

## 말기 신부전 환자에서 말초혈관질환의 불량한 예후에 대한 예측인자

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오형중, 유동은, 한승혁, 유태현, 강신욱, 최규현

### Predictors for Poor Prognosis in PAOD Patients with ESRD

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**Background:** Peripheral arterial occlusive disease (PAOD) frequently complicates in end stage renal disease (ESRD) patients and sometimes leads to serious outcomes such as amputation and sepsis. This study aimed to identify predictors for poor prognosis in PAOD patients with ESRD.

**Methods:** We conducted a retrospective analysis of 64 ESRD patients who were diagnosed with PAOD between Jan 2006 and Dec 2010 in Severance Hospital. We collected baseline demographic data, dialysis modalities, and laboratory values at the time of PAOD diagnosis. We identified predictors for poor prognosis in these patients by multivariate logistic regression analysis. Poor prognosis was defined as amputation or death from sepsis.

**Results:** The mean age of the patients was 59 years, and 46 (71.9%) were male. 75% were on hemodialysis, and 25% performed peritoneal dialysis. Average interval from initial dialysis to PAOD was  $55.8 \pm 62.4$  months. 52 (81.3%) patients had diabetes, and 47 (73.4%) had coronary artery disease. 61 (95.3%) underwent angiographic intervention for PAOD, 26 (40.6%) had their limbs amputated, and 7 (10.9%) died from sepsis. 33 patients with poor prognosis had significantly higher white blood cell (WBC) count and red blood cell distribution width (RDW) in comparison with those who showed fair prognosis. In univariate logistic regression analysis, diabetes [odds ratio (OR), 7.38; 95% confidence interval (CI), 1.47–37.2;  $p=0.015$ ], WBC (OR, 1.28 per 1000/ $\mu\text{L}$ ; 95% CI, 1.03–1.60;  $p=0.028$ ), RDW (OR, 1.59 per 1%; 95% CI, 1.09–2.31;  $p=0.015$ ) were predictors for poor prognosis. In multivariate logistic regression analysis adjusted for age, gender, and statistically significant variables in univariate analysis, diabetes (OR, 23.31; 95% CI, 2.44–222.32;  $p=0.006$ ), RDW (OR, 2.08 per 1%; 95% CI, 1.26–3.44;  $p=0.004$ ), WBC (OR, 1.00 per 1000/ $\mu\text{L}$ ; 95% CI, 1.04–1.83;  $p=0.027$ ) were still significant predictors for poor prognosis in ESRD patients with PAOD.

**Conclusion:** Poor prognosis is anticipated in ESRD patients with PAOD who have diabetes, high RDW, or high WBC at the time of diagnosis. Meticulous management is warranted in these risk groups.

**Key Words:** 말초혈관질환, 말기신부전증, 예후인자  
PAOD, ESRD, Prognostic factor