

PAEDIATRIC NURSING PRACTICE MANUAL
SECTION 7

WOUND CARE

9.8 DRAINS AND FISTULAE

9.8.4 REMOVAL OF A URESIL TRUSET™ NEPHROSTOMY PIGTAIL CATHETER

Aim

To safely remove a nephrostomy pigtail catheter

Background Information


A nephrostomy tube is inserted to provide permanent or temporary urinary drainage following a procedure or to relieve ureteric obstruction. Nephrostomy drainage catheters may be placed under radiological guidance or in theatre. The retaining mechanism within a pigtail catheter is a coil which is retained within the renal pelvis.¹

Key Points

1. Removal of a pigtail catheter must only be undertaken under the written instruction of a medical officer. The order should be documented in the patient notes.
2. Analgesia and/or sedation must be considered prior to the procedure.
3. UreSil™ pigtail drainage catheters with locking mechanism are the catheter of choice at PMH. However, always check the post operative notes for description of catheter, either locking or non-locking (also written on catheter) and follow the manufacturer instructions for the safe removal of the catheter.
4. The internal pigtail formation must be uncoiled prior to removal or severe pain and possible internal damage may occur.²
5. Use aseptic non touch technique for this procedure. [Refer to A&NTT Framework.](#)

Equipment

Dressing trolley
Disposable dressing pack
PPE: apron, gloves (sterile & non sterile)
Waste bag
Normal saline 0.9% solution
Gauze squares
Transparent occlusive dressing
+/- Sterile scissors
+/- Guarded artery forceps x 2

PROCEDURE	ADDITIONAL INFORMATION
<p>Explain the procedure to the child/carer.</p> <p>Administer analgesia at least 30 minutes prior to removal of catheter.</p>	<p>Offer reassurance throughout the procedure.</p> <p>Utilise play/distraction and comforting measures.</p>
<p>Ask the child to lie on their side which is opposite to the pigtail catheter.</p>	<p>Facilitates easy access to the site.</p>
<p>Perform hand hygiene.</p> <p>Clean trolley with 70% alcohol or sporacidal detergent and allow to dry.</p> <p>Gather equipment.</p>	
<p>Open dressing pack and assemble equipment onto the aseptic field using non touch technique.</p> <p>Repeat hand hygiene and don non sterile gloves.</p> <p>Remove and discard the dressing directly into waste bag.</p>	<p>Protect all key parts from contamination.</p>
<p>Repeat hand hygiene and don sterile gloves.</p>	
<p>Swab around insertion site with 0.9% saline.</p>	
<p>Depress the blue release tab at the distal end of the hub and slide the housing to the unlock position.</p>	<p>This will automatically release the locking mechanism.</p>
<p>If suture was stored on insertion;</p> <p>Unwrap the suture from the retention slot to release the pigtail.</p> 	<p>On insertion the pigtail can be locked by;</p> <ul style="list-style-type: none"> pulling thread tight and applying locking mechanism <p>OR</p> <ul style="list-style-type: none"> if suture storage required, it will be wrapped around the slot provided prior to applying the locking mechanism

PROCEDURE	ADDITIONAL INFORMATION
<p>If unable to unlock, as above;</p> <p>Clamp the catheter close to the insertion site and apply second clamp distal to the intended cut on the shaft.</p> <ul style="list-style-type: none"> • Hold the distal end of the catheter • Using scissors, cut the catheter half way between the artery forceps and the catheter hub • Discard the cut end of the catheter • Place fingers at the skin surface either side of the catheter, to apply counter pressure • Release the artery forceps to free the locking mechanism <p>Place folded gauze squares over insertion site.</p>	<p>To prevent the catheter from retracting into the wound.</p> <p>A locking string maintains the pigtail shape it must be cut to release the formation.</p> <p>If the catheter is cut, ensure the string is removed from the patient also.</p>
<p>Whilst supporting the skin around the drain use gentle traction to remove the catheter in a continuous motion.</p> <p>Note: If resistance felt and/or patient complains of pain DO NOT continue to pull. Refer back to medical team.</p>	<p>If the catheter has been cut ensure the string is removed from the patient also.</p>
<p>Inspect the catheter to ensure intact.</p>	
<p>Apply occlusive dressing over the gauze squares.</p>	
<p>Discard of used equipment into clinical waste. Decontaminate trolley with sporacidal detergent (eg. Tuffie wipe). Perform hand hygiene.</p>	
<p>Document procedure in medical notes.</p>	<p>Monitor and report excessive leakage at the site.</p>

References:

1. ACI Urology Network. Nursing Management of Patients with Nephrostomy Tubes. 2012. Available from: http://www.aci.health.nsw.gov.au/_data/assets/pdf_file/0011/165917/Nephrostomy-Tubes-Toolkit.pdf. Accessed: 27 May 2013
2. Hayes D. Pigtail drain tubes: a guide for nurses [expert opinion]. Australian Nursing Journal.12(10):19-20; 2005.

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Royal Perth Hospital. Nursing practice standard for the management of pigtail drainage systems. 2008.
Sir Charles Gairdner Hospital. Nursing practice guidelines; wound drain management - removal of a pigtail catheter. 2008

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Wound Care
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