



## PROCEDURE: Peritoneal Equilibration Test (PET)

### Purpose:

To assess the peritoneal membrane characteristics for individual patients. The PET can be used to estimate transport properties of the membrane.

### Materials Needed:

2 liter bag of 2.5% dialysate  
Transfer set with drain bag  
Disinfectant  
Sterile gauze  
Lab tubes for dialysate samples (3 or 4 samples)  
Lab tube for one blood sample

### Personal Protective Equipment Recommended:

Gloves, apron, mask, and safety glasses or full face shield

**NOTE:** The patient should be instructed to report to the clinic with the overnight dwell in the abdomen. The nurse will drain the overnight dwell in the clinic.

STEP	RATIONALE
1. Put on personal protective equipment.	1. To comply with infection control policy.
2. Prepare 2 liter bag of 2.5% dialysate.	2. To be used for procedure.
3. Drain overnight dwell completely with the patient in an upright position. Record drain volume. The overnight dwell must be at least 6 hours long.	3. To empty the abdomen of the equilibrated effluent.
4. Infuse the 2 liter 2.5% solution with the patient in a supine position. Infuse the solution as rapidly as possible (400 ml every 2 minutes). Instruct the patient to turn from side to side every 2 minutes during the infusion.	4. To infuse dialysate in a manner that allows the greatest contact of dialysate with the peritoneal membrane.



5. Dialysate samples will be drawn at time 0, 2 hour, and 4 hour. An optional sample at time 1 hour may be drawn. Time 0 dwell occurs IMMEDIATELY after the dialysate is infused and time 4 hour dwell is at the completion of the 4 hour drain.
  6. To obtain effluent samples:
    - Soak the medication port for 5 minutes with gauze soaked with disinfectant.
    - Drain 200 ml into the drain bag, agitate the bag.
    - Draw a 10 ml sample of effluent from the medication port using aseptic technique.
    - Place sample into properly labeled lab tube.
    - Reinfuse the remaining effluent.
  7. Draw a blood sample when the 2 hour effluent sample is drawn. Send blood for urea, creatinine, and glucose.
  8. At 4 hours, completely drain the patient. Allow 20 minutes to drain. Agitate the drain bag, draw an effluent sample. Record effluent drain volume.
5. Effluent must be obtained to perform analysis of urea, creatinine, and glucose.
  6. Aseptic technique must be maintained to prevent the introduction of bacteria into the peritoneal membrane.
    - 200 ml will provide an adequate aliquot of effluent to sample.
    - Lab tubes must be labeled correctly otherwise results will not make sense.
  7. A blood sample must be obtained to calculate Dialysate/Plasma (D/P) ratios.
  8. To complete the PET the abdomen must be drained.