Neonate	1200-1500g	5 Fr umbilical catheter
Neonate	1500-2500g	5 Fr umbilical catheter or size 6 Fr Foleys
0-6 months	3.5-7kg	6 Fr Foleys indwelling catheter

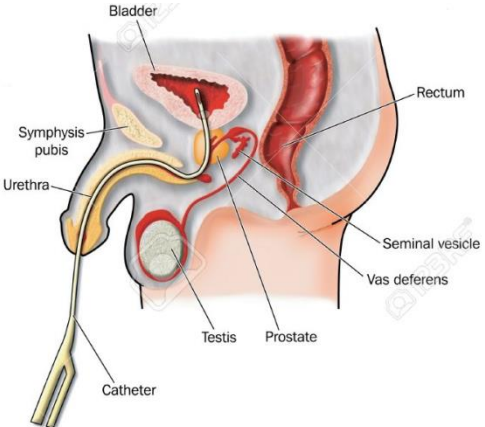
Female Catheter Insertion

Steps	Additional Information
1. Perform Hand Hygiene	ANTT/Infection Control
2. Place infant in supine position with knees bent and hips flexed, clean genital area with soap and water first.	
3. Perform hand hygiene	ANTT/Infection Control
4. Open dressing pack (aseptic field) and prepare equipment needed using aseptic technique	
5. Pour 0.2% Chlorhexidine irrigation solution onto tray.	
6. Perform aseptic hand wash and don sterile gloves.	
7. Apply sterile drapes/towel.	
8. Separate labia majora with one hand and expose urethral opening. In neonates, the urethral meatus is immediately above the hymeneal fringes.	
9. Using swabs held in forceps in the other hand clean the labial folds and the urethral opening. Move swab from above the urethral opening down towards the rectum. Discard swab after each urethral stroke into waste bag or designated waste area.	
10. Remove catheter wire if a 6Fr catheter is used.	
11. Lubricate catheter.	
12. Insert catheter into the urethral opening, upward at approximately 30 degree angle until urine begins to flow.	<p>IF UNABLE TO PASS THE CATHETER AFTER TWO ATTEMPTS, DISCONTINUE PROCEDURE AND SEEK SENIOR MEDICAL TEAM ASSISTANCE</p>

Steps	Additional Information
13. Release labia majora	
14. Obtain specimen if required and attach drainage bag.	
15. Secure in place with leukostrips and tape to thigh.	Ensure genital area is clean and dry and that the infant is moved into a comfortable position post procedure
16. Dispose of gloves and equipment in clinical waste.	Clean trolley and repeat hand hygiene.
17. Document procedure and outcome in the patients records including; date and time of insertion, type and size of catheter, name of clinician inserting catheter, any complications or issues, securement and drainage.	

Male Catheter Insertion

Steps	Additional Information
1. Prepare for procedure as for female catheterisation.	
2. Place infant in supine position, clean genital area with soap and water first.	
3. Hold the shaft of the penis using sterile gauze.	
4. Lift the penis and retract the foreskin gently. Do not force the foreskin back	
5. Using other hand, clean the urethral opening with swabs held in forceps. Use a circular motion from the glans first then the urinary meatus.	Discard swab into waste bag after each single wipe.
6. Remove catheter wire if a 6Fr catheter is used.	
7. Lubricate catheter.	
8. Apply sterile drapes/towel.	

Steps	Additional Information
<p>9. Hold the penis with slight upward tension and perpendicular to the child's body.</p>	
<p>10. Insert the catheter into the urethral opening and watch for the flow of urine</p>	<p>IF UNABLE TO PASS THE CATHETER AFTER TWO ATTEMPTS, DISCONTINUE PROCEDURE AND SEEK SENIOR MEDICAL TEAM ASSISTANCE</p>
<p>11. Complete procedure as female catheterisation.</p>	

IDC Specimen Collection

Indications & considerations:

- For investigations and electrolyte management.
- Urine for urinalysis or culture should be collected fresh from the needless sampling port of catheter tubing (not drainage bag).
- This should be completed in line following aseptic technique principles.
- Large volumes e.g. 24hr collection, can be collected from drainage bag.

Equipment:

- Dressing Trolley
- Dressing pack
- PPE as per aseptic technique & risk of body fluid exposure protocols
- 10mL catheter tip syringe
- 70% Alcohol/2% Chlorhexidine swabs
- Specimen container

Steps	Additional Information
<p>1. Explain procedure to patient/carer.</p>	
<p>2. Perform hand hygiene and put on gloves</p>	

Steps	Additional Information
3. Clamp below the sampling point.	
4. Scrub sampling point vigorously with alcohol swabs for at least 15 seconds and allow 30 seconds of airing prior to accessing port with a 10ml syringe to collect sample.	
5. Attach sterile syringe to access port and slowly aspirate required volume of urine.	
6. Remove syringe and transfer contents to specimen container and or urinalysis strip.	Discard syringe into clinical waste
7. Re-swab access port with alcohol swab.	
8. Label container, ensure lid is firmly sealed	
9. Remove gloves and perform hand hygiene	
10. Complete documentation.	

