

**PERITONEAL DIALYSIS CATHETER – DAILY CARE, DRESSING AND MANAGEMENT**

<p><b>Cross References</b> (including NSW Health/ SESLHD policy directives)</p>	<p><a href="#"><u>NSW Health PD2017_013 Infection Prevention and Control Policy</u></a>  <a href="#"><u>NSW Health PD2017_026 Clinical and Related Waste Management for Health Services</u></a>  <a href="#"><u>Aust Government   NHMRC   ACSQHC Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019)</u></a>  <a href="#"><u>SESLHD/PD146 Wound - Antiseptic Dressing Policy</u></a>  <a href="#"><u>SGH-TSH CLIN027 Aseptic Technique - Competency and Education Requirements</u></a>  <a href="#"><u>SGH CLIN 357 Peritoneal Dialysis Catheter (and Extension set) – Management of Contamination</u></a>  <a href="#"><u>SGH CLIN 433 Peritoneal Dialysis (PD) Catheter Infection – Exit Site and Tunnel Infection Management and Treatment</u></a>  <a href="#"><u>SGH CLIN 442 Peritoneal Dialysis (PD) – Peritonitis Management and Treatment</u></a>  <a href="#"><u>SGH CLIN 414 Peritoneal Dialysis Catheter – Post Insertion Catheter Care, Dressing and Management</u></a>  <a href="#"><u>SGH CLIN434 Peritoneal Dialysis Catheter (PD) – Nasal Swab and Mupirocin (Nasal Staphylococcus Aureus Eradication Treatment)</u></a></p>
<p><b>1. What it is</b></p>	<p>A guideline and procedure to protect the PD catheter from contamination or infection according to best practice guidelines</p>
<p><b>2. Risk Rating</b></p>	<p>Low</p>
<p><b>3. Employees it Applies to</b></p>	<p>Registered Nurses (RN) Enrolled Nurses (RN) Medical Officers (MO)</p>

**4. Process**

**Background**

A peritoneal dialysis catheter (PDC) exit site is presumed healed after 3 weeks from time of PDC insertion, however, patients with healed PDC exit site continues to remain at risk for catheter related complication. Hence, it remains crucial to protect the catheter and exit site to prevent complications, contamination or infection.

**4.1 SAFEGUARDS**

- Patients with newly inserted PDC must not shower and have a weekly post insertion exit site dressing change for a minimum of 3 weeks as per SGH CLIN 414 Peritoneal Dialysis Catheter – Post Insertion Catheter Care, Dressing and Management
- PD nurses will review PDC and exit site to determine if exit site is completely healed and safe for patient to shower and change exit site dressing daily
- Once PDC exit site is healed, patient will be advised to shower daily and will be educated on routine exit site care including daily dressing change as per Patient Guide – PDC Daily Exit Site Care and Dressing in Appendix A.

**Note:** Healed PDC exit site is routinely cleansed after every shower, dried with white gauze, swabbed with betadine or chlorhexidine from exit site outwards, treated with bactroban ointment and covered with island gauze dressings (i.e. Curapor / Cosmopor / Asguard Flex) or film dressings (i.e. Tegaderm / Mepore film / Asguard clear)

- Every PD patient has a distinct daily PDC exit site care and dressing regimen due to allergies and sensitivities, always confirm these with the patient/carer or PD nurses once patient is admitted to the hospital
- It is essential to continue with the patient's usual PDC care and dressing daily or after every shower

**Note:** Wet dressings are to be replaced immediately to prevent fungal exit site infection

- Independent and mobile inpatients must be encouraged and provided with necessary equipment to shower and attend to own exit site dressing daily
- For less mobile or immobile inpatients, nurses must attend to daily PDC exit site care and dressing as per patient's usual routine
- Accreditation requirement must be complied with prior to dressing procedure (as per Appendix B). Daily PDC exit site dressing change can only be carried out by PD accredited RN/EN or RN/EN under the supervision of PD accredited RN
- Assess the PDC exit-site for signs and symptoms of infection and manage as per SGH CLIN 433 Peritoneal Dialysis (PD) Catheter Infection – Exit Site and Tunnel Infection Management and Treatment
- Notify PD and renal team for any PDC or exit site related concerns
- Always immobilise and secure tip of PDC by taping down to abdomen to prevent from dangling, pulling or twisting which could result to exit site trauma

