## Peritoneal Dialysis (PD) – Intraperitoneal Meropenem Administration

| Cross References | Medication Handling in NSW Public Health Facilities; NSW Health PD2013_043  
Peritoneal Dialysis – Peritonitis Treatment Protocol; Renal Department Protocol  
Peritoneal Dialysis – Antibiotic Administration Guidelines; Renal Department Protocol  
Continuous Ambulatory Peritoneal Dialysis (CAPD) Freeline Solo Exchange Procedure; Renal Department Protocol |
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<td><strong>1. Purpose</strong></td>
<td>To ensure the administration of intraperitoneal Meropenem is performed according to best practice guidelines reducing the risk of infection and ensuring patient safety</td>
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<td><strong>2. Process</strong></td>
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<td><strong>2.1 Devices</strong></td>
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| **2.1.1 Equipment** | □ Trolley  
□ Portable IV pole  
□ Water for injection – 10 ml ampoule  
□ Alcohol swabs x 2  
□ Blue clamp |
| **2.1.2 Key parts** | □ Meropenem – 500 milligram vial  
□ Drawing-up needle (18G)  
□ 21 G needle  
□ 10 ml syringe  
□ PD fluid (Freeline Solo bag) |
| **2.1.3 Key site** | ▪ Rubber bung on Meropenem vial  
▪ Rubber bung on PD fluid  
▪ Abdominal PD catheter |
| **2.2 Recommended Intraperitoneal Dose for treatment of Peritonitis** | ▪ Daily dose is 800 milligram/day divided into 200 mg/bag for 14-21 days |
2.3 Procedure
1. Warm the selected PD fluid (freeline solo bag) on the warmer
   a. Select appropriate PD fluid strength by conducting a fluid assessment on
      patient 30 minutes prior to CAPD procedure
   b. Note: PD fluid takes 30 minutes to warm.
2. Ensure the “5 Rights” of Principles for Safe Medication Administration is observed with
   second person check
3. Perform hand hygiene
4. Identify and gather equipment and key parts for procedure
5. Check expiry dates on antibiotic vial, PD fluid and water for injection
6. Clean trolley/work surface with detergent
7. Perform hand hygiene
8. Don gloves
9. Prepare general aseptic field equipment and key parts near the patient’s bedside
10. Use the sharp edge of the blue clamp to open outer pouch of the dialysis bag. DO NOT
    USE SCISSORS OR KNIVES
11. Place the opened bag on top of the clean trolley and ensure the lines are facing up
12. Recheck the dialysis bag strength, volume, expiry, colour and for leakage
13. Prepare the antibiotics using aseptic technique ensuring all the key parts/sites are
    protected
   a. Alcohol swab the rubber bung on Meropenem vial;
   b. Attach drawing up needle to 10 ml syringe;
   c. Open water ampoules and aspirate all content into the 10 ml syringe, discard 5
      mls of water;
   d. Push needle into the rubber bung on a Meropenem vial, inject the remaining 5 mls
      of water, invert vial and shake until all powder dissolves then aspirate all content;
   e. Once Meropenem vial is emptied into the 10 ml syringe, discard 3 mls of
      Meropenem solution;
   f. Replace drawing-up needle with 21G needle.
14. Administer the antibiotics into the dialysis fluid using aseptic technique ensuring all the
    key parts/sites are protected
   a. Alcohol swab the rubber bung on dialysis fluid;
   b. Push needle into the centre of the dialysis fluid bung and inject the remaining 2
      mls of Meropenem solution.
      Note: For accidental piercing of the bag or the side of the bung , use a new
      dialysis fluid
15. Administer Meropenem intraperitoneally through CAPD exchange as per Continuous
    Ambulatory Peritoneal Dialysis (CAPD) Freeline Solo Exchange Procedure; Renal
    Department Protocol
   a. Note: Dwell intraperitoneal Meropenem for 6 hours
16. Wear PPE
17. Discard bag and lines in the clinical waste bin, discard needles in sharps bin
18. Remove gloves and PPE
19. Perform hand hygiene
20. Clean trolley after use and perform hand hygiene
21. Sign and co-sign the medication chart  
22. Document the procedure on the CAPD chart and patient notes  
23. Handover to the next shift

### 3. Network file location/reference, if applicable

| Network file location/reference, if applicable | St George Hospital Renal Website: http://strenal.org.au/ |

### 4. External References / Further Reading


### Revision and Approval History

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<thead>
<tr>
<th>Date published</th>
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<tbody>
<tr>
<td>March 2015</td>
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