## **PD Procedures**

# Catheter Irrigation



### 1.0 Practice Standard

The Registered Nurse and the Licensed Practical Nurse who is trained and has demonstrated competency in Peritoneal Dialysis Procedures:

 Will irrigate the peritoneal catheter using strict aseptic technique according to program policy when catheter inflow and/or outflow obstruction is assessed as caused by blood clots or fibrin.

### 2.0 Definitions and Abbreviations

IP: intraperitoneal

Catheter irrigation: Procedure using a large syringe containing heparinized dialysis solution or normal saline in a push/pull technique to flush fibrin or clots from the PD catheter and tubing.

Outflow failure: The drainage volume is substantially less than the inflow volume and there is no evidence of pericatheter leakage. Outflow failure is often preceded by irregular drainage, increased fibrin in the dialysate or constipation.

## 3.0 Equipment

- Large syringe: 50 60 cc
- Needle
- 1.5% dialysate or Sterile normal saline 0.9%NaCl
- Mask
- Hand soap
- Hand sanitizer
- Sterile tray or towel

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## 4.0 Procedure and Rationale

PR	OCEDURE	RATIONALE
1.	Assess reason for flow obstruction.	
2.	Mask and wash hands.	
3.	Using aseptic technique prepare supplies and draw up saline or dialysate per protocol into large syringe.	Large syringe creates a vacuum required to address cause of blockage.
4.	Expose transfer set.	
5.	Remove minicap and attach syringe with saline or dialysate to transfer set.	
6.	Open clamp and attempt to instill solution into catheter using a steady gentle pushing pressure.	Patient may experience some discomfort when pushing solution dependent on the position of the catheter tip. Discontinue the procedure if the patient experiences pain or cramping.
7.	Gently attempt to aspirate by drawing back on the syringe – do not force.	
8.	Repeat push/pull technique of instilling fluid into the catheter and withdrawing.	
9.	Close transfer set and remove syringe.	
10.	Apply minicap	
11.	Notify Nephrologist if unable to instill or withdraw fluid.	

# 5.0 Patient Teaching Considerations

PROCEDURE		RATIONALE
1.	Educated patient to the importance of monitoring and reporting solution clarity, color, and appearance of fibrin and blood.	
2.	Maintain bowel routine.	

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### 6.0 Documentation Considerations

#### Document:

- Reason for irrigation
- Any significant findings that occurred during the irrigation procedure
- Appearance of drained effluent: color and clarity
- · Volume of drained effluent
- Patient tolerance of procedure

# 7.0 Special Considerations: Interventional Guidelines

(does not replace individualized care and clinical expertise)

- Refer to individual PD program protocols for additional information and step by step instructions associated with catheter irrigation.
- Heparin is generally more useful prophylactically than therapeutically.
- Dependent on xray findings, the use of thrombolytic agents may be required for catheters that do not respond to flushing or irrigation.
- Surgical removal of the obstructed catheter with replacement may be required If attempts to restore outflow of a PD catheter fail.

#### 8.0 References

Counts, S.C. Core Curriculum for Nephrology Nursing 5th edition 2008; 828 - 829.

Daugirdas J, Blake P, Ing T. Handbook of Dialysis, 4th Edition (2007) Lippincott Williams & Wilkins 356-375 Li PK, Szeto CC, Piraino B, Bernardini J, Figueiredo A, et al. Peritoneal dialysis related infections recommendations: 2010 update. Perit Dial int., 2010; 30: 393 – 423

Mujais S, Crabtree JH, Firanek CA et al. Access Care and Complications Management. Renal Division, Baxter Health Corporation, 2006.

Prowant B. Peritoneal dialysis access. Contemporary nephrology nursing: principles and practice 2nd edition (676) Pitman: American Nephrology Nurses Association (2006)

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