## 4.2 DEVICES

### 4.2.1 Equipment

- Trolley
- Blue Sheet
- Non sterile gloves
- Micropore tape
- PPE as per NSW Health PD2017\_013 Infection Prevention and Control Policy and NHMRC Australian Guidelines for the prevention and control of Infection in Healthcare
- Sterile Gloves

### 4.2.2 Key Parts

- Occlusive dressing:
  - Island gauze dressings (i.e. Curapor / Cosmopor / Asguard Flex)
  - OR
  - Film dressings (i.e. Tegaderm / Mepore film / Asguard clear)
- White gauze
- 0.9% sodium chloride
- Betadine or chlorhexidine swabs
- Dressing Pack

- Mupirocin ointment or other antibacterial ointment/drops as prescribed
- Add the following for suspected exit site infection:
  - Sterile swab stick (for bacterial swab)

#### 4.2.3 Key site

- PD catheter

#### 4.1 Procedure

- 1) Confirm usual PDC exit site care and dressing with patient/carer or PD nurses
- 2) Perform hand hygiene
- 3) Wear PPE as per NSW Health PD2017\_013 Infection Prevention and Control Policy and NHMRC Australian Guidelines for the prevention and control of Infection in Healthcare
- 4) Don non sterile gloves
- 5) Secure PDC tip with tape, remove old dressing and take note of the condition of the exit site. If site is red or exudate/pain is present, collect a wound swab for MCS, notify PD and renal team and commence treatment as per as per SGH CLIN 433 Peritoneal Dialysis (PD) Catheter Infection – Exit Site and Tunnel Infection Management and Treatment
- 6) Perform hand hygiene
- 7) Identify and gather equipment and key parts for procedure
- 8) Clean trolley/work surface with detergent
- 9) Set-up general sterile field with equipment and key parts at the bedside
- 10) Perform hand hygiene
- 11) Don sterile gloves
- 12) Soak 2 gauze squares in normal saline solution
- 13) Clean exit site twice with saline soaked gauze, dry thoroughly with gauze
- 14) Clean around the exit site twice with betadine or chlorhexidine swabs; allow 2 minutes to dry naturally
- 15) Apply mupirocin ointment or antibacterial drops/ointment to exit site as ordered
- 16) Loop the catheter, align titanium connector to exit site and cover both with the island gauze or film occlusive dressing as per Appendix C
- 17) Immobilise and secure tip of PDC on the side or top of dressing with micropore tape
- 18) Discard all equipment as per SESLHDPD/140 Waste management
- 19) Document the procedure in eMR/clinical notes
- 20) Handover to the next shift
- 21) Inform the PD nurses

<b>5. Keywords</b>	Peritoneal dialysis, PD Catheter, Dressing
<b>6. Functional Group</b>	Renal, Peritoneal Dialysis

## 7. External References

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**SGH CLIN402 Clinical Business Rule**

	Tsai, C. C., Yang, P. S., Liu, C. L., Wu, C. J., Hsu, Y. C., & Cheng, S. P. (2018). Comparison of topical mupirocin and gentamicin in the prevention of peritoneal dialysis-related infections: A systematic review and meta-analysis. <i>Am J Surg</i> , 215(1), 179-185. doi:10.1016/j.amjsurg.2017.03.005
<b>8. Consumer Advisory Group (CAG) approval of patient information brochure (or related material)</b>	Not applicable
<b>9. Implementation and Evaluation Plan</b> Including education, training, clinical notes audit, knowledge evaluation audit etc	Inservices Publication on SGH-TSH CIBR intranet page
<b>10. Knowledge Evaluation</b>	<p>Q1: What must be checked and monitored every PD catheter dressing change? A: PDC exit site status and monitor for signs and symptoms of exit site infection.</p> <p>Q2: Who can attend to daily PDC exit site dressing change? A: Patient if able or PD accredited RN/EN or RN/EN under the supervision of PD accredited RN.</p> <p>Q3: How to immobilise and secure PDC and why? A: PDC tip should be taped down to abdomen to prevent exit site trauma from dangling, pulling or twisting PDC.</p> <p>Q4: How often is healed PDC exit site dressing changed and why? A: Daily to keep exit site clean and dry or after every shower because wet dressings are to be replaced immediately to prevent fungal exit site infection.</p>
<b>11. Who is Responsible</b>	Director of St George and Sutherland Renal Service. Nursing Unit Manager, Dialysis Unit

