

Automated Peritoneal Dialysis (APD) Set-up and Connection Procedure – HomeChoice Dialysis Machine

Cross References	APD: Homechoice step by step guide for home PD patients; Renal Department Protocol
1. Purpose	To ensure APD set-up and connection procedure is performed according to best practice guidelines reducing the risk of infection and ensuring patient safety
<p>2. Process</p> <p>2.1 Devices</p> <p>2.1.1 Equipment</p> <ul style="list-style-type: none"> <input type="checkbox"/> Trolley <input type="checkbox"/> HomeChoice machine <input type="checkbox"/> Drain bag <input type="checkbox"/> Micropore tape <input type="checkbox"/> Blue clamp <p>2.1.2 Key parts</p> <ul style="list-style-type: none"> <input type="checkbox"/> Peritoneal dialysis fluid (Dialysate) <input type="checkbox"/> Minicap <input type="checkbox"/> Cassette/lines <p>2.1.3 Key site</p> <ul style="list-style-type: none"> ▪ Abdominal PD catheter <p>2.2 Procedure</p> <ol style="list-style-type: none"> 1. Select appropriate dialysate strength by conducting a fluid assessment on patient 2. Perform hand hygiene 3. Identify and gather equipment and key parts for procedure 4. Clean trolley/work surface with detergent 5. Plug machine into power and turn on 6. Press GO (green button) to start 7. Check and modify the PD program as needed (Ensure same program is recorded on the machine, PD chart and patient notes) 8. Wash the blue clamp and dry thoroughly 9. Perform hand hygiene 	

10. Prepare general aseptic field with equipment and key parts
11. Open the dialysate bags using the sharp edge of the blue clamp. **DO NOT USE SCISSORS OR KNIVES**
 - a. Check the bag strength, volume, expiry, colour and for leakage;
 - b. Place one dialysate bag onto the heater covering the silver button;
 - c. Place next bag/s on the cleaned surface;
12. Open the cassette/lines and place on top of the heater bag
13. Press GO. Machine will flash "LOAD THE SET"
 - a. Open the cassette door by pulling the lever up. Load the cassette;
 - b. Close the door pushing the lever down;
 - c. Attach line organiser to the cassette door;
14. Close all clamps. Attach drain bag to the drain line (line with small blue cap)
15. Press GO. Machine will flash "SELF TEST"
16. After 2 minutes of machine self-test, machine will flash "CONNECT BAGS"
17. Perform hand hygiene
18. Don sterile gloves
19. Perform bag connection procedure ensuring all key parts/sites are protected:
 - a. Remove coloured cap from dialysate bag and remove clear cap from bag line;
 - b. **Use non-touch connection technique to connect bags:**
 - i. Red clamp line to heater bag;
 - ii. White clamp line to next bag and etc...
20. Break the greenstick seals on the bags
21. Open clamps on lines with connected bags (**Leave the clamps closed on unconnected lines**)
22. Open clamp on patient line (line with a large blue cap)
23. Press GO to prime the lines. Machine will flash "PRIMING"
24. After 7 minutes of machine priming, machine will flash "CONNECT SELF/CHECK PATIENT LINE"
25. Remove gloves and perform hand hygiene
26. Prepare the patient:
 - a. Don non-sterile gloves;
 - b. Expose the PD catheter;
 - c. Keep PD catheter away from clothing;
27. Remove gloves and perform hand hygiene
28. Don sterile gloves
29. Perform patient connection procedure ensuring all key parts/sites are protected:
 - a. Remove the large blue cap from the patient line;
 - b. Remove minicap from the PD catheter;
 - c. **Use non-touch connection technique to connect catheter to the patient line;**
30. Twist open the catheter valve
31. To start PD therapy, press GO twice until machine says "INITIAL DRAIN."
32. Document the procedure on the APD chart and patient notes
33. Handover to the next shift

3. Network file location/reference, if applicable	St George Hospital Renal Website: http://stgrenal.med.unsw.edu.au/StGRenalWeb.nsf
4. External References / Further Reading	<p>Bannister, K. (2014). The influence of peritoneal dialysis systems and solutions on the incidence of peritonitis and catheter-related infections. <i>The KHA-CARI Guidelines – Caring for Australasians with Renal Impairment</i> [cited 2014 June]; Available from: http://www.cari.org.au/Dialysis/dialysis%20peritonitis/dialysis_peritonitis.html</p> <p>Dombros, N., Dratwa, M., Feriani, M., Gokal, R., Heimbürger, O., Krediet, R., . . . Verger, C. (2005). European best practice guidelines for peritoneal dialysis. 6 Automated peritoneal dialysis. <i>Nephrol Dial Transplant</i>, 20 Suppl 9, ix21-ix23. doi: 10.1093/ndt/gfi1120</p>

Revision and Approval History

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