AUTOMATED PERITONEAL DIALYSIS

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PERITONEAL DIALYSIS EXCHANGE

- A dialysis exchange removes old dialysis fluid from the peritoneal cavity and replaces it with new fluid.
- For Continuous Ambulatory Peritoneal Dialysis (CAPD) or Automated Peritoneal Dialysis (APD), there are 3 phases of a dialysis exchange as described below.
- In APD, these occur as a result of clamps on a machine, opening and closing at pre-programmed intervals.

a. Drain

- Fluid currently in your peritoneal cavity is drained through your peritoneal catheter into a bag
- Fluid contains waste products and extra water from your blood
b. Fill

- New dialysis fluid flows into your peritoneal cavity through your peritoneal catheter

![Image of dialysis setup]

c. Dwell

- Fluid stays in your peritoneal cavity
- Dialysis and excess fluid removal occurs during this time

![Image of dialysis setup]
TYPES OF AUTOMATED PERITONEAL DIALYSIS (APD)

- The type of APD prescribed for you will take into consideration your physical, personal and caregiver needs.
- A combination of any of the types below may be used.
- Your nurse will teach you the information that you require to perform your treatment safely

1. **Continuous Cycler Peritoneal Dialysis (CCPD) with Last Fill**
   - 3 to 7 exchanges of 1.5 to 2.5 L fill volume over 7 – 10 hours at night time.
   - Dwell times range from 45 minutes to 3 hours
   - Last dwell is left in at the end of the cycling period and drained out again before the next cycling period (about 15 hours later)
2. Intermittent Nocturnal Peritoneal Dialysis (NIPD)
   - 3 to 7 exchanges with 1.5 to 2.5 L fill volume delivered over 7 – 10 hours at night time.
   - Dwell times range from 45 minutes to 3 hours
   - Last dwell is drained at the end of treatment and the peritoneal cavity remains empty all day.

3. High Dose Continous Cycler Peritoneal Dialysis (Hi- Dose CCPD)
   - NIPD is performed at night
   - In the earlier part of evening you connect to cycler for a fill, and then disconnect from cycler while solution dwells.
   - You will reconnect to cycler at bedtime.

4. Tidal Peritoneal Dialysis (TPD)
   - Some fluid is left in the peritoneal cavity at the end of the drain cycle and then the fill volume of the next cycle is a smaller volume.

PERITONEAL DIALYSIS EQUIPMENT
In order to understand how peritoneal dialysis works, it is important that you understand the following terms:

1. **Peritoneal Dialysis Catheter**
   - All peritoneal dialysis catheters are made of a soft, flexible plastic.
   - The catheter is tunneled through the skin and layers of fat and tissue below, into the peritoneal cavity.
2. Titanium Adapter

- Connects the Peritoneal Dialysis Catheter to the Transfer Set (see below).
- Does not need changing.
- Reduces wear and tear on your catheter.

3. Transfer Set

- A piece of tubing attached to the titanium adapter at end of the peritoneal dialysis catheter
- Tubing from the Twin Bag® tubing is attached when performing a dialysis exchange.
- Helps to avoid pulling and tugging on your catheter.
- Transfer Set will be changed every 6 months during your clinic visit.
- When Twist Clamp is open fluid flows in and out of the peritoneal cavity.
- When Twist Clamp is closed, no fluid will flow.
• Never open Twist Clamp unless connected to the dialysis fluid tubing.

REMEMBER: **DO NOT TOUCH THE END OF YOUR TRANSFER SET IF THE CAP IS OFF!**

4. Mini Cap

- This is a plastic cap with a medicated sponge inside, designed to keep germs from entering your catheter and peritoneal cavity.
- At the end of each dialysis exchange, put a **new** cap on the end of your transfer set.
- Always check the expiration date on the packaging and never use one that has expired.
REMEMBER: NEVER TOUCH THE INSIDE OF THE CAP OR THE SPONGE!

Sponge Soaked with Povidine-Iodine Solution

5. **Opticap®**
   - Used to cap patient line on cycler tubing and Transfer Set if you are stopping the treatment for a short time and will be re-connecting to the machine.

Transfer Set Cap

Patient Line Cap
6. Peritoneal Dialysis Fluid

- Dialysis fluid is a clear, sterile solution that is made up of sterile water, sugar and electrolytes.
- Dialysis Fluid comes in different strengths and volumes, with tubing attached as shown below.
- Generally you will use 5 litre bags of dialysis fluid for APD but you may use some 2 or 3 litre bags as well.

Dialysis Fluid

Pull Ring – Connector to Transfer Set

Medication Port

Dialysis Fluid Printing includes, contents, solution strength, volume and expiry date
7. Baxter Home® Choice Automated Peritoneal Dialysis

Cycler

**FRONT**

1. Heater Pan
2. Silver Heater Sensor Button
3. Bag Stops
4. Serial Number
5. Occluder (behind Door)
6. Door
7. Handle (shown in locked position)
8. Control Panel

**BACK**

1. Power Entry
2. J1 – Service Port
3. J2 – Modem Port
4. Power Cord
5. On/Off Switch
1. Display Screen
2. Control Panel
3. GO button
4. STOP button
5. ENTER button
6. UP/DOWN buttons
8. **Cycler Tubing/Cassette**

- Patient Line
- Drain Bag Line
- Heater Line
- Additional Bags
- Last Fill Bag Line
- Cassette
9. **Drain Bag**

- Usually use only 1 15 litre bag per treatment but comes in packages of 2
- Connects by a “spike” to Cycler Tubing/Cassette set
- May use Drain Line Extension Set (shown below) between Drain Bag and Cycler Tubing/Cassette set as needed
24. **Drain Line Extension Set**

- Drain Bag Connection End
- Cycler Tubing/Cassette Connection End

25. **Dialysis Clamps**
   a. Come in different colours
   b. Work like scissors but are not sharp and will not cut the tubing
   c. Not sterile but should be kept clean by washing in soap and water.

[Image of Dialysis Clamps](healthtec.co.uk)
26. **Masks**

- Always wear a mask when doing your dialysis exchange.
- This prevents germs from your nose and mouth contaminating sterile parts of your equipment.
- Discard the mask after every use.

**REMEMBER:**
**ALWAYS PUT YOUR MASK ON BEFORE WASHING YOUR HANDS!**
REMINDERS TO REDUCE THE RISK OF CONTAMINATION DURING EXCHANGE

1. **Clean Work Area**

   - Work area should be: well lit; no blowing air from drafts, open windows, or fans; clean and dry.
   - Counter tops, tables and equipment, must be cleaned before each use.
   - No pets in the area while connecting or disconnecting, or other treatment procedures, or where you store supplies and equipment.

![No Pets Sign](www.shutterstock.com)
2. Hand Washing

- Hand washing is **very important** for you to reduce the risk of developing infections.
- Thorough hand washing will decrease the number of germs on your hands, but not all of them.
- Whenever you are going to do any procedures related to your dialysis treatment or peritoneal dialysis catheter, you **MUST** wash your hands for 2 minutes.

- Your hands will never be completely free of germs so hand washing does not replace the need to pay careful attention when doing procedures and follow all directions – **NO SHORTCUTS!**
DIALYSIS PRESCRIPTION

• You will be told how many exchanges you need to do per treatment (prescribed by Nephrologist)

• There are different types of APD and the nurse will help you to program your machine based on your prescription.

• Generally you will be on the same prescription for a while and rarely need to change the machine program however; the number and/or the volume of exchanges prescribed may increase over time as your urine output decreases. This will be discussed with you by the nurse or Nephrologist.

• If your prescription changes, the nurse will work with you to change your machine program.

• The following procedures will guide you through a normal treatment.

• Follow these procedures **EXACTLY** when performing your peritoneal dialysis treatment

• Short cuts or changing the order of the steps may put you at risk for infection or other problems
PERFORMING AN AUTOMATED PERITONEAL DIALYSIS (APD) TREATMENT

PREPARATION:

1. Weigh yourself and record on your Daily Record sheet.
   (Example in “Assessment and Peritoneal Dialysis Fluid Selection” section)

2. Do your blood pressure - sitting and standing, and record on your Daily Record sheet.

3. If you have Diabetes, check your blood sugar and record on your Daily Record sheet.

4. Decide what bags to use for the day, using the Bag Selection Guide (found in “Assessment and Peritoneal Dialysis Fluid Selection” section) and record on your Daily Record sheet.

5. Close windows and doors. Turn off fans as necessary.

6. Clean table and work area.
7. Perform hand hygiene.

8. Gather supplies:
   - 1 – 15L Cycler Drainage Bag
   - 1 - Scissor Clamp
   - 1 – Automated PD Set with Cassette 4-Prong Cycler Tubing
   - 4 - Masks
   - Towel
   - 2 – Bags Peritoneal Dialysis Solutions
   - Supplies for adding medications to peritoneal dialysis solution if required
   - 2 MiniCaps® (extra in case of contamination)
   - 1 Opticap® (in case of need to temporarily disconnect)
   - Tape
   - Hand Sanitizer
9. Check Peritoneal Dialysis solutions for:

- Expiry date
- Strength
- Clarity
- Leaks
- Volume
- Ports intact
CYCLER SET-UP

1. Turn on the hard power (black switch at the back right hand corner of the cycler).

2. Machine display will read “Press Go To Start”

3. Place 1 bag of solution on the cycler’s heater & the 2nd bag on the table beside the cycler. (It takes about 45 minutes to warm the bag on the heater)

4. Program the machine as per the instruction sheet that will be given to you if necessary.
5. Wash your hands or clean them with hand sanitizer.

6. Press "Go" on cycler

7. The cycler should now read “Load the Set”

8. Remove tubing from packaging

9. Open the door to the cycler, fit the cassette into position & close door

10. Ensure tubing is straight & not overlapping where it comes out of door
11. Place blue organizer on holder on outside of door by hanging organizer over hook on top of door and securing hole in organizer over prong on door front.

12. Close all clamps

13. Take a drain bag out of package, attach extension tubing if needed and attach to tubing on right side of cycler tubing organizer.

14. Close white clamp on large drain spout of drain bag

15. Use scissor clamp to double clamp drain spout (Double guard against accidental leakage onto
16. Press “Go”. Cycler will go into “Self Testing” which checks for leaks (Takes about 2–3 minutes)

17. Put on mask

18. Perform hand hygiene.

19. If fibrin present in previous night’s drainage, add Heparin to bags now, as per procedure, Adding Heparin to Peritoneal Dialysis Fluid on pages 39 - 43 of this section.

20. When self testing is complete the display will read “Connect Bags”.
21. Connect the bags to the cycler tubing as follows:

a) Connect the tube with the **blue pull tab on right** (when facing machine) to spike on drainage bag.

b) Connect the tube with the **red clamp** to the bag on the heater. Don’t forget to break flangible in bag.

c) Connect next tube to bag on table. Don’t forget to break flangible in bag.
22. Open clamps on tubing attached to peritoneal dialysis solution bags, drainage bag and patient line (Tube on the far left of organizer with the blue pull tab) 
Press “Go”.

23. The cycler will now start “**Priming**” which will be displayed on the screen. Priming flushes the air out of the tubing and takes approximately 6 – 10 minutes.

24. When machine has finished priming, machine message will read “**Connect Yourself**” “**Check Patient Line**”
STARTING THE TREATMENT

1. Mask.
2. Perform hand hygiene.
3. Remove tape from transfer set/abdomen.
4. Place clean towel/facecloth on patient’s lap, ensure transfer set is closed & place transfer set on towel.
5. Perform hand hygiene again.
6. Clamp “Patient Line”. (On far left side of blue organizer - may use blue scissor clamp)
7. Take the “Patient Line” out of organizer & remove blue pull tab
8. Ensure arm does not cross over sterile ends of transfer set and tubing when opened.
9. **Do Not put the patient line down.** Remove MiniCap® from transfer set & attach patient line to transfer set. **Turn patient line, not Transfer Set when making connection.**

10. Open the “**twist clamp**” on the transfer set.

11. Unclamp patient line.

12. Remove mask.

13. Press “**Go**”
14. Machine display will read “Initial Drain” & the cycler will check to see whether there is any fluid that needs to be drained before it goes into “Fill” phase of exchange.