## SGH CLIN402 Clinical Business Rule

<b>Approval for Peritoneal Dialysis Catheter – Daily Care, Dressing and Management</b>	
<b>Specialty/Department Committee</b>	Committee title: Peritoneal Dialysis Committee Chairperson name/position: Franziska Pettit, Staff Specialist Date: 01.06.20
<b>Nurse Manager</b>	Name/position Christine Day, Nurse Manager Medicine Date: 02.07.20
<b>Medical Head of Department</b>	Name /position: George Mangos, Department Head Renal Services Date: 29.06.20
<b>Contributors to CIBR development</b> e.g. CNC, Medical Officers (names and position title/specialty)	

### Revision and Approval History

Date	Revision number	Reason	Author (Position)	Revision due
Sep 2017	1	New	Anna Claire Cuesta (PD CNC)	Sep 2020
Jul 2020	2	Review	Anna Claire Cuesta (PD CNC)	Jul 2023

### General Manager's Ratification

Name: Paul Darcy (SGH)      Date: 29.07.20

Appendix A


PATIENT NAME _____ MRN _____ DATE _____ or affix Patient Identification Label here	<b>PATIENT GUIDE</b> <b>PERITONEAL DIALYSIS CATHETER (PDC)</b> <b>DAILY EXIT SITE CARE AND DRESSING</b>
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PDC is the only access you have to perform peritoneal dialysis (PD), therefore, it is a very important part of your body. It is essential to take care of and protect your PDC from infection or blockage that will result in inadequate dialysis. Both conditions can make you very unwell which could lead to hospital admissions. To protect your PDC, you must:


1. Maintain a daily bowel motion and avoid constipation to prevent PDC blockage. Use aperients or laxative as needed – ask your doctor or PD nurses for advice
2. Always immobilise and secure the tip of your PDC with tape to prevent from dangling, pulling or twisting
3. Shower daily to keep your body and PDC clean
4. Change your PDC exit site dressing daily or after every shower to keep it clean and infection-free. It is important to change wet dressing immediately and to keep the dressing dry all the time.

**How to change your PDC exit site dressing daily:**

1. Gather all equipment for your dressing change on a cleaned work tray, away from a wet area:
  - a. Your dressing – Curapor, Cosmopor, Asguard, Tegaderm or Mepore
  - b. Betadine or Chlorhexidine swabs x 2
  - c. Micropore, Transpore or Yuki-ban tape
  - d. White gauze squares
  - e. Antibacterial ointment (i.e. Bactroban)



2. Secure the tip of the PDC on abdomen with tape.
3. Shower as usual, with PDC exit site dressing in place
4. After shower, dry self with towel
5. Prepare dressing supplies on the cleaned work tray:
  - a. Open dressing and gauze, lay flat on tray
  - b. Open betadine or chlorhexidine swabs x 2 and place on top of the inside of the dressing wrapper
  - c. Squeeze out the bactroban ointment on top of the inside of the dressing wrapper




6. Remove wet tape from tip of PDC and replace with dry tape to secure PDC on your abdomen
7. Remove old and wet PDC exit site dressing

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PATIENT NAME _____ MRN _____ DATE _____ or affix Patient Identification Label here	<b>PATIENT GUIDE</b> <b>PERITONEAL DIALYSIS CATHETER (PDC)</b> <b>DAILY EXIT SITE CARE AND DRESSING</b>
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8. Perform 1 minute handwash with antibacterial liquid soap. Dry your hands thoroughly with paper towel.
9. Dry PDC exit site with gauze. **Do not use paper towel or cloth towel to dry your exit site**
10. Review your PDC exit site (preferably in front of a full body mirror) and monitor for signs of infection i.e. redness, swelling, tenderness or pus/blood discharge.
 

