

PERITONEAL DIALYSIS (PD) – INPATIENT MANAGEMENT

Cross References (including NSW Health/ SESLHD policy directives)	<u>SGH CLIN396 Peritoneal dialysis patients – Preparation for invasive procedures or surgery</u> <u>SGH CLIN 402 Peritoneal Dialysis Catheter – Daily Care, dressing and management</u> <u>SGH CLIN 414 Peritoneal Dialysis Catheter (PDC) – Post insertion Catheter Care, Dressing and Management</u> <u>SGH CLIN 433 Peritoneal Dialysis Catheter (PDC) Infection – Exit Site and Tunnel Infection Management and Treatment</u> <u>PD SGH WPI 141 Peritoneal Dialysis Catheter (PDC) – Break-in management for patients requiring urgent peritoneal dialysis with newly inserted PDC</u> <u>PD SGH WPI 143 Peritoneal Dialysis (PD) – Manual drain with a drain bag (ultra set)</u> <u>PD SGH WPI 144 Peritoneal Dialysis (PD) – Management of patients requiring intermittent peritoneal dialysis</u> <u>PD SGH WPI 216 Automated Peritoneal Dialysis (APD) Connection And Disconnection Procedure – Claria Dialysis Machine</u> <u>PD SGH WPI 217 Continuous Ambulatory Peritoneal Dialysis (CAPD) Freeline Solo Exchange Procedure</u>
1. What it is	A clinical business rule to assist with the management of inpatients requiring peritoneal dialysis.
2. Risk Rating	Medium
3. Employees it Applies to	Nurses and medical officers (MO) across St George Hospital

4. Process**Background**

Peritoneal dialysis (PD) patients manage their own treatment at home. There are two forms of PD:

- Continuous Ambulatory Peritoneal Dialysis (CAPD) which involves the patient performing a manual exchange of dialysis fluid four to five times a day.
- Automated Peritoneal Dialysis (APD) which is an automated system where patient connects to a machine at night (usually 8-10 hours) and the machine controls the inflow and outflow of the dialysis fluid.

4.1 Peritoneal Dialysis Support

- PD patients admitted to the hospital will require support from the renal healthcare team.
- PD clinical nurse consultant (CNC) page 1091 and PD nurses (ext 33770) provide inpatient PD support and outpatient care for patients on PD during operating hours – Monday to Friday, 0730 to 1600.
- 4 South (4S) ward (ext 33458) is the primary contact for after-hours PD support, including weekends and public holidays.

- You may also request for PD support from:
 - ⇒ Clinical nurse educators (CNE), clinical nurse specialists (CNS) and senior registered nurses (RN) from 4South and Emergency Department
 - ⇒ Baxter Healthcare (ph 1800BAXTER or 1800 229 837) provides technical support 24 hours a day, 7 days a week for any PD machine related issues
- All Workplace Instructions (WPIs) and Clinical Business Rules (CLBRs) related to the management of PD patients are found on the hospital intranet page [SGSHHS Clinical Business Rules](#)

4.2 Management of PD patients on presentation to Emergency Department

- Perform critical clinical care as indicated
- Request for the “Dialysis Patient Card” to collect renal information from the patient. Return the card to patient once collection is completed.
- Refer to the relevant PD CBR or WPI in the hospital intranet page [SGSHHS Clinical Business Rules](#), inform and seek assistance from the Renal Team and appropriate support nurses as per *4.1 Peritoneal Dialysis Support* for the following:
 - To determine and deliver the appropriate PD therapy
 - To assist in ascertaining the appropriate PD catheter exit site dressing i.e. Daily or Post-insertion catheter care and dressing
 - For PD catheter and exit site related concerns
 - For PD catheter manual drain, flush, blockage, contamination and/or damage
 - For PD-related infection management and specimen collection
- Note: PD catheter and exit site can be reviewed but should not be accessed or handled by non-accredited staff as per [SGH CLIN 433 Peritoneal Dialysis Catheter \(PDC\) Infection – Exit Site and Tunnel Infection Management and Treatment](#)
- For PD or renal related admission, aim to transfer patient to 4South as soon as possible

