

혈액투석을 받는 환자에서 resistin 수치와 모든 입원에 대한 예측인자로서의 관련성

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Low Resistin Level as a Strong Predictor of All Cause Hospitalization in Hemodialysis Maintenance Patient

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Background: Malnutrition and inflammation could be considered one of main causes that patients with end stage renal disease (ESRD) have high morbidity and mortality rates. For example, interleukin-6, known as a inflammation marker, is associated with mortality and morbidity in ESRD patient. Resistin, one of adipokines is associated with nutritional status and inflammation. We examined whether resistin levels predicts clinical outcome in ESRD patients.

Methods: We prospectively evaluated 105 outpatients on hemodialysis in single dialysis center (male, 46.7%; mean age, 54.5 ± 16.6 yr). We stratified the patients into 4 groups by the quartiles of serum resistin levels.

Results: Patients with lowest quartile (LQ) of serum resistin levels had higher events of all-cause hospitalization ($p=0.026$). During the 18.9-month observational period, patients with LQ of serum resistin levels had poor hospitalization-free survival (log rank test, $p=0.019$). After the adjustment of all co-variables, LQ of serum resistin levels independently increased the risk for the first hospital admission (hazard ratio [HR], 3.6; 95% confidence interval [CI], 1.5-8.5). In contrast, higher levels of serum interleukin-6 significantly increased the risk for the first hospitalization (HR, 2.6; 95% CI, 1.4-4.8). There was no significant correlation between serum resistin and interleukin-6 levels ($r=0.128$, $p=0.193$).

Conclusion: The current data showed that the low serum resistin levels may predict a poor clinical outcome in patients on hemodialysis. It suggests that resistin levels, and suggests that resistin may be a predictor independent on inflammation in hemodialysis patients.

Key Words: 혈액투석, 입원, resistin
Hemodialysis, Resistin, Hospitalization