**Note:** Any signs or symptoms of infection, please report to the PD nurses immediately or present yourself to the SGH emergency department. Crusty exit site will also need closer examination by the PD nurses.
11. Clean your exit site with the first swab (starting from the exit site using a circular motion moving outwards)
12. Use the second swab to clean the exit site again (starting from the exit site using a circular motion moving outwards)
13. Wait for the exit site to dry naturally. **Do not fan or blow on your exit site. Do not use a blow dryer to dry your exit site.**
14. Once exit site is dry, apply antibacterial ointment using one piece of white gauze. **Do not use cotton buds to apply antibacterial ointment**
15. Loop the catheter to align titanium connector next to exit site. Cover both with the one dressing



**NOTE:** Immediately report to PD nurses any allergic reaction (i.e. redness, itch, rash or blistering) to dressing, tape or swab. You will be provided with different dressing products to try.

16. Secure the tip of your catheter on the side or top of your dressing with tape

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Appendix B

**Peritoneal Dialysis Catheter (PDC) Exit Site Dressing Assessment Form**

**Limitations for Practice:**

Enrolled Nurse	Clinical Nurse Educator
Registered Nurse	Nurse Educator
Clinical Nurse Specialist	Clinical Nurse Consultant

**Objective:**  
To ensure PDC exit site dressing procedure is performed according to best practice guidelines reducing the risk of infection and ensuring patient safety.

**Background:**

- Competency assessment and training is compulsory for 4 south (4S) and emergency department (ED) nursing staff prior to attending to PDC exit site dressing assessment.
- Nursing staff with no exposure to PDC exit site dressing must undergo competency training and practice under the supervision of PDC exit site dressing competent nurse
- Competency assessment and training is to be carried out by a PDC exit site dressing competent nurse
- Assessor may determine the number of practice sessions required prior to competency assessment
- Simulated PDC exit site dressing practice sessions are acceptable
- Competency assessment is to be performed on a patient with new, replaced or repositioned PD catheter.
- Repeat competency assessment and training every SBR or WPI update and/or every 5 years

**Note:**

- Keep the original copy of your completed assessment form for your record.
- Forward a copy of the completed assessment form to the CNE and PD unit.

SGH Renal Department Page 1 of 2 Revised 2020

**Peritoneal Dialysis Catheter (PDC) Exit Site Dressing Assessment Form**

Name: \_\_\_\_\_ Pay No: \_\_\_\_\_  
Print Signature

**Please initial appropriate box**

Action	P1	P2	P3	P4	P5	C
1. Ascertains type of PDC exit site dressing to do: Post-op or Regular Daily						
2. Refers and follows the appropriate exit site care PD CBRs/WPIs						
3. Cleans trolley and collects equipments						
4. Performs handwash						
5. Prepares equipment and sets-up sterile field						
6. Secures end of catheter with tape						
7. Performs handwash						
8. Wear PPE if necessary						
9. Removes old dressing						
10. Reviews condition of exit site. Swabs as necessary and informs PD and renal team						
11. Performs surgical handwash						
12. Dons sterile gloves						
13. Cleans exit site as per appropriate PD CBRs/WPIs						
14. Waits for exit site to dry. Applies topical antibiotics.						
15. Applies appropriate dressing. Ensures exit site and titanium are covered						
16. Secures PD catheter with tape						
17. Discards all equipments						
18. Documents the procedure						
19. Hands over to the next shift						

Practice 1 (P1) Assessor's name & initial \_\_\_\_\_ Date \_\_\_\_\_

Practice 2 (P2) Assessor's name & initial \_\_\_\_\_ Date \_\_\_\_\_

Practice 3 (P3) Assessor's name & initial \_\_\_\_\_ Date \_\_\_\_\_

Practice 4 (P4) Assessor's name & initial \_\_\_\_\_ Date \_\_\_\_\_

Practice 5 (P5) Assessor's name & initial \_\_\_\_\_ Date \_\_\_\_\_

Competent (C) Assessor's name & initial \_\_\_\_\_ Date \_\_\_\_\_

SGH Renal Department Page 2 of 2 Revised 2020



Appendix C