4.3 Management of PD patients during hospital admission

- Routine care of PD patients on the ward/unit:
 - a. Daily weight
 - b. Fluid balance and recording. Is patient on a fluid restriction?
 - c. Routine clinical observations – Blood Pressure, Pulse, Temperature and Oxygen Saturation
 - d. Strict bowel management and recording
 - Note: Alert Renal Team and PD nurses if patient is constipated
 - e. Order a PD diet for the patient. Confirm with the Renal Dietitian if patient is suitable to continue with PD diet
 - f. Documentation of PD procedures and completion of PD charts
 - g. PD Catheter exit site care and dressing as per [SGH CLIN 402 Peritoneal Dialysis Catheter – Daily Care, dressing and management](#) or [SGH CLIN 414 Peritoneal Dialysis Catheter \(PDC\) – Post insertion Catheter Care, Dressing and Management](#)
- Note 1: PD patients should be encouraged to do their own daily exit site dressing if able

Note 2: PD catheter and exit site can be reviewed but should not be accessed or handled by non-accredited staff as per [SGH CLIN 433 Peritoneal Dialysis Catheter \(PDC\) Infection – Exit Site and Tunnel Infection Management and Treatment](#)

- Support the dialysis regimen as per the Renal Team and PD nurse recommendations
- Refer to the relevant PD CBR or WPI in the hospital intranet page [SGSHHS Clinical Business Rules](#), seek assistance from Renal Team and appropriate support nurses as per *4.1 Peritoneal Dialysis Support* and for:
 - PD catheter and exit site related concerns
 - PD catheter manual drain, flush, blockage, contamination and/or damage
 - PD-related infection management and specimen collection
- Refer to [SGH CLIN396 Peritoneal dialysis patients – Preparation for invasive procedures or surgery](#) for PD patients about to undergo invasive clinical or diagnostic procedures or surgery

4.4 Management of PD patients during peritoneal dialysis

- For patients on CAPD
 - Ensure dialysis lines and PD Catheter are not kinked
 - Ensure dialysis line is not pulling on PD Catheter
- For patients on APD
 - Position the PD machine in a safe area close to the patient bed and ensure power cords are secured from tripping
 - Ensure patient's bed is the same height as the PD machine
 - If the machine alarms during treatment
 - Ensure dialysis lines and PD catheter are not kinked
 - Reposition patient
 - If PD machine alarm continues, seek assistance as per *4.1 Peritoneal Dialysis Support*
- For patients on intermittent peritoneal dialysis (IPD), please refer to [PD SGH WPI 144 Peritoneal Dialysis \(PD\) – Management of patients requiring intermittent peritoneal dialysis](#)
- For patient requiring urgent PD on a brand new PD catheter (< 3 weeks from time of insertion), please refer to [PD SGH WPI 141 Peritoneal Dialysis Catheter \(PDC\) – Break-in management for patients requiring urgent peritoneal dialysis with newly inserted PDC](#)
- Discontinue and disconnect patient from dialysis in an emergency i.e. cardiac arrest, respiratory arrest, extreme hypotensive episodes, fire and/or any situations that may require patient to be evacuated
- Discontinue and disconnect patient from dialysis for any signs of dialysate leak, extreme abdominal pain, excessive abdominal bleed, faecal-coloured PD drainage and persistent PD catheter blockage as per [PD SGH WPI 216 Automated Peritoneal Dialysis \(APD\) Connection And Disconnection Procedure – Claria Dialysis Machine](#) or [PD SGH WPI 217 Continuous Ambulatory Peritoneal Dialysis \(CAPD\) Freeline Solo Exchange Procedure](#)
- For any PD related concerns, notify the Renal Team and PD nurses

4.5 General Management

- Document the PD procedure and outcomes in eMR clinical notes and on PD chart

- PD catheter care is paramount in preventing PD related complications and infections, hence:
 - PD set-up and connection can only be performed by or under the supervision of an accredited staff as per [PD SGH WPI 216 Automated Peritoneal Dialysis \(APD\) Connection And Disconnection Procedure – Claria Dialysis Machine](#) or [PD SGH WPI 217 Continuous Ambulatory Peritoneal Dialysis \(CAPD\) Freeline Solo Exchange Procedure](#)
 - PD catheter and exit site can be reviewed but should not be accessed or handled by non-accredited staff as per [SGH CLIN 433 Peritoneal Dialysis Catheter \(PDC\) Infection – Exit Site and Tunnel Infection Management and Treatment](#)
- “Peritoneal Dialysis and PD Catheter” and “Peritoneal Dialysis and Training” brochures are available from the PD Unit, 4South or the hospital intranet page [SGSHHS Clinical Business Rules](#)

4.6 Management of Peritoneal Dialysis patients for PD catheter removal

- Seek assistance from appropriate support nurses as per *4.1 Peritoneal Dialysis Support*, to drain out all peritoneal dialysis effluent as per [PD SGH WPI 143 Peritoneal Dialysis \(PD\) – Manual drain with a drain bag \(ultra set\)](#) before the procedure
- Ensure all pre-operative preparation is completed before procedure

5. Keywords	Peritoneal dialysis, Peritoneal dialysis catheter, Peritoneal dialysis care
6. Functional Group	Renal, Peritoneal Dialysis
7. External References	<p>Gokal, R., Alexander, S., Ash, S., Chen, T.W., Danielson, A., Holmes, C., Joffe, P., Moncrief, J., Nichols, K., Piraino, B., Prowant, B., Slingeneyer, A., Stegmayr, B., Twardowski, Z., and Vas, S. (1998). Peritoneal catheters and exit-site practices toward optimum peritoneal access: 1998 update. <i>Peritoneal Dialysis International</i>. 18(1), 11-33</p> <p>Li, P. K.-T., Szeto, C. C., Piraino, B., de Arteaga, J., Fan, S., Figueiredo, A. E., Johnson, D. W. (2016). ISPD Peritonitis Recommendations: 2016 Update on Prevention and Treatment. <i>Peritoneal Dialysis International</i>, 36(5), 481-508. doi: 10.3747/pdi.2016.00078</p> <p>Piraino, B., Bernardini, J., Brown, E., Figueiredo, A., Johnson, D. W., Lye, W.-C., et al. (2011). ISPD Position Statement on Reducing the Risks of Peritoneal Dialysis-Related Infections. <i>Peritoneal Dialysis International</i>, 31:614-630.</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>
8. Consumer Advisory Group (CAG) approval of patient information brochure (or related material)	Not applicable

9. Implementation and Evaluation Plan <i>Including education, training, clinical notes audit, knowledge evaluation audit etc</i>	Inservices Learning Packages Publication on SGSHHS CIBR intranet page
10. Knowledge Evaluation	Q1: Who is to be notified if a PD patient presents for hospital admission? A: Renal Team, PD nurses and 4South. Q2: Who can access a PD catheter? A: Only the staff accredited to perform PD and PD dressing or staff working towards PD accreditation under the supervision of an accredited staff. Q3: Who is to be notified for any PD related issues? A: Renal team, PD CNC and nurses Q4: When is a patient to be disconnected from PD? A: At the end of a PD therapy. Sometimes PD therapy may be aborted prematurely in the event of crisis or emergency situations i.e. dialysate leak, extreme abdominal pain, excessive abdominal bleed, faecal-coloured PD drainage, persistent PD catheter blockage, cardiac arrest, respiratory arrest, extreme hypotensive episodes, fire and/or any situations that may require patient to be evacuated.
11. Who is Responsible	Director of St George and Sutherland Renal Service Nursing Unit Manager, Dialysis Unit

Approval for Peritoneal Dialysis (PD) – Inpatient Management	
Specialty/Department Committee	Committee title: Peritoneal Dialysis Committee Chairperson name/position: Franziska Pettit, Staff Specialist Date: 03.04.19
Nurse Manager	Name/position: Christine Day, Nurse Manager Medicine Date: 15.04.19
Medical Head of Department	Name /position: George Mangos, Department Head Renal Services Date: 04.04.19
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Revision and Approval History

Date	Revision number	Author (Position)	Revision due
May 2016	0	(Anna) Claire Cuesta (PD CNC)	May 2019
May 2019	1	(Anna) Claire Cuesta (PD CNC)	May 2022

General Manager's Ratification

Name: Leisa Rathborne Date: 30.05.19