

복막투석환자에서 Gamma-glutamyltransferase 수치가 사망률을 예측한다

가톨릭대학교 의과대학 내과학교실¹, 중앙대학교 의과대학 내과학교실²
 경북대학교 의과대학 내과학교실³, 서울대학교 의과대학 내과학교실⁴
 연세대학교 의과대학 내과학교실⁵, 전남대학교 의과대학 내과학교실⁶

박우영¹, 김수현², 김형욱¹, 김영옥¹, 진동찬¹, 송호철¹, 최의진¹
 김용림³, 김연수⁴, 강신욱⁵, 김남호⁶, 양철우¹, 김용균¹

Serum Gamma-glutamyltransferase Levels Predict Mortality in Peritoneal Dialysis Patients

Woo Yeong Park¹, Su-Hyun Kim², Hyung Wook Kim¹, Young Ok Kim¹, Dong Chan Jin¹
 Ho Chul Song¹, Euy Jin Choi¹, Yong-Lim Kim³, Yon-Su Kim⁴, Shin-Wook Kang⁵
 Nam-Ho Kim⁶, Chul Woo Yang¹, Yong Kyun Kim¹

Department of Internal Medicine¹, College of Medicine, The Catholic University of Korea, Seoul, Korea
 Department of Internal Medicine², College of Medicine, Chung-Ang University, Seoul, Korea
 Department of Internal Medicine³, School of Medicine, Kyungpook National University, Korea
 Department of Internal Medicine⁴, College of Medicine, Seoul National University, Seoul, Korea
 Department of Internal Medicine⁵, College of Medicine, Yonsei University, Seoul, Korea
 Department of Internal Medicine⁶, Chonnam National University Medical School, Korea

Background: Increased gamma-glutamyltransferase (GGT) is associated with oxidative stress and all-cause mortality in the general population. However, its role in peritoneal dialysis (PD) patients is unclear. The aim of this study is determine the association between GGT and mortality in PD patients.

Methods: PD 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 <16 U/L; Tertile 2, GGT=16-27 U/L; Tertile 3, GGT >27 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 757 PD patients were included. The median follow-up period was 28 months. The multivariate Cox proportional hazard model showed that the higher tertiles of serum GGT levels were associated with higher mortality (Tertile 2: HR 2.00, 95% confidence interval (CI), 1.05-3.84, p=0.036, Tertile 3: HR 1.91, 95% CI, 1.03-3.55, p=0.041) after adjustment for clinical variables.

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

Key Words: 사망률, 복막투석, 감마글루타미트랜스퍼라제
 Mortality, Peritoneal dialysis, Gamma-glutamyltransferase