15. To check drain volume press ▼. To escape press ▲.

16. If initial drain volume has been set too high Low drain alarm will be audible.
   a) Press “Stop”
   b) Press ▼ until “Bypass” is displayed.
   c) Press “Enter” (You may need to press the button twice.) Fill phase will begin.

17. Use tape to secure patient line/transfer set to patient’s abdomen.
ENDING THE TREATMENT

1. Perform hand hygiene.

2. When treatment time has ended, machine display will read “End of Therapy”.


5. Press ▼. Machine display will read “Average Dwell Time ____”. Document on Treatment Record.

6. Press ▲ until machine display reads “End of Therapy” again.
7. Press “Go”.

8. Machine display will read “Close All Clamps”. Close clamps on transfer set, patient line, tubing attached to peritoneal dialysis solutions and drainage bag.

9. Press “Go”.

10. Machine display will read “Disconnect Yourself”. Remove tape from abdomen as necessary.

11. Mask.

12. Perform hand hygiene.
13. Carefully open package for MiniCap®. Ensure package is placed so your arm will not be crossing over sterile end of transfer set when opened.

14. Place towel on under transfer set.

15. Disconnect patient line from transfer set and place in slot on tubing organizer.

16. **Do Not put the transfer set down.** Attach MiniCap® securely to end of transfer set.

17. Secure transfer set to your abdomen.

18. Remove mask.
19. Open door on machine and remove cassette and discard cycler tubing in garbage.

20. Machine display will read “Turn Me Off”. Turn off machine using button on back of machine.

21. Press “Go”.

22. Check drainage for clarity and fibrin. Document on Treatment Record.

23. Assess weight, blood pressure and blood glucose (if you have diabetes). Document on Treatment Record.

24. Dispose of drainage and garbage.
   a) To dispose of used dialysis fluid, carefully cut bag and empty fluid into toilet.
b) Dispose of empty bag and used tubing in green or black garbage bag as per your local municipality guidelines with all other non-recyclable or compost garbage.

**REMEMBER:** WASH YOUR HANDS THOROUGHLY AFTER DISPOSING OF USED DIALYSIS FLUID AND TUBING.
PROCEDURE FOR ADDING HEPARIN TO DIALYSIS FLUID

- Occasionally you may find fibrin in your peritoneal dialysis drainage (effluent)
- When you check the effluent in the bag, if fibrin is present, it will look like clumps or strands that are creamy white or pinkish in colour (If your catheter is new, fibrin may be red)
- If fibrin is present, Heparin is added to peritoneal dialysate to prevent blockage of your peritoneal dialysis catheter so fluid can flow in and out of the peritoneal cavity
- Fibrin may be present at any time but is more common if you have peritonitis

**Fibrin alone is not a sign of peritonitis**

- Follow the procedure **EXACTLY**, as described on the next page, to avoid contaminating the dialysis fluid and causing peritonitis
PREPARATION:

1. Gather supplies:
   - Peritoneal Dialysis Fluid – Twin Bag
   - 3mL syringe with needle attached
   - 1 vial of 1:1000 Heparin
   - 1 Alcohol swab
   - Mask

2. Place equipment on clean work surface.

3. Put on mask.

4. Wash hands.

5. Check dialysis fluid as described in CAPD Twin Bag Procedure (page 19) and place on table, writing side down.

6. Check expiry date of heparin. If opening a new vial, write the date on the vial. Do not use after one month of its first use.

