

혈액투석 환자에서 노인영양위험지수와 전체 임파구 수의 사망률과의 연관성

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The Association of Geriatric Nutritional Risk Index and Total Lymphocytes Count with Mortality in Korean Hemodialysis Patients

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Background: We examined the relationships between the Geriatric Nutritional Risk Index (GNRI), total lymphocyte count (TLC), and mortality in Korean hemodialysis patients.

Methods: We examined the GNRI and TLC of 120 maintenance hemodialysis patients and followed these patients for 120 months. Predictors of all-cause death were examined using life table analysis and the Cox proportional hazards model.

Results: Life table analysis revealed that subjects with GNRI <90 (n=19) had lower survival rates than did those with GNRI ≥90 (n=101) (Wilcoxon test, p=0.048), but subjects with TLC <1,500/mm³ (n=76) had similar survival rates compared to subjects with TLC ≥1,500/mm³ (n=44) (Wilcoxon test, p=0.500). Multivariate Cox proportional hazards analyses demonstrated that GNRI is a significant predictor of mortality [hazard ratio (HR) 9.315, 95% confidence interval (CI) 1.161–74.753, p=0.036], after adjusting for age, sex, presence of type 2 diabetes mellitus, Kt/V, nPCR and TLC. The association of GNRI ≥90 with TLC ≥1500/mm³ excludes the occurrence of complications with moderate reliability.

Conclusion: GNRI may be a significant predictor of mortality in Korean hemodialysis patients. However, the inclusion of TLC may improve evaluations of nutritional risk and identification of patients at risk of malnutrition.

Key Words: 노인영양위험지수, 전체 임파구수, 혈액투석, 사망률
GNRI, Total lymphocytes count, Hemodialysis, Mortality

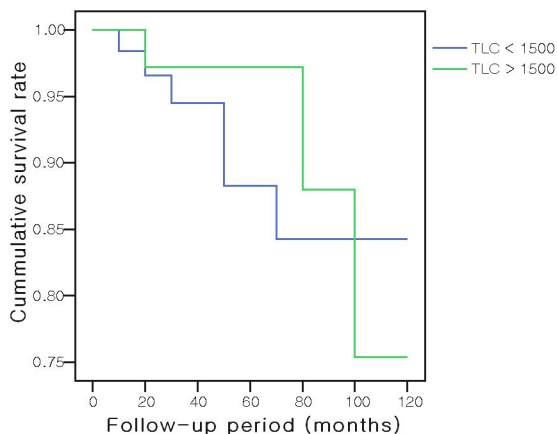


Fig. 1. Total lymphocytes count and 120-month survival of hemodialysis patients. In both groups, survival rate during the follow-up period was similar (life table analysis, p=0.500).

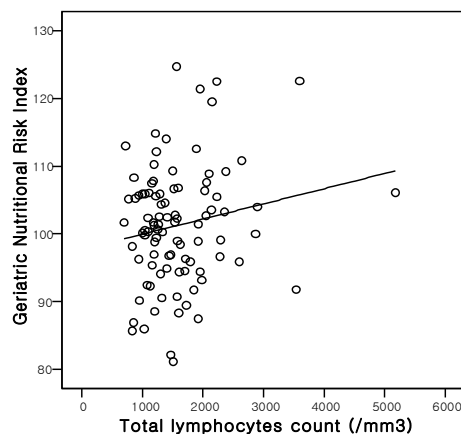


Fig. 2. Correlation between Geriatric Nutritional Risk Index and total lymphocytes count according to Pearson's simple correlation model (r = 0.176; p = 0.090)