



MANITOBA RENAL PROGRAM

SUBJECT <ul style="list-style-type: none"> Peritoneal Dialysis Bag Exchange Utilizing Twin Bag® System 	SECTION 40.10 Peritoneal Dialysis Procedures
	CODE 40.10.08
AUTHORIZATION <ul style="list-style-type: none"> Professional Advisory Committee, Manitoba Renal Program Nursing Practice Council, St. Boniface Hospital 	EFFECTIVE DATE September 2003
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PURPOSE:

- To provide sterile drainage of effluent out of the peritoneal cavity and instillation of dialysate solution into the peritoneal cavity.

POLICY:

- The Continuous Ambulatory Peritoneal Dialysis (CAPD) prescription is ordered by the physician and includes:
 - Volume of the dialysate exchange
 - The number of daily exchanges
 - The type of dialysate solution (i.e. glucose based, icodextrin based, amino acid based, bicarbonate based)
- Peritoneal Dialysis Unit Nurses, Deer Lodge Centre Peritoneal Dialysis Trained Nurses, and Peritoneal Dialysis Community Care Nurses may adjust the dialysate solution strength based upon patient assessment. All other personnel must have a physicians order signed by the Nephrologist to adjust the dialysate solution strength.
- All Registered Nurses (RN) and Licensed Practical Nurses (LPN) who have received education and training and who are competent may perform this procedure.

EQUIPMENT:

- Twin Bag® Dialysate solution as ordered
- Medication if ordered
- MiniCap Disconnect Cap (MiniCap) (2)
- clean clamps (2)
- IV pole
- Graduated cylinder
- Tape
- Towel/Incontinent pad

KEY POINTS:

- Check expiry date
- Second MiniCap in case of contamination

PROCEDURE:

KEY POINTS:

PROCEDURE:

1. Perform hand hygiene.
2. Gather supplies.
3. Remove dialysate solution from outer wrap.
4. Peel drain bag and line from dialysate solution bag.
5. Check dialysate solution bag for:
 - Clarity of dialysate solution
 - Intact port cap and connector cover
 - Leaks by squeezing bag
6. Add medication if ordered.
7. Hang dialysate solution bag on IV pole and lay drain bag on towel/incontinent pad on floor.
8. Ensure twist clamp on transfer set is closed.
9. Perform hand hygiene.
10. Remove connector cover from dialysate solution tubing.
11. Holding transfer set securely, remove MiniCap from set and discard cap. Maintain sterility of exposed end.
12. Connect dialysate solution tubing to transfer set.
13. Open transfer set twist clamp to begin drain.
14. Once drain complete, **close transfer set twist clamp** and apply clean clamp to drain line.
15. Assess effluent for colour, clarity and presence of fibrin.
16. Break green seal on fill line.
17. Open clean clamp on drain line for 5 seconds. Reclamp.

KEY POINTS:

- Ensure correct solution volume, dextrose concentration, solution type, temperature, and expiry date before opening outer wrap of dialysate solution bag.
- If more than 2 teaspoons of fluid in outer wrap, discard dialysate solution bag.
- Dry dialysate solution bag prior to checking for leaks.
- See procedure 40.10.03 *Instillation of Medication into Peritoneal Dialysis Solution*.
- Maintain sterility of the luer lock connector. If contaminated, discard bag and use new bag of dialysate solution.
- If transfer set is contaminated apply a new MiniCap and refer to 70.30.05g *Appendix G Decision Tree for Managing Contamination (in 70.30.05, Contamination Protocol Section D. Dry/Wet Contamination)*.
- Use aseptic technique.
- Ensure drainage is adequate amount.
- If effluent cloudy, refer to 70.30.05, *Peritoneal Dialysis Contamination Protocol Section A. Suspected Peritonitis*. Also refer to 40.10.14, *Collection of Peritoneal Dialysis Effluent from a Peritoneal Dialysis Drain/Sample Bag for Peritonitis Investigation*.
- To flush air from the fill line. Do not allow more than 5 seconds to pass before clamping line, otherwise too much dialysate will be lost in the drain bag.

PROCEDURE:

18. Open transfer set twist clamp to allow dialysate flow into the peritoneal cavity.
19. Close transfer set twist clamp once infusion of dialysate solution is complete.
20. Clamp fill line with second clean clamp.
21. Perform hand hygiene.
22. Open MiniCap package.
23. Disconnect dialysate solution bag from transfer set and apply MiniCap.
24. Immobilize transfer set.
25. Measure/weigh effluent. Dispose of as per facility policy.

KEY POINTS:

- Flush before fill reduces the risk of contamination.
- Silver side down to prevent cap rolling off of surface.
- Maintain sterility of transfer set end.
- If transfer set is contaminated apply a new MiniCap and refer to 70.30.05g *Appendix G Decision Tree for Managing Contamination (in 70.30.05, Contamination Protocol Section D. Dry/Wet Contamination)*.
- Transfer set and catheter immobilization prevents trauma and infection to the exit site and promotes healing of the exit site.
- Assess for fibrin.

DOCUMENTATION:

- Continuous Ambulatory Peritoneal Dialysis (CAPD) Flow Sheet (40.10.0a Appendix A Form W-00353)
 - Volume and concentration of dialysate infused
 - Colour, clarity and volume of effluent
 - Medication added, if applicable.
- Medication Administered in Patient Health Record if applicable.

REFERENCES:

- Baxter Corporation (1998). Twin Bag. The patient friendly, single connection (CAPD) system. Toronto, Ontario.
- Piraino, B., Bailie, G.R., Bernardine, J., Boeschoten, E., Gupta, A. et al. (2005). International Society for Peritoneal Dialysis Guidelines/Recommendations. *Peritoneal Dialysis International*, Vol 25, 107-131.
- Thomas, N. (Ed). (2002). Renal Nursing (2nd Edition). (p223, 249). London, England: Bailliere Tindall
- Prowant, B. (2006). Peritoneal dialysis access. In Molzahn, A. & Butera, E. (Eds.), *Contemporary nephrology nursing: principles and practices, second edition* (pp. 661-709). Pitman: American Nephrology Nurses Association.