AUTOMATED PERITONEAL DIALYSIS (APD) DISCONNECTION WITH OPTICAP PROCEDURE

Cross references	NSW Health PD2017_013 *Infection Prevention and Control Policy* NHMRC Australian Guidelines for the prevention and control of Infection in Healthcare NSW Health PD2017_026 *Clinical and Related Waste Management for Health Services* SGH-TSH CLIN027 *Aseptic Technique - Competency and Education Requirements*
1. Purpose	To ensure APD disconnection with Opticap procedure is performed according to best practice guidelines reducing the risk of infection and ensuring patient safety

2. Process

2.1 DEVICES

2.1.1 Equipment

- Sterile gloves
- Micropore tape

2.1.2 Key parts

- Opticap

2.1.3 Key site

- Abdominal PD catheter

2.2 SAFEGUARD

2.2.1 Frequent disconnection from APD machine during dialysis is highly discouraged due to increased risk of contamination

2.2.2 Limit disconnection during dialysis to toilet breaks or urgent medical procedures only to reduce risk of contamination

2.2.3 Maximum of 2 disconnection episodes only for every 10 hour therapy to reduce risk of contamination

2.2.4 If >2 disconnection episodes during dialysis is anticipated, convert patient to CAPD to reduce risk of contamination

2.3 PROCEDURE

1. Press the red (STOP) button to pause/stop dialysis
   Note: If possible to wait, pause/stop and disconnect whilst on ‘DWELL’ phase
2. Perform hand hygiene and don non-sterile gloves
3. Close the clamp on patient line
4. Close the PD catheter valve until it “clicks”

5. Open Opticap
6. Perform hand hygiene and don sterile gloves
7. Perform disconnection procedure ensuring all key parts/sites are protected:
    a) Disconnect patient line using non-touch disconnection technique
    b) Place patient line back on the line organiser
    c) Remove minicap from Opticap
    d) Place new minicap on catheter using non-touch technique
    e) Remove blue divider and place Opticap onto patient line using non-touch technique
8. Secure the PD catheter on abdomen with micropore tape before patient mobilises
9. Remove gloves and perform hand hygiene
10. Once patient returns, prepare the PD catheter
    a) Perform hand hygiene and don non-sterile gloves
    b) Keep PD catheter away from clothing
    c) Expose the PD catheter
11. Remove gloves and perform hand hygiene
12. Don sterile gloves
13. Perform connection procedure ensuring all key parts/sites are protected:
    a) Remove the Opticap from the patient line
    b) Remove the minicap from the catheter
    c) Connect catheter to patient line using non-touch connection technique
14. Open the catheter valve
15. Open the clamp on patient line
16. Press green (GO) button to continue dialysis
17. Discard equipment as per NSW Health PD2017_026 *Clinical and Related Waste Management for Health Services*
18. Remove gloves and perform hand hygiene
19. Document the frequency of and reason for disconnection on APD chart and patient notes
20. Handover to the next shift

3. Network file	Renal, Peritoneal Dialysis
4. External references / further reading	6 Automated peritoneal dialysis (2005). *Nephrology Dialysis Transplantation*, Volume 20, Issue suppl_9, 1 December 2005, Pages ix21–ix23, https://doi.org/10.1093/ndt/gfi1120 Bannister, K. (2014). The influence of peritoneal dialysis systems and solutions on the incidence of peritonitis and catheter-related infections. *The KHA-CARI Guidelines – Caring for Australasians with Renal Impairment* [cited 2014 June]; Available from: http://www.cari.org.au/Dialysis/dialysis%20peritonitis/dialysis_peritonitis.html Dombros, N., Dratwa, M., Feriani, M., Gokal, R., Heimburger, O., Krediet, R., . . . Verger, C. (2005). European best practice guidelines for peritoneal dialysis. 4 Continuous ambulatory peritoneal dialysis delivery systems. *Nephrology Dialysis Transplantation, 20 Suppl 9*, ix13-ix15. doi: 10.1093/ndt/gfi1118

	Gowrie Balasubramanian, Khadija McKitty, Stanley L.-S. Fan (2011). Comparing automated peritoneal dialysis with continuous ambulatory peritoneal dialysis: survival and quality of life differences? *Nephrology Dialysis Transplantation*, Volume 26, Issue 5, 1 May 2011, Pages 1702–1708, https://doi.org/10.1093/ndt/gfq607 Kannaiyan S. Rabindranath, James Adams, Tariq Z. Ali, Conal Daly, Luke Vale, Alison M. MacLeod (2007). Automated *vs* continuous ambulatory peritoneal dialysis: a systematic review of randomized controlled trials. *Nephrology Dialysis Transplantation*, Volume 22, Issue 10, 1 October 2007, Pages 2991–2998, https://doi.org/10.1093/ndt/gfm515 Masa Knehtl, Eva Jakopin, Martin Hren, Nina Hojs, Sebastjan Bevc, Robert Ekart, Radovan Hojs (2018). SP530 Comparison Of Continuous Ambulatory Peritoneal Dialysis (CAPD) Versus Automated Peritoneal Dialysis (APD) Considering Treatment Adequacy, Anemia, Inflammation And Mineral Bone Disease. *Nephrology Dialysis Transplantation*, Volume 33, Issue suppl_1, 1 May 2018, Pages i526–i527, https://doi.org/10.1093/ndt/gfy104.SP530 Woodrow G, Fan SL, Reid C et al. (2017) Renal Association clinical practice guideline on peritoneal dialysis in adults and children. *BMC Nephrology* 18:333; https://doi.org/10.1186/s12882-017-0687-2
5. Specialty/department committee approval	Peritoneal Dialysis Committee Chairperson name/position: Franziska Pettit, Staff Specialist Date: 05.02.19
6. Department head approval	Name / position: Prof George Mangos, Department Head Renal Services Date: 14.02.19
7. Executive sponsor approval – Nurse Manager	Name / position: Christine Day, Nurse Manager Medicine Date: 21.02.19

Revision and Approval History

Date published	Revision number	Author (Position)	Date revision due
Feb 2019	0	Anna Claire Cuesta	Feb 2022