PERITONEAL DIALYSIS CATHETER (PDC) FLUSH – POST INSERTION FLUSH IN OPERATING THEATRE, PROCEDURE ROOM OR RECOVERY ROOM – SGH

Cross references	NSW Health PD2017_013 *Infection Prevention and Control Policy* NSW Health PD2017_026 *Clinical and Related Waste Management for Health Services* NHMRC *Australian Guidelines for the prevention and control of Infection in Healthcare* SGH-TSH CLIN027 *Aseptic Technique - Competency and Education Requirements* SGH CLIN538 *Peritoneal dialysis Catheter (PDC): Poor Flow / No Flow Management* SGH CLIN364 Peritoneal Dialysis Catheter (PDC) – Heparin Lock SGH PD WPI 217 *Continuous Ambulatory Peritoneal Dialysis (CAPD) Freeline Solo Exchange Procedure* SGH PD WPI 053 Peritoneal Dialysis – 1L Flush on a PD Catheter
1. Purpose	To ensure the process of flushing a newly inserted PD catheter is performed according to best practice guidelines reducing the risk of infection and ensuring patient safety

2. Process

Flushing a new PDC immediately after insertion is recommended to check for flow rate, function and patency. Heparin lock after flushing a new PDC is also recommended to prevent blockages.

2.1 Devices

2.1.1 Equipment

- Trolley
- Portable IV pole
- Blue clamp
- Dialysate warmer
- Micropore tape

2.1.2 Key parts

- Minicap
- Peritoneal dialysis fluid - 1.5 % Freeline Solo bag (as per Appendix A)
- Drawing-up needle (18G)
- 20mL syringe
- 0.9% sodium chloride - 10mL ampoule
- Heparin – 5000Units/5mL (only if indicated)

2.1.3 Key site

- Abdominal PD catheter

2.2 PROCEDURE

1. Warm the PD fluid (Freeline solo bag) on the warmer

   Note: PD fluid takes 30 minutes to warm. PD fluid warmer can be requested from the PD unit or 4South ward.
2. Perform hand hygiene
3. Clean trolley/work surface with detergent
4. Identify and gather equipment for procedure
5. Wash the blue clamp and dry thoroughly
6. Perform hand hygiene
7. Prepare general aseptic field with key parts, blue clamp and micropore tape
8. Use the sharp edge of the blue clamp to open outer pouch of the dialysis bag. DO NOT USE SCISSORS OR KNIVES
9. Place the opened bag on top of the clean trolley and ensure the lines are facing up (as per Appendix B)
10. Check the bag strength, volume, expiry, colour and for leakage
11. Prepare the patient:
    a. Perform hand hygiene
    b. Wear PPE and don gloves as per NSW Health PD2017_013 *Infection Prevention and Control Policy*
    c. Expose the PD catheter
    d. Keep PD catheter away from clothing
12. Remove gloves and perform hand hygiene
13. Don sterile gloves
14. Perform SGH PD WPI 053 Peritoneal Dialysis – 1L Flush on a PD Catheter. Perform connection procedure ensuring all key parts/sites are protected (as per Appendix C)
    a. Remove the coloured cap from the patient line and remove minicap from the catheter
    b. Use non-touch connection technique to connect catheter to the patient line
    c. Hang the full bag on an IV pole and place the empty drain bag on the floor
    d. Ensure all lines are not kinked or pulling from the exit site. Ensure catheter dressing remains intact
    e. Break the green stick to flush and prime the lines for 5 seconds then close the blue clamp on the outflow line
15. Twist open the catheter valve to run 1000mL PD fluid into the patient (fill time is approximately 10-15 minutes)
16. When fill is complete, place a blue clamp on the inflow line
17. Prepare to immediately drain out the patient:
    a. Open the blue clamp on the outflow line
    b. Record PD effluent quality and volume.

       Note: PD effluent is expected to be light blood-stained on initial flush post PDC insertion procedure
18. If PD effluent is heavily blood stained, perform another 1 Litre PD flush by repeating steps 15-17.

Note: 1 Litre PD flushes will need to be repeated until effluent is light blood stained or clear.

19. After flushing is completed, clamp the inflow and outflow line and close the PDC valve.
20. Prepare heparin lock as per SGH CLIN364 Peritoneal Dialysis Catheter (PDC) – Heparin Lock

    Note: Heparin lock must be prescribed on eMEDs/medication chart, it is not nurse initiated.
21. Disconnect patient from dialysis bag and administer heparin lock on newly inserted PDC as per SGH CLIN364 Peritoneal Dialysis Catheter (PDC) – Heparin Lock using aseptic technique ensuring all the key parts are protected
22. After heparin lock is completed, close the PDC valve
23. Disconnect syringe from PDC and apply new minicap (as per Appendix D)
24. Secure the end part of the PD catheter to the abdomen with a micropore tape
25. Discard used equipment in the clinical waste bin as per NSW Health PD2017_013 *Infection Prevention and Control Policy*
26. Remove gloves and PPE
27. Perform hand hygiene
28. Clean trolley after use and perform hand hygiene
29. Document the procedure on clinical notes including the:
    a. Amount of PDC flushes done
    b. PD effluent colour, clarity and weight
    c. PDC inflow and outflow rate and volume
30. Inform the PD team
31. Handover to the ward nurse receiving the patient

3. Network file	Renal, Peritoneal Dialysis
4. External references / further reading	Brown, E. A., Blake, P. G., Boudville, N., Davies, S., de Arteaga, J., Dong, J., . . . Warady, B. (2020). International Society for Peritoneal Dialysis practice recommendations: Prescribing high-quality goal-directed peritoneal dialysis. *Perit Dial Int, 40*(3), 244-253. doi:10.1177/0896860819895364 Corbett, R. W., Goodlet, G., MacLaren, B., Jolliffe, A., Joseph, A., Lu, C., . . . Blake, P. G. (2020). International Society for Peritoneal Dialysis Practice Recommendations: The view of the person who is doing or who has done peritoneal dialysis. *Perit Dial Int, 40*(3), 349-352. doi:10.1177/0896860820918822 Castro, M. J., Vijt, D., Endall, G., Elseviers, M., Lindley, E., & Board, E. E. R. (2004). Post insertion catheter care in peritoneal dialysis centers across Europe: results of the Post Insertion Project of the Research Board. *EDTNA ERCA J, 30*(1), 42-47. doi:10.1111/j.1755-6686.2004.tb00330.x Cho, Y., Boudville, N., Palmer, S. C., Chow, J. S. F., Hawley, C. M., Jose, M. D., . . . Johnson, D. W. (2018). Practice of Peritoneal Dialysis Catheter Flushing in Australia and New Zealand: Multi-Center Cross-Sectional Survey. *38*(2), 98-103. doi:10.3747/pdi.2017.00108

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5. Specialty/department committee approval	Peritoneal Dialysis Committee Dr Franziska Pettit, Staff Specialist Signature: 20.05.20
6. Department head approval	Dr George Mangos, Department Head Renal Services Signature: 20.05.20
7. Executive sponsor approval – Nurse Manager	Christine Day, Nurse Manager Medicine Signature: 28.05.20

Revision and Approval History

Date published	Revision number	Author (Position)	Date revision due
August 2017	1	Anna Claire Cuesta (PD CNC)	Aug 2010
May 2020	2	Anna Claire Cuesta (PD CNC)	May 2023

2.3 Appendixes

Appendix A

Appendix B

Appendix C

Appendix D