

복막 투석 중인 말기 신부전 환자의 혈청 β 2-microglobulin과 사망률의 관계

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The Impact of Serum β 2-microglobulin on Mortality in Peritoneal Dialysis Patients: A Prospective Cohort Study

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Background: β 2-microglobulin is a surrogate marker of middle-molecule uremic toxins and associated with mortality in hemodialysis patients. However, the impact of serum β 2-microglobulin levels on mortality in peritoneal dialysis (PD) patients is uncertain. The purpose of this study was to examine the association of serum β 2-microglobulin level with mortality in PD patients using the Clinical Research Center (CRC) registry for end-stage renal disease (ESRD) cohort in Korea.

Methods: A total of 656 PD patients were selected from the CRC registry for ESRD in Korea. Patients were categorized into three groups by tertiles of serum β 2-microglobulin. All-cause mortality and modality change was evaluated, using Cox regression to estimate the impact of serum β 2-microglobulin on mortality, adjusting for potential confounders.

Results: The median β 2-microglobulin level was 25.0 mg/L and the median follow-up period was 31 months. Kaplan-Meier analysis showed that the mortality rate was significantly different according to tertiles of serum β 2-microglobulin in PD patients ($p=0.015$, Log-rank). Multivariate Cox proportional hazards analysis showed that the highest tertile of β 2-microglobulin (>31.6 mg/L), compared with the lowest tertile (<18.4 mg/L) was associated with a hazard ratio of 4.29 (95% confidential interval 2.05-8.98) for all-cause death after adjustment for age, gender, BMI, comorbidity score, diabetes, hypoalbuminemia, and log CRP.

Conclusion: These results is supportive of the potential role of the serum β 2-microglobulin level as a predictor of mortality in PD patients.

Key Words: 베타2-마이크로글로불린, 사망률, 복막 투석
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