CHRONIC PD CATHETER EXIT SITE CARE
INFECTED EXIT SITE

PURPOSE:

1. To ensure standardization of technique between all of the Toronto Home Peritoneal Dialysis (PD) Units and Home Care Agencies.
2. To monitor infection and the healing process of an infected peritoneal dialysis catheter exit site. This may also reduce the risk of peritonitis.

POLICY:

1. To be performed by a registered nurse (or registered practical nurse) trained in PD for a patient diagnosed with a PD catheter exit site infection.
2. Increase frequency of exit site care by modified shower technique to daily or twice daily (or as ordered by physician).
3. Inspection of the exit site and documentation of the exit site condition on the Patient Care Record is essential. If the infected exit site worsens, i.e. progression to a tunnel infection noted by induration and copious discharge, please notify the Home PD Unit immediately.
4. The standard cleaning solution for catheter care is 2% chlorhexidine gluconate aqueous solution with a 4% isopropyl alcohol as a stabilizer. Trade name for this solution is Stanhexidine. If the patient is sensitive to chlorhexidine gluconate, check his/her records or ask the Home PD Unit for a substitute antiseptic solution order.
5. Tub baths are not recommended for patients with peritoneal catheters.
6. Dressing should be air permeable. Tape may be substituted by Burnnet or Flexnet or catheter immobilizer based on patient allergies or patient preference.
7. If mupirocin ointment is ordered, ensure that the PD catheter is the silastic type, and the mupirocin is applied sparingly. Mupirocin cream may be used with polyurethane catheters.
8. Refilling liquid soap/transfering liquid soap between containers should be avoided. If liquid soap is unavailable, antibacterial bar soap may be substituted (eg. Dial).
9. Wash cloths should be white or light coloured. With dark colours, the dye can come out. If unable to provide clean wash cloths and towels daily, may substitute with clean gauze.

PROCEDURE:

1. Assess the patient's ability to perform modified shower technique independently. If not, it should be done by the nurse. (see Guideline #1)
2. Wash hands for two minutes.
3. Gather the equipment: (see Guideline #2)
   - antibacterial liquid soap/body wash soap (eg. Dial, Jergens)
   - 2 clean washcloths
   - clean towel
   - chlorhexidine gluconate 2% aqueous solution
   - 3 packages of 5x5 cm gauze
   - 1 dressing (i.e. mepore or gauze) (see Guideline #10)
   - tape
   - mupirocin if ordered plus a Q-tip or another package of gauze
4. If having a shower, have patient undress and remove the old dressing. If the dressing is not being changed in conjunction with a shower, simply remove the dressing. (see Guideline #4)
5. Examine the old dressing for amount and type of drainage. Examine the exit site noting redness, crusting and drainage type. If follow-up swab for C+S is ordered, obtain specimen.
6. Wash hands.
7. Leave the catheter and transfer set or extension taped to the abdomen.
8. If shower is taken, shower and shampoo as usual. Avoid scrubbing the exit site.
9. Apply antibacterial soap to clean wet washcloth and very gently clean around the exit site. Wash the exit
Site and surrounding skin in a circular motion starting from the exit site and working outwards. (see Guideline #4)

10. Take second washcloth and wet it with clean water. Rinse exit site well ensuring that no water enters the sinus. Crusts may be softened by soaking with Shur-Clens or hydrogen peroxide. Never forcibly remove a crust. It should gradually fall off as the exit site heals. (see Guidelines #5, #6 and #7)

11. Gently pat dry the exit site with a clean towel, then dry the rest of the body.

12. Open the gauze packages. Saturate one with chlorhexidine gluconate 2%.

13. Paint a small circle of chlorhexidine gluconate 2% around the exit site in the same circular motion. Ensure that chlorhexidine gluconate 2% is not “probed” into the sinus. Allow to air dry for 30 seconds.

14. Apply the mupirocin sparingly around the exit site if ordered by the physician, using a Q-tip or a gauze. (see Policy #7, Guidelines #8 and #9)

15. Place one 5x5 cm gauze under the catheter at the exit site so that the catheter is resting on the gauze (optional). Apply the final dressing--sterile gauze with hypofix or mepore.

16. Tape the transfer set to the patient's skin in a comfortable position, minimizing excessive tension on the exit site. The PD catheter and transfer set may be looped and anchored at all times. Some patients may use an immobilizer. (see Guidelines #3 and #11)

17. Document the condition of the exit site.

NURSING GUIDELINES:

1. Ensure the procedure is done in a clean environment (eg. no pets in the room).

2. Gloves and masks are not necessary for chronic exit site care. Technique is clean. However, masks may be used at the nurse's discretion (eg. if he/she has a cold; if referring unit has specified). Gloves (procedural, not sterile) may be used in the event of discharge at the exit site as part of the BSP practices. For dry, intact exit sites, gloves are not required.

3. Immobilization of the catheter AT ALL TIMES is critical in preventing trauma by mechanical action during handling and normal body movements.

4. Minimal and gentle movements of the catheter should be used when performing exit site care.

5. Never forcibly remove crust from the PD catheter exit site. Hydrogen peroxide or Shur-Clens may be recommended according to doctor's order.

6. Some patients may be ordered to have hydrogen peroxide soaks. Hydrogen peroxide should be a 1:10 dilution or 5-10% concentration. After soap and water wash, pour hydrogen peroxide onto 2x2 gauze. Wrap gauze around catheter and leave for 5 minutes. Dry with gauze and apply antiseptic solution followed by mupirocin if ordered. Mesalt (salt impregnated gauze) may also be ordered if there is copious drainage from the site.

7. Flow of the water should be in a gentle downward position.

8. Mupirocin is only used for gram positive bacteria.

9. Mupirocin cream is more expensive than mupirocin ointment.

10. The size of gauze used is optional according to patient/unit preference. Some units may offer the patient the option of not using a dressing six months post PD catheter implantation if the exit site is well-healed.

11. When securing the PD catheter, ensure that the catheter follows its natural direction to avoid trauma to the exit site. Also, ensure that the catheter does not bend at its connection to the adapter, as the catheter can crack over time. This puts the patient at risk for getting peritonitis.

REFERENCES:


