# PD Procedures: Exit Site Care

# Healed Exit Non-Showering Procedure



#### 1.0 Practice Standard

Indwelling catheters are at risk for the development of infections.

The Registered Nurse and the Licensed Practical Nurse who is trained and has demonstrated competency in Peritoneal Dialysis Procedures will use the outlined procedure to promote wound healing and minimize the risk of infection of the peritoneal catheter healed exit site.

The peritoneal dialysis patient and or care provider may be taught by the PD program to care for their healed exit site/acutely infected exit site at home using the outlined procedure. Patient specifics must be considered in applying this procedure in various environments.

Care of the healed exit site/acutely infected exit site using this procedure may be required if the patient does not shower at home or is admitted to the hospital.

Frequency of dressing changes to be performed:

- Healed exit site: daily or a minimum of 3 times per week. Exit site care is recommended every time after water contamination or vigorous exercise
- Acute infected exit site: daily or more frequently as determined by the PD clinical team.

#### 2.0 Definitions and Abbreviations

Healed exit site: exit site absent of bleeding, drainage, erythema, swelling, leakage, pain or tenderness on palpation. Evidence of epithelial

tissue growth in sinus.

## 3.0 Equipment/Supplies

- Chlorhexidine liquid soap or non antibacterial liquid pump soap
- Alcohol hand sanitizer
- Sterile 4 x 4
- Sterile 2 x 2
- Absorbent dressing: mepore
- Cleansing agent
  - Chlorhexidine soap
  - Saline spray such as sea clens, constant clens, sure clens
  - · Non-antibacterial liquid pump soap
- Tape
- · Immobilization device
- · Antibiotic cream/ointment if ordered

BC Renal • <u>BCRenal.ca</u> Aug 2023

## 4.0 Procedure and Rationale

|   | PROCEDURE  | RATIONALE  |
|---|--|--|
| 1 | Gather and prepare all necessary supplies.   |  |
| 2 | Perform hand hygiene using chlorhexidine soap or regular pump soap.  | Thorough handwashing reduces the risk of transmission of organisms from touch contamination.   |
| 3 | Remove dressing around catheter exit site using aseptic technique.   |  |
| 4 | Inspect exit site (external exit and visible sinus), and tunnel for:  drainage: type and amount erythema pain swelling leakage catheter extrusion and or migration Note: See procedure "Exit Site Care: Assessing and Classifying the Exit Site"   | Assessment of exit sites based on appearance and specific characteristics aids in the early diagnosis, prevention and effective treatment of exit site infections.   |
| 5 | Inspect PD catheter for integrity:     cracks     holes     loose connector/adaptor  |  |
| 6 | Cleanse hands using hand sanitizer.  |  |
| 7 | Cleanse area around the exit site and under the catheter with the cleansing agent of choice and gauze using a circular motion from the exit site outwards.  If using a spray saline solution (i.e. safe clens, sea clens, constant clens):  • spray the solution directly on the exit site OR  • spray saline solution on 4 x 4 and use circular motions to cleanse the exit site. | Saline based solutions are non cytotoxic solutions that aid in promoting wound healing. Avoid solutions such as betadine, chlorhexidine, peroxide or alcohol which are cytotoxic and delay healing. ISPD 2023 recommendations suggests that no cleansing agent has been shown to be sperior to any other with respect to preventing catheter related infections. |
| 8 | Dry exit site thoroughly with gauze using a circular motion from the exit site outwards.   | A moist environment creates a medium for growth of micro organisms.  |
| 9 | Apply antibiotic cream/ointment if ordered using sterile gauze minimizing contact between ointments/creams and the PD catheter.  | Mupirocin has shown to reduce staphylococcus aureus exit site infection. Gentamicin has shown to reduce staphylococcus aureus and pseudomonas exit site infections. Some reports indicate that contact between mupiricin can damage polyirethane catheters and gentamicin cream may damage silicone catheters.   |

Continued...

|    | PROCEDURE  | RATIONALE  |
|----|--|--|
| 10 | Cover the exit site with dressing.                           | Sterile gauze or transparent semi permeable dressings will be used to cover the exit site to keep clean, help secure the catheter and prevent irritation                     |
|    |  | by clothing. The type of dressing may need to be individualized due to skin sensitivity, patient activity, personal hygiene, catheter stabilization.                         |
| 11 | Secure catheter to abdomen with tape or immobilizing device. | Immobilization of the catheter at all times is critical to promote healing and prevent further trauma caused by mechanical action during handling and normal body movements. |

