



## MANITOBA RENAL PROGRAM

<b>SUBJECT</b> <ul style="list-style-type: none"> <li>Baxter Home Choice Pro Cyclor Set-Up: Initiation of Cycling and End of Treatment utilizing a luer lock cyclor set (software version 10.4)</li> </ul>	<b>SECTION</b> 30.80 Peritoneal Dialysis
	<b>CODE</b> 30.80.09
<b>AUTHORIZATION</b> <ul style="list-style-type: none"> <li>Professional Advisory Committee, Manitoba Renal Program</li> <li>Nursing Practice Council, St. Boniface Hospital</li> </ul>	<b>EFFECTIVE DATE</b> November 2002
	<b>REVISION DATE</b> September 2006 May 2012 December 2014

### PURPOSE:

- To provide peritoneal dialysis using the Baxter HomeChoice Pro® automated peritoneal dialysis system and related equipment.

### POLICY:

- The Nephrologist will prescribe the total therapy time, total therapy volume, fill volume, last fill volume, and dialysate solutions.
- All Registered Nurses (RN) and Licensed Practical Nurses (LPN) who have received education and training and who are competent may perform this procedure.

### EQUIPMENT:

- Baxter HomeChoice Pro® automated system
- Disposable Luer set, 4 Prong cyclor with cassette
- Prescribed dialysate solution
- MiniCap Disconnect cap x 2
- Cyclor drainage bag set (2 x 15 liters), spike
- Drain manifold
- 12 ft. drain line extension (connects 2 15 liter set, spike) (optional)
- 12 ft. patient extension line, Easy-lock (optional)
- Tape (optional)

### KEY POINTS:

- More than four solution bags use disposable luer lock, 8 prong cyclor with cassette.
- check expiry date
- Second mini cap in case of contamination
- May use up to 2 drain lines

### PROCEDURE:

#### A. Set-up:

- Perform hand hygiene.

### KEY POINTS:

## PROCEDURE:

2. Gather supplies.
3. Plug the power cord into the back of the machine. Plug the other end into a grounded outlet.
4. Nurse's Menu option available on all machines.
5. Turn machine ON.
  - If change/verification of program required perform steps 6-12.
6. Select program parameters:
  - Press down arrow until CHANGE PROGRAM is displayed.
  - Press ENTER.
  - Select Program Parameters:
    - Press ENTER to make the screen blink. Use the up and down arrows to change the parameter to the desired level
    - Press ENTER again to stop the blinking and save the parameter.
    - Use the down arrow to advance to the next parameter).
7. Press STOP.
8. Make Adjustments:
  - Press down arrow until MAKE ADJUSTMENTS is displayed on screen.
  - Press ENTER.
  - Scroll to INITIAL DRAIN ALARM. Ensure

## KEY POINTS:

- Ensure correct solution volume, dextrose concentration, solution type and expiry date before opening outer wrap of dialysate solution bags.
- Information available from *HomeChoice* APD Systems Trainer's Guide
- The Nurse's Menu allows the nurse to tailor the Home Choice Pro to meet a patient's particular needs.
  - Nurse's Menu:
  - Mode: Standard/Low Fill
  - Min drain Vol 85%
  - Smart Dwells: defaults to YES
  - Heater Bag Empty: NO
  - Tidal Full Drain: defaults to YES.
    - Change to NO
  - Language
  - Flush: Defaults to YES
  - Reset Weight: defaults to NO.
    - Change to YES
  - Program Locked: defaults to NO
  - Therapy Log
  - Alarm Log
- For further information, refer to the Baxter 10.4 User Manual
- PLEASE WAIT displays on screen, followed by STANDARD MODE ON. Machine beeps x2. PRESS GO TO START appears on the display.
- **DO NOT PRESS "GO" AT THIS TIME.** Wait until step 13 to press GO. Verify program parameters prior to initiating setup.
- Set the parameters for the following settings:
  - Therapy type
  - Total volume
  - Therapy time
  - Fill volume
  - Last fill volume
  - Dextrose (this step is skipped if LAST FILL VOLUME = 0). If using a last fill with a different dextrose concentration or a different type solution (eg. icodextrin) enter DIFFERENT otherwise leave as SAME.
  - Weight units (lbs or kgs)
  - Patient weight (target weight)
- Home Choice Pro will calculate and display the number of cycles and dwell time.
- **INITIAL DRAIN ALARM must never be set to OFF to avoid increased intraperitoneal volume.**
- **Last manual drain defaults to yes, but should be set to no.**
- It is recommended that the INITIAL DRAIN ALARM

## PROCEDURE:

that INITIAL DRAIN ALARM is set appropriately.