7. Remove black cap on Heparin vial, if it is still on.
8. Wipe rubber stopper of Heparin vial and the injection port on the bag of Dialysis Fluid with alcohol swab and place swab under medication port on bag after so the clean port does not touch the table surface.
9. Open needle/syringe and tighten needle on syringe.

10. Remove cap from needle and pull back on plunger to ensure it moves freely and then push plunger until there is 0.5 (1/2mL) – 1.0mL of air left in the syringe.

11. Insert needle into centre of rubber stopper on vial and inject air into vial.

12. Hold vial so it is upside down ensuring that tip of needle is still covered by the liquid.
13. Gently pull back on the plunger of the syringe to draw up 0.5mL (1/2 mL) of heparin into syringe. If you have fibrin because of peritonitis, draw up 1.0mL of heparin into syringe.

14. Gently insert needle into middle of medication port on bag making sure that you don’t puncture the side of the port.

15. Inject heparin into bag by pressing on the syringe plunger.

16. When empty, remove needle from port and discard syringe and needle into sharps container. **Do not put the cap back on the needle.**

17. Gently shake the bag to mix the drug into the fluid.

18. Perform dialysis exchange as per procedure.

19. Record use of Heparin on Daily Dialysis Record.

**REMEMBER: DO NOT LET ANYTHING TOUCH THE NEEDLE OR YOU WILL GET AN INFECTION**
PERFORMING A MANUAL DRAIN

- Sometimes you may need to drain your peritoneal cavity before the full treatment has been completed.
- Reasons may include, but are not limited to:
  a) Medical emergencies
  b) Treatment problems
  c) Drain volume at end of therapy is insufficient
- A treatment may be stopped entirely or you may resume the treatment when the reason for doing the manual drain has been addressed.

1. Perform hand hygiene.
2. Press “Stop”.
3. Press arrow down until display reads “Manual Drain”.
4. Press “Enter”. Machine will display the drain volume. This may take several minutes to complete.
5. If resuming treatment, press “GO” to restart where you left off.
6. If discontinuing the treatment refer to pages 49 - 53.
TEMPORARILY DISCONTINUING A TREATMENT BEFORE COMPLETION

- Sometimes you may need to temporarily stop your treatment before it is complete.
- Reasons may include, but are not limited to:
  a) Medical emergencies
  b) Treatment problems
  c) Washroom use
- If discontinuation is temporary perform the following procedure during the “Dwell” phase of exchange:
  1. Mask
  2. Perform hand hygiene.
  3. If discontinuing treatment during “Fill” or “Drain” phase, press “Stop”. It is better to discontinue during “Dwell” phase. If in “Dwell” phase, **DO NOT** press “Stop”. Check remaining time to ensure it is adequate for amount of time required off machine.
4. Clamp patient line from cycler and close transfer set clamp.

5. Remove tape from abdomen as necessary.

6. Carefully open package for OptiCap®. Ensure package is placed so your arm will not cross over sterile ends of transfer set and tubing when opened.

7. Place towel under transfer set.

8. Disconnect patient line from transfer set.

9. **Do Not put the transfer set down.** Attach first portion of OptiCap® securely to end of transfer set.
10. Apply second portion of OptiCap® to end of patient line and place in slot on tubing organizer.

11. Secure transfer set to your abdomen with tape.

12. Remove mask.

13. Perform hand hygiene.
RECONNECT AFTER TEMPORARY DISCONNECTION

1. Mask.
2. Remove tape from abdomen.
3. Place towel under transfer set.
4. Perform hand hygiene.
5. Remove cap from patient line.
6. Remove cap from transfer set.
7. Connect patient line to transfer set.
8. Open clamps on patient line from cycler and transfer set.
9. If cycler was stopped, press “Go”.
10. Secure transfer set to patient’s abdomen.
11. Remove mask.
DISCONTINUING A TREATMENT PRIOR TO COMPLETION

- Perform the following procedure during the “Dwell” phase if your dialysis prescription includes a day-time dwell or after “Drain” phase or Manual Drain (page 44) if your dialysis prescription does not include a day-time dwell.

1. If discontinuing treatment during “Fill” or “Drain” phase, press “Stop”. It is better to discontinue during “Dwell” phase. If in “Dwell” phase, **DO NOT** press “Stop”.

2. Turn off machine using button on back of machine. (If stopped more than 30 min, machine will alarm)

3. Press “Stop” to mute alarm. Machine display will read “Power Restored”.

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15. Press ▼. Machine display will read “Average Dwell Time ____”. Document on Treatment Record.

9. Press ▼. Machine display will read “End of Therapy”

10. Press “Enter” and close clamps on transfer set, patient line, tubing attached to peritoneal dialysis solutions and drainage bag.
11. Press “Go”.

12. Machine display will read “Disconnect Yourself”.

13. Mask


15. Remove tape from abdomen as necessary.

16. Carefully open package for MiniCap®. Ensure package is placed so your arm will not cross over sterile ends of transfer set and tubing when opened.

17. Place towel under transfer set.

18. Disconnect patient line from transfer set.

19. **Do Not put the transfer set down.** Attach MiniCap® securely to end of transfer set.

20. Place patient line in slot on tubing organizer.

21. Secure transfer set to your abdomen with tape.

22. Remove mask.
23. Perform hand hygiene.

24. Open door on machine and remove cassette and discard cycler tubing in garbage.

25. Press “Go”.

26. Machine display will read “Turn Me Off”. Turn off machine using button on back of machine.

27. Check drainage for clarity and fibrin. Document on Treatment Record.

28. Assess weight, blood pressure and blood glucose (if you have diabetes). Document on Treatment Record.
29. Dispose of drainage and garbage.
   c) To dispose of used dialysis fluid, carefully cut bag and empty fluid into toilet
d) Dispose of empty bag and used tubing in green or black garbage bag as per your local municipality guidelines with all other non-recyclable or compost garbage

   **REMEMBER: WASH YOUR HANDS THOROUGHLY AFTER DISPOSING OF USED DIALYSIS FLUID AND TUBING**

**TROUBLESHOOTING**

- Since Automated Peritoneal Dialysis involves the use of a machine, there is always the possibility that you will experience alarm situations
- The alarms are for your safety and should not be ignored
- The alarms can be heard and identified in the Display Screen on the machine
- Please refer to the *HomeChoice® APD Systems Patient At-Home Guide*, Section 15, to respond to these alarm situations
• For any problems related to your medical condition or response to the treatment itself, refer to Topic 7: Potential Complications of Peritoneal Dialysis and Other Potential Problems, in this Resource Manual

• Remember, when in doubt:
  o For machine related issues call the Baxter Technical Assistance line at 1(800)553-6898
  o For concerns regarding your medical condition response to the treatment call the Home Dialysis Unit during business hours at (416) 864-5794 or after business hours page the nurse on-call at (416)685-9682
  o For Medical Emergencies call 911
PERITONEAL ADEQUACY AND EQUILIBRATION TESTING

- Peritoneal Dialysis Adequacy Testing
  - The Nephrologist will ask you to have a Peritoneal Adequacy Test done to help determine the effectiveness of your dialysis prescription by measuring the amount of urea and creatinine removed by dialysis over 24 hours.
  - Usually performed 4-6 weeks after the beginning of peritoneal dialysis therapy and then once per year or as required.
  - If your urine output is greater than 150mL/24 hours, your nurse will ask you to do a 24 hour urine collection; review the instruction sheet with you and give you a collection bottle.
  - You will also be asked to bring all bags of effluent and 24 hour urine collection on specified date to Home Dialysis Unit.
  - Blood will be taken within the same 24 hour period as urine and effluent collections are done.
o Your nurse will review the instruction sheet (pages 57 – 60 & 62 ) with you when arranging testing (dependent upon type of therapy)
o Tie off or clamp each tubing securely, to ensure there is no leak. Place bags in a cool place.
o Bring in this sheet once collection for test complete, along with this paper.
o If you develop cloudy fluid, abdominal pain or your catheter is draining poorly on the day that you are to do this collection, contact your nurse as soon as possible.
24 Hr Dialysate Collection Instruction Sheet
Nocturnal Intermittent Peritoneal Dialysis

Name: ________________________________________.
Collection Dates: _______________ to _______________.