# 5.0 Patient Teaching Considerations

|   | PATIENT TEACHING   | RATIONALE  |
|---|--|--|
| 1 | Patients and caregivers will be instructed in the proper care of the exit site and catheter to minimize the risk of exit site/tunnel infections.   |  |
| 2 | Patients and caregivers will be instructed in the signs and symptoms of exit site/tunnel infections.   | Early recognition and reporting of signs and symptoms results in early treatment and minimizes potential complications.  |
| 3 | Patients and caregivers will be instructed in the importance of early reporting of changes in the appearance of their exit site to the PD program. |  |
| 4 | Patients will be instructed to avoid tub baths, hot tubs, swimming and or any activity where the exit site is submerged.                           | Submerging of the exit site in water is not permitted on peritoneal dialysis to prevent infection. (patient to discuss swimming options with the PD program once the exit site is well healed).                                      |
| 5 | Showering should be avoided when the exit site has been assessed as infected. Sponge baths are recommended during this time period.                | Showering should be avoided until the exit site is re assessed as healed by the PD program.  |
| 6 | Attempts to remove difficult to detach crusts and scabs at the exit site should be avoided.  | Crusts and scabs act as a natural barrier and should not be removed. Aggressive exit site cleansing should be avoided to minimize trauma to the exit site. Softening of the crust or scab with saline may result in easy detachment. |

BC Renal • BCRenal.ca Aug 2023

#### 6.0 Documentation Considerations

Documentation on patient record to include:

- Assessment of the exit site with each dressing change. Document any significant findings.
- Refer to protocol "Exit Site Care: Assessing and Classification of Exit Sites" for further reference.

Report and document any complications including:

- excessive serous, purulent or sanguineous drainage
- · evidence of leak
- trauma
- · signs of infection
- pain/tenderness

# 7.0 Special Considerations: Interventional Guidelines

(does not replace individualized care and clinical expertise)

- After the first 3 to 4 weeks the exit site is colonized with bacteria so daily dressing changes should be done to minimise bacteria multiplication.
- Research indicates that well healed exit sites should remain well healed unless grossly contaminated or traumatized.
- Consideration of skin allergies/sensitivities to solutions such as chlorhexidine must be considered when performing exit site assessments and incorporating solutions into exit site practices.

#### 8.0 References

Chow M, et al. ISPD Catheter related infection recommendations: 2023 update. Sage Journals. Vokume 43, Issue 3. May 2023

Counts, S.C. (2006). The Evolution of Nephrology and Nephrology Nursing. In A. Molzahn & E. Butera (Eds.), *Contemporary*  Nephrology Nursing: Principles and Practice (2<sup>nd</sup> ed., pp. 27-50). Pitman, NJ: American Nephrology Nurses' Association.

Counts, S.C. (2008) Core Curriculum for Nephrology Nursing 5<sup>th</sup> edition. 781-791.

Figueiredo A, Brunier G. Reducing and treating peritoneal dialysis catheter related infections: Nursing implementation from evidence to practice. Sage journals. Volume 43, Issue 3. May 2023

Hain, D. J. and Chan, J. (2013) Best available evidence for peritoneal dialysis catheter exit site care. *Nephrology Nursing Journal*, January-February, 40(1): 63-69.

Li, P.K., Szeto, C.C. and Piraino, B. (2010). ISPD Guidelines/Recommendations: Peritoneal dialysis related infection recommendations – 2010 update. *Peritoneal Dialysis International*, 30, 393-423.

Piraino B, Bailie G, Bernardini J, et al. Peritoneal Dialysis Related Infections Recommendations: 2005 update. *Peritoneal Dialysis International* 2005; Vol 25, pp 107 -131.

## 9.0 Developed By

BC Renal PD Nursing Group

## 10.0 Reviewed By

- BC Renal PD Medical Director
- BC Renal PD Nursing Group- reviewed and revised August 2020.

#### 11.0 Created

May 1, 2016

#### 12.0 Reviewed and Revised

August 2023

BC Renal • BCRenal.ca Aug 2023