9. Press STOP
10. Remove dialysate solution bags from outer wrap and check for:
  - Leaks by squeezing bags
  - Intact port caps
  - Clarity of dialysate solution
11. Place one 5000mL dialysate solution bag on heater cradle.
12. Place remaining dialysate solution bags on top of heater bag or beside the cyclor if space available.
13. Press GO.
14. Load cassette.
15. Attach the organizer to the front of the cyclor door.
16. Clamp all 6 clamps on organizer lines.
17. Press GO.
18. Attach drain line (positioned on extreme right of organizer) to drain manifold and attach Y portion of drain manifold to drain bags.
19. Perform hand hygiene.
20. Attach patient Easy-Lock Extension Line to the patient line if needed.
21. Remove the heater line with the red clamp from the organizer and luer lock to heater bag.
22. Luer lock remaining bags to white and blue clamp lines.
23. Open only the clamps on the lines connected to dialysate solution bags.
24. **Open clamp on patient line (positioned on extreme left of organizer).**

## KEY POINTS:

- be set to 70%-80% of the volume present in the peritoneal cavity.
- If the last fill amount is 500ml or less the INITIAL DRAIN ALARM may be set to 0.
- Display will read PRESS GO TO START.
- If medications ordered, add at this time. See procedure *30.80.03 Instillation of Medication into Peritoneal Dialysis Solution*.
- Ensure dialysate solution bag is positioned on top of heater sensor.
- This will be the "heater bag"
- 500 mL above the total therapy volume is required to accommodate priming of cyclor lines.
- Display will read LOAD THE SET.
- Ensure bar clamp is soft or has retracted.
- Must be clamped during self-test to avoid RELOAD SET alarm.
- Display reads SELF-TESTING. When the self-test is complete, the display changes to CONNECT BAGS.
- Ensure large clamps on drain bag ports are clamped if using. Do not clamp small clamps on drain bag spike lines.
- If the client has a private bathroom, drain lines may be used to drain into the toilet. Ensure end of line is above toilet water. Secure with tape.
- Place end of patient Easy-Lock Extension Line in line organizer.
- Maintain sterility of the exposed ends.
- If the LAST FILL requires a different dextrose concentration or different type of solution (eg. icodextrin, amino acid), use the blue clamp line for the last fill bag).
- **No alarm on machine will occur to indicate patient line clamped and air will remain in line.**

## **PROCEDURE:**

25. Break seals on dialysate solution bags.

26. Press GO.

### **B. Patient Connection:**

1. Ensure the twist clamp on transfer set is closed.

2. Perform hand hygiene.

3. Remove patient line from organizer.

4. Remove pull ring from patient line; remove minicap from transfer set and connect to patient line.

5. Open twist clamp on transfer set.

6. **Press GO.**

7. After draining at least 300 ml, check effluent for clarity.

- From drain line, fill clear container with effluent and assess for clarity of effluent.

### **C. End of Therapy:**

1. Scroll down to obtain therapy information using the down arrow and record.

2. Press GO.

3. Close twist clamp on the transfer set, the clamps on the disposable set and the small clamps on the drain bags. (Or the clamp on the drain line extension if using).

## **KEY POINTS:**

- If using Easy-Lock Extension Line the clamp will be located past the extension on patient line.
- Display will read PRIMING. Priming takes approximately 10 minutes. When priming complete display will flash CONNECT YOURSELF and CHECK PATIENT LINE. If air is noted in patient line, reprime patient line as follows:
  - Press STOP
  - Arrow down to REPRIME PATIENT LINE
  - Press ENTER
  - Machine reads VERIFY LINE IN ORGANIZER
  - Press ENTER again

- Verify patient line is primed. If line is not primed, refer to step A. 26 key point.
- Maintain sterility of patient line and transfer set.
- If patient line is contaminated, discard set-up
- If transfer set is contaminated apply a new minicap and refer to *30.80.09 Appendix A Decision Tree for Managing Contamination.*
- Display screen will read INITIAL DRAIN.
- If cloudy effluent noted, take a sample using the sample minibags. Refer to *60.30.14, Peritonitis Protocol.*

- Display reads END OF THERAPY.
- Post therapy information:
  - Initial Drain
  - Total Ultrafiltration
  - Dwell Time
  - Added/Lost Dwell
- Display reads CLOSE ALL CLAMPS.

## **PROCEDURE:**

4. Press GO.
5. Perform hand hygiene
6. Open mini cap package.
7. Disconnect the patient line from the transfer set.
8. Place mini cap on end of transfer set.
9. Anchor transfer set to abdomen.
10. Remove blue organizer from outside of door and cassette from machine.
11. Press GO.
12. Turn machine OFF.
13. Remove lines and bags and discard per facility policy.
14. Wipe down machine per facility equipment cleaning practices.

## **KEY POINTS:**

- Display will read DISCONNECT YOURSELF.
- Maintain sterility of exposed ends.
- If transfer set is contaminated apply a new minicap and refer to *30.80.09 Appendix A Decision Tree for Managing Contamination.*
- Transfer set and catheter immobilization prevents trauma and infection to the exit site and promotes healing of the exit site.
- Display reads TURN ME OFF.

## **DOCUMENTATION:**

- Automated Peritoneal Dialysis Record (Appendix B): treatment parameters, patient outcome, medications administered.
- Medications administered in the patient health record.
- EPR

## **REFERENCES:**

Baxter Healthcare Corporation. (2010). *'Homechoice' APD Systems Trainer's Guide and Patient At-Home Guide*, 07-19-63-294 [Manual]. McGaw Park , IL: Author.