

PERITONEAL DIALYSIS / RENEL DEPARTMENT
Workplace Instruction (PD_SGH_WPI_144)

PERITONEAL DIALYSIS (PD) – MANAGEMENT OF PATIENTS REQUIRING INTERMITTENT PERITONEAL DIALYSIS

Cross references	<u>SGH CLIN 345 Peritoneal Dialysis – Inpatient Management</u> <u>SGH CLIN381 Intraperitoneal Potassium Administration</u> <u>SGH CLIN380 Intraperitoneal Heparin Administration</u> <u>SGH CLIN 364 Peritoneal Dialysis Catheter (PDC) – Heparin lock</u> <u>PD SGH WPI 141 – Break-In Management For Patients Requiring Urgent PD with Newly Inserted PD Catheter</u> <i>SGH Renal Department</i> Renal SGH WPI APD End of Therapy and Disconnection Procedure – HomeChoice Dialysis Machine Renal SGH WPI APD Set-up and Connection Procedure – HomeChoice Dialysis Machine Renal SGH WPI APD Disconnection with Opticap Procedure
1. Purpose	To ensure the intermittent peritoneal dialysis procedure is performed according to best practice guidelines reducing the risk of infection and ensuring patient safety

Background

- PD patients manage their own treatment at home for Continuous Ambulatory Peritoneal Dialysis (CAPD) and / or Automated Peritoneal Dialysis (APD). However, some patients require longer or more dialysis through Intermittent Peritoneal Dialysis (IPD) due to:
 - Inadequate solute clearance from home PD
 - Inadequate fluid removal from home PD
 - As part of a procedural or surgical preparation
- Other indications for IPD are:
 - Whilst waiting for PD training
 - Low volume IPD for newly inserted PD catheters
- IPD is another form of peritoneal dialysis using the dialysis machine for 24 – 48 hours at least twice per week

2. Process

- 2.1 Complete a recommendation for admission form noting patient is to be admitted in 4 South (4S) and send to the bed manager (fax 32676)
- 2.2 Advise patient to contact the hospital at the time specified to confirm bed availability
- 2.3 Upon hospital admission, ward nurse should attend to and document routine observations and weight Standard Adult General Observation (SAGO) Chart.
Note: Weight should be attended before every dialysis bag change or replacement
- 2.4 Ward nurse to notify the Renal and PD team upon patient's arrival to the ward

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- 2.5 Renal team to complete admission documentation, fluid assessment and pre-dialysis bloods i.e. FBC, UEC including serum potassium
- 2.6 PD nurse and Renal team to complete the PD order form specifying dialysis strength, fluid removal and additives required
- 2.7 Ward nurse to attend to inpatient care and dialysis as per [SGH CLIN 345 Peritoneal Dialysis – Inpatient Management](#)
- 2.8 Commence IPD immediately as per *Renal SGH WPI APD Set-up and Connection Procedure – HomeChoice Dialysis Machine*
- 2.9 For newly inserted PD catheter, manage IPD as per [PD SGH WPI 141 – Break-In Management For Patients Requiring Urgent PD with Newly Inserted PD Catheter](#)
- 2.10 Administer intraperitoneal potassium as per [SGH CLIN381 Intraperitoneal Potassium Administration](#)
- 2.11 Administer intraperitoneal heparin as per [SGH CLIN380 Intraperitoneal Heparin Administration](#)
- 2.12 Ward nurse to monitor:
 1. Bowel movement.
 2. Fluid balance. Ascertain current fluid restriction and target fluid removal
- 2.13 Disconnect patient during IPD therapy as per *Renal SGH WPI APD Disconnection with Opticap Procedure*
- 2.14 Upon completion of IPD, disconnect patient from dialysis machine as per *Renal SGH WPI APD End of Therapy and Disconnection Procedure – HomeChoice Dialysis Machine*
- 2.15 After disconnection, heparin lock new or resting PD catheter to maintain patency as per [SGH CLIN 364 Peritoneal Dialysis Catheter \(PDC\) – Heparin lock](#), or patient to continue with PD at home as usual or as per renal and/or PD team advice
- 2.16 On discharge, PD nurses will provide ongoing outpatient follow-up and review

