

혈액 투석 환자에서 보행 능력이 사망률에 미치는 영향

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Relationship of Ambulatory Activity with All-cause Mortality in Hemodialysis Patients

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Background: Low physical activity has been reported to be associated with mortality in dialysis end-stage renal disease (ESRD) patients. However, the association between ambulatory activity and all-cause mortality is not well established in hemodialysis (HD) patients.

Methods: A total of 3,251 HD patients were enrolled from the Clinical Research Center registry for ESRD cohort in Korea. Patients were divided into four groups according to the questionnaire for ambulatory activity (Group 1: patients with normal ambulatory activity, Group 2: patients who walk with assistance such as person, cane or walker, Group 3: patients who required wheelchair for ambulation, Group 4: bed-ridden patients). The primary outcome was all-cause mortality.

Results: The number of patients in each group was 2,719 (83.6%) in group 1, 342 (10.5%) in the group 2, 145 (4.5%) in the group 3 and 45 (1.4%) in group 4. The median follow-up period was 30 months. Kaplan-Meier analysis showed that the all-cause mortality rate was significantly different in among four groups ($p < 0.001$, Log-rank). In the multivariate Cox regression analyses, patients who walk with assistance and patients required wheelchair for ambulation had significantly higher all-cause mortality compared with patients with normal ambulatory activity (HR 1.57, 95% CI, 1.11-2.21, $p = 0.011$ and HR 2.47, 95% CI, 1.56-3.91, $p < 0.001$, respectively).

Conclusions: Our data demonstrated that limited ambulatory activity was strongly associated with all-cause mortality in HD patients. Careful attention for enhancement of ambulatory activity in HD patients with limited ambulatory activity may be needed.

Key Words: 혈액투석, 활동성, 사망률
 Hemodialysis, Activity, Mortality