

F-D10

## 내원 간 수축기 혈압의 변동성이 복막투석 환자의 예후에 미치는 영향

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### Visit-to-visit Variability of Systolic Blood Pressure and Outcomes of Peritoneal Dialysis Patients

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**Background:** Hypertension is common among patients with end stage renal disease and often remains poorly controlled in peritoneal dialysis (PD) patients. Many PD patients suffer of cardiovascular complications. Recent studies have suggested that a high visit-to-visit variability is associated with an increase in subsequent cardiovascular events and complications. However, there are few studies about visit-to-visit systolic blood pressure (SBP) variability and outcomes in PD patients.

**Methods:** The current study reviews about visit-to-visit SBP variability and outcomes in PD patients. We reviewed office based blood pressure record and laboratory findings of PD patients in Seoul National University Hospital from May 2005 to March 2011. Inclusion criteria were patients receiving peritoneal dialysis at least 3 months. Subjects were followed up for an average of 47 months, during which time cardiovascular and non-cardiovascular fatal events were recorded. We retrospectively reviewed office based blood pressure data up to two years later from PD start date. The subjects were grouped as quartile based on their office based SBP calculated using standard deviation, coefficient of variation and average blood pressure variability index. Our study revealed about association of cardiovascular and non-cardiovascular fatal events and quartile of visit-to-visit SBP variability.

**Result:** Among 197 PD patients, 9 patients were followed up loss, 8 patients were excluded due to short PD time, and 1 patient had missing blood pressure data. Large variability patients had significantly high proportion of smoking history and high SBP (standard deviation of systolic blood pressure variability, Q1: 125.2±9.4 mmHg, Q2: 130.4±10.7 mmHg, Q3: 130.8±9.0 mmHg, Q4: 137.0±9.4 mmHg, p<0.001). And large SBP variability patients had significantly more anti-hypertensive medications. During the follow-up, 10 patients died and among them, 7 patients had cardiovascular events (standard deviation of systolic blood pressure variability, Q1:1, Q2:3, Q3:3, Q4:3 /Q1:1, Q2:1, Q3:2, Q4:3). Although not significantly due to small sample size, large visit-to-visit SBP variability patients had more cardiovascular death during follow up.

**Conclusion:** Large visit-to-visit SBP variability patients had significantly more cardiovascular risk factors. Although there was no statistically significant difference of cardiovascular death in the largest visit-to-visit SBP variability patients group.

**Key Words:** 내원 간 수축기 혈압의 변동성, 복막 투석, 심혈관계 사망  
Visit-to-visit variability of systolic blood pressure