

PERITONEAL DIALYSIS CATHETER (PD) – NASAL SWAB AND MUPIROCIN

<p>Cross References (including NSW Health/ SESLHD policy directives)</p>	<p>Medication Handling in NSW Public Health Facilities; NSW Health PD2013_043</p> <p>Infection Control Policy; NSW Health PD2007_036</p> <p>Aseptic Technique; SGSHHS CLIN027</p> <p>Peritoneal Dialysis – Catheter Exit Site Infection Management; Renal Department Protocol</p>
<p>1. What it is</p>	<p>A guideline and procedure to reduce the risks of PD catheter exit site infections through monitoring and treatment of Staphylococcus Aureus (SA) nasal carriage/colonisation</p>
<p>2. Risk Rating</p>	<p>Low</p>
<p>3. Employees it Applies to</p>	<p>Registered Nurses Medical Officers</p>

4. Process

4.1 Recommendations

- Pre dialysis patients on PD pathway are to have nasal swab prior to a PD catheter insertion
- Existing PD patients are to have nasal swab once every year as nasal colonisation can be community acquired resulting in intermittent nasal carriage
- Nasal swab cultures positive to Staphylococcus Aureus (SA) are to be treated with Mupirocin ointment

4.2 Devices

- Sterile transport swab
- Normal saline
- Non-Sterile gloves
- Patient label
- Pathology request form

4.3 Nasal Swab Procedure

1. Educate the patient and/or carer on the importance of monitoring for nasal SA carriage and its treatment
2. Advise patient to clear their nose
3. Perform hand hygiene
4. Don non-sterile gloves
5. Prepare the sterile transport swab by moistening cotton tip with normal saline
6. Insert the moistened swab to right nostril and swab
7. Insert same moistened swab to left nostril and swab
8. Remove gloves
9. Perform hand hygiene
10. Send labelled transport swab to pathology with a completed pathology request form

Approved by:

Date:

Page 1 of 4

11. Monitor for results

4.4 Nasal Mupirocin Treatment

1. Once nasal SA colonisation is confirmed by a positive culture, notify the patient's nephrologist and/or renal team
2. Advise patient to present to the PD unit or renal clinic to commence treatment immediately
3. Educate patient and/or carer on intra-nasal mupirocin application and need for repeat nasal swab:
 - a) Intranasal Mupirocin application (using cotton buds) twice a day for 7 days
 - b) Repeat nasal swab 1 week after the last intra-nasal mupirocin dose
4. For repeat nasal swabs with positive SA culture, repeat steps a & b until repeat nasal swab returns a negative culture.
 - Note: Yearly nasal swab and repeat treatment of mupirocin may be necessary
5. Provide patient with nasal mupirocin prescription from renal doctor
6. Review patient's PD catheter exit site (if applicable), obtain PD catheter exit site swab and commence antibiotic treatment as per Exit Site Infection Management protocol if indicated

5. Keywords	Peritoneal dialysis, Nasal swab, Nasal Mupirocin
6. Functional Group	Renal, Peritoneal Dialysis
7. External References	<p>Bender F., Bernardini, J., Piraino, B. Prevention of Infectious Complications in Peritoneal Dialysis: Best Demonstrated Practices. <i>Kidney International</i> 70: S44-S54, 2006</p> <p>Bode L., Kluytmans J., Wertheim H., Bogaers D., Vandenbroucke-Grauls C., Roosendaal R., Troelstra A., Box A., Voss A., van der Tweel L. and et al. Preventing surgical-site infections in nasal carriers of <i>Staphylococcus aureus</i>. <i>New England Journal Medicine</i> January 7; 362(1): 9-17, 2010</p> <p>Bonham, P. Swab Cultures for Diagnosing Wound Infections-A Literature review and Clinical Guideline. <i>Journal of Wound, Ostomy, and Continence Nursing</i> 36(4):389-395, 2009</p> <p>Piraino B., Baile, G., Bernardini, J. and et al. ISPD Guidelines/Recommendations Peritoneal Dialysis Related Infections Recommendations: 2005 Update. <i>Peritoneal Dialysis International</i> 25: 107-131, 2005</p> <p>Van Rijen M., Bonten M., Wenzel R. and Kluytmans J. Mupirocin ointment for preventing <i>Staphylococcus aureus</i> infections in nasal carriers. <i>Cochrane Database Systematic Review</i> October 8; (4): CD006216. 2008</p>
8. Consumer Advisory Group (CAG) approval of patient information brochure (or related material)	N/A
9. Implementation and	- Included in the education tools developed to assist nurses in



<p>Evaluation Plan Including education, training, clinical notes audit, knowledge evaluation audit etc</p>	<p>increasing their knowledge to the care of patients on peritoneal dialysis i.e. Renal care flip chart, advance and basic PD learning package and PD orientation package</p> <ul style="list-style-type: none"> - Monthly inservice education by PD CNC/nurses to all renal nurses - PD tutorial to Junior Medical Officers by the PD CNC at the beginning of renal rotation
<p>10. Knowledge Evaluation</p>	<p>Q1: When is a nasal swab required? A: -Before insertion of a PD catheter for pre-dialysis patients -Yearly for existing PD patients -1 week after the last intra-nasal mupirocin dose for repeat nasal swab</p> <p>Q2: Why is a nasal swab required for patients requiring peritoneal dialysis? A: To monitor and treat SA nasal colonisation in the aim to reduce the risks of PD catheter exit site infections</p> <p>Q3: What is the treatment for nasal SA colonisation? A: Intra-nasal application of Mupirocin ointment twice a day for seven days</p> <p>Q3: When is nasal SA treatment completed? A: After a repeat nasal swab returns a negative culture</p>
<p>11. Who is Responsible</p>	<p>Director of St George and Sutherland Renal Service. Nursing Unit Manager, Dialysis Unit</p>

Approval for (Insert Clinical Business Rule Title)		* N/A where appropriate	
*Specialty/Department Committee	Committee title: Peritoneal Dialysis Committee Chairperson name/position: Sunil Badve, Staff Specialist	Signature	Date
*Specialty/Department Committee	Committee title Chairperson name/position Signature		Date
*Nursing/Midwifery Co-Director	Name/position Christine Day, Nurse Manager Medicine Signature		Date
*Medical Co-Director	Name /position: Mark Brown, Department Head Renal Services Signature		Date
*Drug and Therapeutics Committee (SGH)	Chairperson's Name: Winston Liauw Signature		Date
Executive Sponsor	Name/Position: Group Manager Medicine & Critical Care Signature		Date
Contributors to CIBR development e.g. CNC, Medical Officers (names and position title/specialty)			

Revision and Approval History

Date	Revision number	Author (Position)	Revision due
March 2016	0	Anna Claire Cuesta (PD CNC)	March 2019

General Manager's Ratification

Name Leisa Rathborne	Signature	Date
----------------------	-----------	------