

PD Procedures

Catheter Heparinization and Capping

1.0 Practice Standard

The Registered Nurse and the Licensed Practical Nurse who is trained and has demonstrated competency in Peritoneal Dialysis Procedures will use the following outlined procedure to maintain patency of the Peritoneal Dialysis catheter when the peritoneal catheter is not in use or when dialysis exchanges are temporarily held.

The capping procedure with heparin of a PD catheter is performed per physician orders when peritoneal dialysis exchanges are held.

2.0 Definitions and Abbreviations

BAXTER TRANSFER SET	LUMEN VOLUME
15 cm (most common length used)	2.26 ml
10 cm	1.5 – 1.6 ml
22 cm	2.65 ml

PD CATHETER BRAND	LENGTH	LUMEN VOLUME	** Total volume including 15 cm transfer set	**Total volume including 10 cm transfer set	**Total volume including 22 cm transfer set
Covidien twin cuff curled	62 cm	3.4 ml*	6 - 7 ml	5 - 6 ml	6 - 7 ml
Tenckhoff straight double cuff	47 cm	2.6 ml*	5 ml	4.5 - 5 ml	5.5 - 6ml
Swan neck	62.5 cm	3.4	7 ml	5 - 6 ml	6 - 7 ml

*To determine the PD catheter priming volume, multiply the length of catheter by a correction factor of .0548cc/cm. The result is the priming volume in cc.

** Guide only

3.0 Equipment

- 10 mL syringe
- Needle
- Heparin (1:1000 IU/mL)
- Alcohol swab
- Minicap
- Masks
- Hand washing solution

4.0 Procedure and Rationale

PROCEDURE	RATIONALE
1. Ensure patients' peritoneal cavity is empty and drained of any effluent. This procedure may be preceded by <i>PD Catheter Irrigation</i> . See procedure titled <i>PD Catheter Irrigation</i> .	Patient should be drained of all dialysis fluid prior to capping to prevent re-absorption of fluid.
2. Gather supplies/equipment required.	
3. Mask and wash hands.	
USING ASEPTIC TECHNIQUE FOR ALL STEPS:	
4. Swab top of heparin bottle and withdraw appropriate amount of heparin using 10mL syringe. Recap needle.	The total amount of heparin must include the lumen volume of the PD Catheter and transfer set. See individual program procedures for suggested volumes.
5. Remove needle from heparin syringe.	
6. Remove minicap from transfer set.	
7. Attach syringe with heparin to transfer set using aseptic technique.	
8. Open twist clamp on transfer set.	
9. Instill heparin.	
10. Close twist clamp on transfer set.	
11. Open minicap package and leave minicap on package wrapper.	
12. Remove syringe and securely place minicap on the transfer set.	
13. Secure transfer set to abdomen with tape or PD belt.	Prevent any pulling of catheter at exit site that may traumatize exit site and lead to exit site infection. Immobilization of catheter promotes healing at the exit site.
14. Document procedure as per program policy.	

Disclaimer: *The procedure steps may not depict actual sequence of events. Patient/Client/Resident specifics must be considered in applying Clinical Practice Decision Support Tools.*

5.0 Patient Teaching Considerations

PROCEDURE	RATIONALE
1. The PD catheter will be capped when not in use for a specific time period.	Capping of the PD catheter with heparin aids in maintaining the patency of the catheter when not in use.
2. Appointments will be made to have the capping procedure with heparin performed at specific time intervals.	Ensures catheter patency until use is determined.

6.0 Documentation Considerations

Document procedure and outcome in the patient's chart.

7.0 Special Considerations: Interventional Guidelines (do not replace individualized care and clinical expertise)

8.0 References

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