IDC Removal

Equipment

- Dressing Trolley
- Dressing pack
- PPE as per aseptic technique & risk of body fluid exposure protocols
- Bluey
- 5ml syringe
- Sterile gloves, specimen container and sterile scissors are also required if sending tip for culture.

Steps	Additional Information
1. Explain procedure to patient/carer.	
2. Determine balloon inflation status by attaching 5ml syringe and gently drawing back slightly.	
3. Position infant for easy access to catheter and place waterproof bluey under infant, be sure to protect patients privacy during procedure.	
4. Wash hands and put on PPE. Prepare equipment.	
5. Gently withdraw catheter – if resistance is encountered DO NOT FORCE. Seek medical advice immediately.	
6. Upon removal, check the catheter and balloon is intact. If any concerns contact medical team	

Steps	Additional Information
immediately.	
7. If catheter tip required for microscopy:	<p>Ensure catheter tip does not come in contact with surfaces or hands.</p> <p>Using sterile scissors cut off tip of catheter approximately 1-2cm placing directly into sterile specimen container.</p> <p>Label specimen and send to pathology with request form.</p>
8. Dispose of catheter and drainage system into clinical waste.	



IDC Nursing management and General Care

- ONLY Nursing staff who have completed the Neonatal Urethral Catheterisation Learning Package are to perform insertion or removal of an IDC.
- IDC site should be observed with nappy changes 3-4hrly. Observe for leaking at catheter site, tension, redness and discharge. Report and document any abnormalities to the medical team immediately.
- Urinary drainage should be documented 1-2 hourly. Colour and concentration of urine should be observed and documented.
- Unless otherwise specified by the treating team, normal urine output is 0.5ml-2ml/kg/hr. Report any variations to the medical team.
- Record fluid balance at least daily, more frequently as ordered by the medical team.
- Daily ward urinalysis should be performed and results documented. Discuss any abnormal results with the medical team immediately.
- IDC drainage bags should be emptied once per shift at a minimum or once $\frac{3}{4}$ full.
- Position drainage bag to prevent backflow of urine or contact with the floor. Gravity is important. Ensure the drainage bag is below the level of the bladder.
- Adherence to a sterile continuously closed urine drainage system is important for reducing the risk of acquiring a catheter associated infection.
- Consider changing the catheter tube and/or bag based on clinical indicators including infection, contamination, and obstruction or if system disconnects, if the equipment is damaged or leaks. Replace system and/or catheter using aseptic technique and sterile equipment.
- Routine hygiene should be maintained with daily clean IDC insertion site with warm soapy water and more frequently if clinically indicated.
- An IDC should be removed when no longer clinically indicated.

Related CAHS internal policies, procedures and guidelinesPCH [Urinary Catheterisation](#)CAHS Infection Control Manual [Aseptic Technique](#)**References and related external legislation, policies, and guidelines**

1. Australia and New Zealand Urological Nurses Society (ANZUNS) Catheterisation Guideline Working Party. Catheterisation Clinical Guidelines. Victoria: ANZUNS; 201
2. Joann Briggs Institute. Management of short-term indwelling urethral catheters to prevent urinary tract infections. Best Practice. 2010;14(12):1-4
3. Kids Health Info for Parents. The Royal Children's Hospital, Melbourne. Indwelling Urinary Catheter Fact Sheet. (2008)
4. Loveday, H.P. et al. (2014) epic3: National Evidence-Based Guidelines for Preventing Healthcare-Associated Infections in NHS Hospitals in England: Guidelines for preventing infections associated with the use of short-term indwelling urethral catheters, Journal of Hospital Infection, Volume 86.
5. Loveday HP, Wilson JA, Pratt RJ, Golsorkhi M, Tingle A, Bak A, et al. epic3: National Evidence-Based Guidelines for Preventing Healthcare-Associated Infections in NHS Hospitals in England.
6. Meddings J, et al. (2013). Reducing unnecessary urinary catheter use and other strategies to prevent catheter-associated urinary tract infection: an integrative review. BMJ Quality Safety; 23:277-289.
7. National Health & Medical Research Council. Australian Guidelines for the Prevention and Control of Infection in Healthcare: B4.2.1 Indwelling urinary devices. NHMRC. 2010.

This document can be made available in alternative formats on request for a person with a disability.

File Path:			
Document Owner:	Neonatology		
Reviewer / Team:	Neonatal Coordinating Group		
Date First Issued:	November 2019	Last Reviewed:	13 th November 2019
Amendment Dates:		Next Review Date:	13 th November 2022
Approved by:	Neonatal Coordinating Group	Date:	26 th November 2019
Endorsed by:	Neonatal Coordinating Group	Date:	
Standards Applicable:	NSQHS Standards:  		
Printed or personally saved electronic copies of this document are considered uncontrolled			