Optimal Dwell Time for maximal small solute clearances in Peritoneal Dialysis patients

**Conclusion**: 20-minute dwell time, representing a daily dialysate flow rate of 28 L, demonstrated the highest small solute clearances in chronic peritoneal dialysis patients.

**METHODS**
- Cohort study
- 36 chronic PD patients

**RESULTS**
- Urea and creatinine clearances (ml/min) were highest at dwell time of 20 mins
  - p value <0.05
- Max Na removal - 0 mins (394.56 mEq/day; p 0.005)
- Max K, P, and Uric acid removal - 20 mins
- Max UF rate - 10 & 15 mins

No association between Solute removals and peritoneal membrane transport types

UF, Solute clearance & Removal rates of:
- Urea
- Creatinine
- Sodium
- Potassium
- Phosphorus
- Uric acid

- 24 patients
- 9 dwell time points (in minutes)
  - 0, 5, 10, 15 [Day1]
  - 20, 30, 40 [Day2]
  - 50, and 60 [Day3]
- Using 2 consecutive cycles x each dwell time

- 12 patients
- 6 dwell time points (in hours)
  - 2, 3, 4, 5, 6, and 7 hours
- Over 6 consecutive days
- Using 3 consecutive cycles x each dwell time