1. You will need to collect all of your dialysate drainage over night

2. On ____________________________, the day you start the collection;

   Record:
   a. The “PROGRAM” of your dialysis machine:
      THERAPY : CCPD/IPD
      TOTAL VOL: _____________ mL
      THERAPY TIME: ____________
      FILL VOL: _________________ mL
      LAST FILL VOL: ____________
      DEXTROSE: ________________

     Press STOP button.
     Record: NITE CYCLES _______ NITE DWELL ________.

3. NIGHT DIALYSIS
   After the machine finishes “PRIMING”, drain the fluid out of the drain bag
   before you connect yourself to the patient line.

   *The end of the drain spout should not touch anything.
   After draining the bag, cover the end of the drain spout.

   a. Start your dialysis

   Record any problems or alarms you had while on the machine:

   ______________________________________________________
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________
4. The next morning, on ______________________, your 24 hour collection will finish at the “END OF THERAPY”.
   
a. **Record:**
      Time dialysis completed (if you are awake then) ________________
      I-DRAIN VOL ________________ mL
      TOTAL UF/LAST UF ____________ mL
      AVG DWELL TIME ________________
      Your morning weight ____________ (lbs/kgs) (empty/full with ______L)
   
b. Shake the drainage bag for a few minutes until the fluid is foamy.
   c. Fill a sterile container about ¾ full with the drainage.
   d. Make sure the drain spout doesn’t touch the inside of the specimen container.
   e. Tighten the lid – ensure there are no leaks
   f. Bring the sample and these papers to the Home Dialysis Unit or Clinic.
   g. **Bring a 24 hour urine collection on the same day.**

**NOTE:** If you do not come to the hospital shortly after getting the sample, please refrigerate it until the time you are ready to leave.

In the hospital, you will need to have blood work done.
24 hr Dialysate Collection Instruction Sheet
HI-DOSE Continuous Cycler Peritoneal Dialysis Therapy

Name: ________________________________
Collection Dates: ______________________ to ______________________
# _____ day exchanges

1. You will need to collect all of your dialysate drainage over a 24 hour period. This includes your Twin Bags and your Cycler drainage.

2. On ________________________, the day before you start the collection;
   Record:
   a. The “PROGRAM” of your dialysis machine:
      THERAPY: HI-DOSE CCPD
      TOTAL VOL: __________________ mL
      # OF DAY FILLS: __________
      DAY FILL VOL: ______________ mL
      NIGHT THER TIME: __________
      NIGHT FILL VOL: ____________ mL
      LAST FILL VOL: ______________ mL
      DEXTROSE: ________________

      PRESS STOP BUTTON.
      RECORD: NITE CYCLES _____ NITE DWELL ________.
   b. The time you started night dialysis: ______________.
      Please aim to start your dialysis at this same time.
   c. The strength and volume of the Dianeal bags you connected to the machine:
      Heater bag ___________ last fill bag ___________
      Other bags ________________________________

3. On ________________________, the day you start the collection:
   Record:
   a. Your morning weight _______________ (lbs/Kgs) (empty/full with _______ L)
   b. The strength and volume of the Twin Bag you connected to the machine:
      Heater bag ____________ last fill bag _______________
      Other bags
After the machine finishes “PRIMING”, drain the fluid out of the drain bag before you connect yourself to the patient line. The end of the drain spout should not touch anything. After draining the bag, cover the end of the drain spout.

**c.** The time you started “INITIAL DRAIN” ____________________________

**d.** The time you finished “DAY FILL” ____________________________

4. Once you connect yourself to the patient line, leave all the drainage in the drain bag until the next morning when the machine says “END OF THERAPY”. Note: The drain bag can hold 20 litres of drainage.

5. **Night Dialysis:**
Start your night dialysis at the same time you did yesterday.

