



MANITOBA RENAL PROGRAM

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| SUBJECT <ul style="list-style-type: none"> ▪ Continuous Cycling Peritoneal Dialysis Protocol | SECTION 70.30 Protocols – Peritoneal Dialysis |
| | CODE 70.30.02 |
| AUTHORIZATION <ul style="list-style-type: none"> ▪ Professional Advisory Committee, Manitoba Renal Program ▪ Professional Advisory Council, St. Boniface Hospital | EFFECTIVE DATE March 2005 |
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COVERAGE:

1. This protocol is applicable to those areas providing peritoneal dialysis (PD) therapy to Stage V D (last stage of renal failure) patients.
2. Peritoneal dialysis is a therapy that requires instillation of a dialyzing solution into the peritoneal cavity via a peritoneal catheter.

STATEMENT OF GUIDELINES:

1. Continuous Cycling Peritoneal Dialysis (CCPD) therapy is done 7 days per week (usually overnight) using an automated machine and may require 1 or 2 daily manual Continuous Ambulatory Peritoneal Dialysis (CAPD) exchanges.
2. The CCPD is performed using aseptic technique.
3. Registered Nurses (RN) and Licensed Practical Nurses (LPN) who have received education and training and who are competent are responsible for the set up of the automated machine, monitoring of the therapy, and the end of therapy disconnect procedure.

While in hospital, patients trained for home PD may perform CCPD with the nurse's supervision.

4. Each CCPD treatment consists of several automated exchanges. Each exchange involves a drain phase (effluent containing wastes, electrolytes and excess fluid is removed from the cavity), a fill phase (infusion of dialysate solution into the peritoneal cavity), and a dwell phase (a period of time during which the dialysate solution remains in the cavity to allow for the removal of solutes and fluid across the peritoneal membrane).
5. Patients performing CCPD at home may drain using either an open drain system to the toilet or using a closed drain bag system as per education and training. It is recommended that patients using the open system check the effluent for clarity a minimum of twice a week. This can be done by either:
 6.
 - a) Attaching a mini bag directly to the PD catheter prior to attaching to cyclor and collecting a sample
 - b) Attaching a mini bag to the y-connector on the drain line of the cyclor set and collecting a sample during the initial drain or first drain (if no last fill)

STATEMENT OF GUIDELINES:

c) By draining 100 ml of effluent directly into a clear container from the y-connector on the drain line of the cyclor set during the initial drain or first drain (if no last fill)

7. Patients admitted to hospital and receiving CCPD should always use closed drain bag system. It is recommended that nurses check the effluent clarity every CCPD treatment by visualizing the effluent in the drain bag during the initial drain and again at the end of treatment prior to discarding effluent. Documentation of the effluent appearance should be completed each treatment on the CCPD record.
8. Patients are weighed daily at the same time each day. The goal is to maintain the patient at their target weight which is the weight with no signs and symptoms of fluid overload and no signs and symptoms of dehydration. The target weight is ordered by the Nephrologist. The target weight is assessed on an ongoing basis.
9. Peritoneal Dialysis Unit Nurses, Deer Lodge Centre, Peritoneal Dialysis Trained Nurses, and Peritoneal Dialysis Community Care Nurses:
 - May adjust the dextrose-based dialysate solution strength based upon patient assessment.
 - Hold Icodextran based on patient assessment x 2 and notify Nephrologist for further assessment
 - All other personnel must have a physician's order signed by the Nephrologist to adjust the dialysate solution strength.

See 70.30.02a *Appendix A, Fluid Management Guidelines*

10. Registered Nurses/ Licensed Practical Nurses who have received education and training and who are competent may add medications to the dialysate solution as per nephrologist order. See Procedure 40.10.03 *Installation of Medication into Peritoneal Dialysis Solution*. Intraperitoneal (IP) medication administration is documented in the Patient Health Record for all inpatients.
11. CCPD therapy is documented on 70.30.02b *Appendix B: Automated Peritoneal Dialysis record* and includes the following:
 - Date
 - Weight
 - Total therapy time
 - Total therapy volume
 - Dextrose concentration
 - Fill volume
 - Last fill volume including type of dialysate solution and the dextrose concentration if using a dextrose based solution
 - Medication added, if applicable
 - Initial Drain Alarm
 - Comments related to therapy
 - Post therapy information which includes initial drain, total ultrafiltration, and the average dwell time
 - Comments related to the appearance of the effluent
 - Pre and post signature of the nurse performing the therapy
12. A PD catheter that is sluggish or plugged may be irrigated with 0.9% NaCl See Procedure 40.10.10, *Peritoneal Catheter Irrigation*. If the PD catheter remains sluggish or plugged, notify the Nephrologist.