

**Abstract Type : Oral**

**Abstract Submission No. : 1446**

## **The impact of severe depression on the survival of older patients with end-stage kidney disease**

**Young Hwan Lee**, You Hyun Jeon, Jeong-Hoon Lim, Hee-Yeon Jung, Ji-Young Choi, Sun-Hee Park, Chan-Duck Kim, Yong-Lim Kim, Jang-Hee Cho  
Department of Internal Medicine, Kyungpook National University School of Medicine, Korea, Republic of

**Objectives:** Incidence of depression increases in patients with end-stage kidney disease (ESKD). We evaluated the association between depression and mortality among older patients with ESKD, which has not been studied previously.

**Methods:** This nationwide prospective cohort study included 487 patients with ESKD aged > 65 years, who were categorized into minimal, mild-to-moderate, and severe depression groups based on their Beck Depression Inventory-II (BDI-II) scores. BDI-II scores were separated into three symptom domains: affective, cognitive, and somatic depressive symptoms. The association between the depression groups and survival were analyzed using multivariate Cox proportional hazard regression models. Predisposing factors for high BDI-II scores were evaluated using logistic regression analysis. The associations among the three depressive-symptom domains and survival were also analyzed.

**Results:** The severe depression group showed a higher modified Charlson comorbidity index value and lower serum albumin, phosphate, and uric acid levels than the other depression groups. The Kaplan–Meier curve revealed a significantly lower survival in the severe depression group than in the minimal and mild-to-moderate depression groups ( $P = 0.011$ ). Multivariate Cox regression analysis confirmed that severe depression was an independent risk factor for mortality in the study cohort [hazard ratio(HR), 1.39; 95% confidence interval (CI), 1.01–1.91;  $P = 0.041$ ]. BDI-II scores were associated with modified Charlson comorbidity index ( $P = 0.009$ ) and serum albumin level ( $P = 0.004$ ) in multivariate linear regression. Among the three depressive symptoms, higher somatic symptom scores were associated with increased mortality (HR, 2.45; 95% CI, 1.25–4.79;  $P = 0.009$ ).

**Conclusions:** Among older patients with ESKD, severe depression increases mortality compared with minimal or mild-to-moderate depression. And patients with concomitant somatic symptoms require careful management of their comorbidities and nutritional status.

Table 1. Associations of depression and mortality in Cox proportional hazard regression model