**Record:**

**a.** DAY DWELL TIME ____________________________.

**b.** The time you started night dialysis ____________________________.

**c.** Any problems or alarms you had while on the machine:

___________________________

6. **The next morning, on ____________________________,**
Your 24 hour collection will finish at the “END OF THERAPY”.

**Record:**

**a.** Time dialysis completed (if you are awake) ____________.

**b.** I-DRAIN VOL ____________________________ mL

**c.** TOTAL UF/LAST UF ____________________________ mL

**d.** AVG DWELL TIME ____________________________

**e.** Your morning weight ____________ (lbs/kg) (empty/full with _________ L)

7. Shake the drainage bag for a few minutes until the fluid is foamy. Empty some of the drainage into your bucket. Then fill a sterile container about ¾ full with the drainage. Make sure the drain spout does not touch inside of the sterile container. Tighten the lid of the container so that there is no leakage.

8. Bring this drainage sample, along with these papers to the Home Dialysis Unit.

Note: If you do not come to the hospital soon after getting the sample, please refrigerate it until the time you are ready to leave.

In the hospital, you will have blood work done.
• Peritoneal Equilibration Testing
  o The Nephrologist will ask you to have an Peritoneal Equilibration Test done to help determine the condition of your peritoneal membrane and how effectively it allows for the removal of toxins and fluid
  o Usually performed 4-6 weeks after the beginning of peritoneal dialysis therapy and as required.
  o Your nurse will review the instruction sheet (page 35) with you when arranging testing
  o You will be asked to perform your CAPD exchange using 2.5% dialysate or 1.5%, if blood pressure is low at bedtime exchange
  o You will need to come to Home Dialysis Unit with dialysate dwelling for a maximum of 10-12 hours
  o While in the Home Dialysis Unit the nurse will perform the test that has many steps including a modified exchange, taking samples from your drainage and blood tests
  o You will need to allow approximately 5 hours for the test to be completed
PERITONEAL EQUILIBRATION (P.E.) TEST

1. Your P.E. Test is booked for:________________ at ____________ a.m. The test will take at least 5 hours. Please come to the Home Dialysis Unit is located on the 8th Floor of the Cardinal Carter Wing, Room 8-090.

   * If your drain bags are cloudy or you have abdominal pain, please contact the Home Dialysis Unit. This test cannot be done if you have an infection but, you still have to come to the hospital to be assessed.

2. On __________________, you will need to do your bedtime exchange using a 2.5% 2L bag. It is important to drain completely before you fill with this bag.

   * If your blood pressure is too low or you feel dizzy at bedtime, you may use a 1.5% bag instead. Please remember to tell the nurse which bag you used.

3. On __________________, **DO NOT YOUR FIRST MORNING EXCHANGE.** When you get to the hospital, your nurse will do your dialysis exchange. If you have diabetes, discuss with your nurse whether you should eat your breakfast at home or, at the hospital. If you desire, your lunch will be provided.

   **PLEASE BRING WITH YOU, ALL MEDICATIONS THAT YOU WILL NEED TO TAKE DURING THIS TIME.**
MY GOALS:
IMPORTANT POINTS TO CONSIDER:

1. What should I do to prepare the area where I can do my exchange safely?

   ________________________________
   ________________________________
   ________________________________
   ________________________________
   ________________________________

2. Can I name all of the supplies that I will need to do my exchange?

   ________________________________
   ________________________________
   ________________________________
   ________________________________
   ________________________________
3. What will I do if the machine alarms, especially if I have never seen that particular alarm before?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

4. How should I dispose of my effluent and used tubing?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
5. When should I add Heparin to my dialysis fluid and for how long?

6. Label the diagram.
PICTURE CREDITS

Unless otherwise specified, all pictures of the Home Choice machine and supplies required for the treatment are copied from:

- www.baxter.com

REFERENCES


www.baxter.com

Toronto Western Hospital, University Health Network; Home Peritoneal Dialysis Unit Patient Manual, 8th edition, February 26, 2002