

PD Procedures

Adding Medication To Dialysate Solutions

1.0 Practice Standard

Registered nurses who have completed nephrology nursing orientation to peritoneal dialysis.

LPN's are restricted to adding heparin only.

2.0 Definitions & Abbreviations

Intraperitoneal (IP) medication administration is an effective route for medication administration.

Common medications given by IP route are:

- Potassium
- Heparin
- Lidocaine
- Antibiotics
- Insulin

CAPD: medications should only be added to dialysate after the dialysate has been heated as heating dialysate with medication may interfere with the stability of the medication

CCPD: do not add medication to the last fill or the heater bag

Antibiotics: instill in the abdomen using a twin bag and dwell for 6 hours or as prescribed to ensure adequate absorption of the medication

Heparin is added to dialysate as part of the peritonitis protocol to prevent:

- fibrin formation related to the inflammatory process
- when fibrin is present to maintain tube patency
- reduce bacterial colonization in fibrin

3.0 Equipment

- Sterile syringe of appropriate size
- Sterile needle
- Alcohol swabs
- Medication to be added
- Medication label
- PD solution

4.0 Procedure and Rationale

PROCEDURE	RATIONALE
1. Check dialysate solution for volume, expiry date, solution strength and clarity	
2. Warm dialysate solution	
3. Remove outer wrapper	
4. Wash hands	
5. Check medication for 7 rights of administration	
6. Clean medication vial top with alcohol swabs and allow top(s) to dry	Aseptic technique is required to prevent infection. If any of the objects become contaminated, discard and start again.
7. Using appropriate needle, draw up prescribed amount of medication	
8. Clean medication port of dialysate bag with an alcohol swab. Allow to dry	
9. Add medication through the port while maintaining aseptic technique	
10. Gently agitate bag to mix	To ensure distribution of medication in dialysate
11. Label the dialysate bag with a medication label	
12. Instill dialysate into patient's peritoneum	

5.0 Patient Teaching Considerations

	RATIONALE
1. Inform patient of purpose and type of medication	
2. If patient is discharged prior to drainage of the dialysate containing medication, inform patient: <ul style="list-style-type: none"> • type and purpose of med • time to drain dialysate containing the med and to then proceed with PD as per usual routine 	
3. Teach signs and symptoms of allergic reaction and to seek medical assistance	

6.0 Documentation Considerations

Document medication, dose, route, date, time and solution used in progress note and medication record

7.0 Special Considerations: Interventional Guidelines

(do not replace individualized care and clinical expertise)

Systemic absorption of Alteplase across the peritoneal membrane is unknown therefore it should be completely removed after the dwell with subsequent irrigation of peritoneal cavity with dialysate.

8.0 References

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Intraperitoneal administration of drugs in peritoneal dialysis patients: a review of compatibility and guidance for clinical use. Peritoneal Dialysis International, Vol 29, pp5-15

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9.0 Developed By

- BC Renal PD RN group

10.0 Reviewed By

- BC Renal PD Medical Director
- BC Renal PD RN group

11.0 Created

- September 2018