PERITONEAL DIALYSIS – HEPARIN FLUSHING A PD CATHETER

PURPOSE

Describes procedure for flushing the peritoneal catheter with heparin.

BACKGROUND

There is no clear evidence supporting the various approaches to maintaining patency of a newly placed catheter that is not being utilised (or similarly an old PD catheter not being utilised such as early post renal transplantation). In these settings, weekly flushing with heparin can be employed. If there has been prominent bloody dialysate during the post catheter insertion dialysis exchanges, it is recommended (opinion). Alternative strategies for PD catheter ‘break-in’ followed by other units include 1-3 times weekly quick in/out exchange of heparinised (500 units/L) normal saline/dianeal.

POLICY STATEMENTS

A Peritoneal Dialysis Catheter is flushed weekly with heparin when catheter is not in use or more frequently if there is prominent bloody dialysate.

A prescriber’s order is required for flushing with heparin. The order may specify “heparin flush peritoneal catheter as per protocol.”

The dose of heparin is 1 mL heparin (1000 units/mL) diluted with 7 mL NS to total volume 8 mL.

Strict aseptic technique is required for preparation of heparin and during peritoneal dialysis catheter access to reduce the risk of peritonitis.

SITE APPLICABILITY

- Pediatric Intensive Care Unit
- Inpatient unit 3F

PRACTICE LEVEL/COMPETENCIES

Peritoneal Dialysis is an advanced skill and is practiced after the practitioner has obtained the required education and has had his/her learning validated at the bedside with an appropriate dialysis trained nurse.

EQUIPMENT

- Mask
- Vial normal saline
- Heparin 1000 units/mL vial
- 10 mL syringe/needle
- Chlorhexidine 2%(CHG)/alcohol swab 70%
- Minicap® (povidone-iodine impregnated cap)

PROCEDURE Rationale

1. **REVIEW** order for heparin flushing. Facilitates completion of task in a timely manner.
2. **GATHER** needed equipment and supplies. Routine infection control practices; reduces transmission of microorganisms.
3. **MASK** and **PERFORM** hand hygiene.
4. **SCRUB** rubber top of heparin vial and saline vial with CHG/alcohol swab and allow to dry.
5. **DRAW** 1 mL heparin (1000 units) and 7 mL normal saline (NS) into syringe to a total of 8 mL.
6. **CLOSE** clamp on Transfer Set if not already closed. Occludes catheter.
7. **REMOVE** Minicap®.
8. **ATTACH** heparin syringe to Transfer Set, **OPEN** Transfer Set clamp, and **INJECT** heparin/saline solution.
9. **CLOSE** Transfer Set clamp and **REMOVE** syringe.

10. **APPLY** new Minicap® to Transfer Set.

11. **SECURE** catheter and Transfer Set to patient using immobilising device (e.g. Statlock®). **ENSURE** no kinks or tension on the catheter when in the immobiliser.

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**Trauma to exit site can increase the risk of bacterial growth followed by infections.**

**It is important to minimize catheter movement to prevent fluid leaks from the exit site when performing peritoneal dialysis.**

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**DOCUMENTATION**

**DOCUMENT** on appropriate records including Peritoneal Dialysis Flowsheet, Nurses’ Notes, MAR, Patient Care Flowsheet:

- Heparin flushes (date, time, dosage, route)
- Child’s tolerance of procedure(s)
- Patient/Family Education
- Unexpected outcomes and complications
- any other pertinent actions or observations

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**REFERENCES**


Schmidt, R.J. and Holley, J.L. (2012). Noninfectious complications of Peritoneal Dialysis Catheters. Up to Date Online.