3. Network file	Renal, Peritoneal Dialysis
4. External references / further reading	https://stgrenal.org.au/dialysis Alkatheeri, A. M. A., Blake, P. G., Gray, D., & Jain, A. K. (2016). Success of Urgent-Start Peritoneal Dialysis in a Large Canadian Renal Program. <i>Peritoneal Dialysis International</i> , 36(2), 171-176. doi: 10.3747/pdi.2014.00148 Amirmokri, P., Morgan, P., & Bastani, B. (2007). Intra-peritoneal administration of potassium and magnesium: a practical method to supplement these electrolytes in peritoneal dialysis patients. <i>Renal Failure</i> , 29(5):603-5. PMID: 17654324 Arramreddy, R., Zheng, S., Saxena, A. B., Liebman, S. E., & Wong, L. (2014). Urgent-Start Peritoneal Dialysis: A Chance for a New Beginning. <i>Am J Kidney Dis</i> , 63(3), 390-395. doi: 10.1053/j.ajkd.2013.09.018 Bento, C., Fuerbringer, R., Tabisz, A., & Riella, M. (2016). Live or let die: when intermittent peritoneal dialysis is the only plausible solution

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	<p>for survival. <i>Minerva Urol Nefrol</i>, 68(1), 45-46.</p> <p>Casaretto, A., Rosario, R., Kotzker, W. R., Pagan-Rosario, Y., Groenhoff, C., & Guest, S. (2012). Urgent-start peritoneal dialysis: report from a U.S. private nephrology practice. <i>Adv Perit Dial</i>, 28, 102-105.</p> <p>Ghaffari, A. (2012). Urgent-start peritoneal dialysis: a quality improvement report. <i>Am J Kidney Dis</i>, 59(3), 400-408. doi: 10.1053/j.ajkd.2011.08.034</p> <p>Groenhoff, C., Delgado, E., McClernon, M., Davis, A., Malone, L., Majirsky, J., & Guest, S. (2014). Urgent-start peritoneal dialysis: nursing aspects. <i>Nephrology nursing journal : journal of the American Nephrology Nurses' Association</i>, 41(4), 347-352; quiz 353.</p> <p>Szeto, C.-C., Li, P. K.-T., Johnson, D. W., Bernardini, J., Dong, J., Figueiredo, A. E., . . . Brown, E. A. (2017). ISPD Catheter-Related Infection Recommendations: 2017 Update. <i>Peritoneal Dialysis International</i>, 37(2), 141-154. doi: 10.3747/pdi.2016.00120</p> <p>Wang, C., Fu, X., Yang, Y., Deng, J., Zhang, H., Deng, H., . . . Liu, Y. (2017). A Comparison between Intermittent Peritoneal Dialysis and Automatic Peritoneal Dialysis on Urgent Peritoneal Dialysis. <i>American Journal of Nephrology</i>, 45(6), 540-548.</p> <p>Xu, Q., Xu, F., Fan, L., Xiong, L., Li, H., & et al. (2014) Serum Potassium Levels and Its Variability in Incident Peritoneal Dialysis Patients: Associations with Mortality. <i>PLoS ONE</i> 9(1): e86750. doi:10.1371/journal.pone.0086750</p> <p>Zanger, R. (2010). Hyponatremia and hypokalemia in patients on peritoneal dialysis, <i>Seminars in Dialysis</i>, 23(6):575-580</p>
5. Specialty/department committee approval	Peritoneal Dialysis Committee
6. Department head approval	Mark Brown or Franziska Pettit, Department Head Renal Services Date: 20.06.17
7. Executive sponsor approval – Nurse Manager	Sarah Massey, A/Nurse Manager Medicine Date: Aug 2017

Revision and Approval History

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