

혈액투석 환자에서 Gamma-glutamyltransferase 수치와 환자 사망률

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Gamma-glutamyltransferase Levels and Patient Mortality in Hemodialysis Patients

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Background: Serum gamma-glutamyltransferase (GGT) level has been reported associated with oxidative stress and elevated serum GGT levels are associated with mortality the general population. However, the association between serum GGT levels and mortality in hemodialysis (HD) patients is uncertain. Our aim is to investigate the relationship between serum GGT levels and mortality in HD patients.

Methods: HD patients were selected from Clinical Research Center registry for End Stage Renal Disease cohort in Korea. Patients were categorized into three groups by tertiles of serum GGT levels as follows: Tertile 1, GGT <14 U/L; Tertile 2, GGT=14-28 U/L; Tertile 3, GGT >28 U/L. Cox regression analysis was used to calculate the adjusted hazard ratio (HR) of mortality with a serum GGT levels of tertile 1 as the reference.

Results: A total of 1,444 PD patients were included. The median follow-up period was 28 months. The multivariate Cox proportional hazard model showed that the highest tertile of serum GGT levels were associated with higher mortality with tertile 1 as the reference (HR 2.27, 95% CI, 1.07-4.72, p=0.029) after adjustment for clinical variables, while there was no significant difference in mortality between tertile 1 and tertile 2 (HR 2.06, 95% CI, 0.96-4.42, p=0.0620).

Conclusions: Our data showed that elevated serum GGT level is significantly associated with increased mortality in HD patients.

Key Words: 사망률, 혈액투석, 감마-글루타미트르랜스퍼라제
 Mortality, Hemodialysis, Gamma-glutamyltransferase