

복막투석환자에서 prealbumin과 영양지표 및 염증과의 관령성

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The Association of Prealbumin with Nutritional Markers and Inflammation in Incident Peritoneal Dialysis Patients

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Background: Prealbumin, also known as transthyretin, is generally a more sensitive marker for protein-energy status than albumin and it is reported as an independent risk for mortality in hemodialysis patients. We evaluated the association of prealbumin with other markers of nutritional status and inflammation and also the impact of prealbumin on survival in incident PD patients.

Methods: The data of 139 PD patients who started CAPD in our hospital between January 2002 and November 2007 were analyzed. Laboratory data, dialysis adequacy and nutritional parameters were assessed within 3 months after PD initiation. Correlation between prealbumin and other nutritional parameters and inflammation were assessed. Cox proportional hazards regression was used to identify independent predictors of mortality.

Results: The mean age of patients was 52.7 ± 16.0 years (male 62.6%). The patients with diabetes as a primary renal disease were 46.8%, and 34.6% of patients had cardiovascular diseases (CVD). The mean duration of follow-up was 50.0 (range 2-120) months. Prealbumin was positively correlated with serum Cr, serum albumin, transferrin, % lean body mass (LBM) and nPCR, but negatively correlated with SGA score, age, hs-CRP and serum glucose. Mortality was significantly higher in low prealbumin (<30 mg/dL) group. In univariate analysis, age, diabetes, presence of CVD, SGA, low prealbumin (<30mg/dL), high CRP (>5 mg/L) were associated with patient survival. Multivariate analysis demonstrated that older age (age ≥ 55) (HR 3.002, CI 1.229-7.333), DM (HR 2.936 (1.431-6.026)), CVD (HR 2.902 (1.374-6.130)), high CRP (HR 2.232 (1.150-4.334)) were independent risk factors of mortality.

Conclusion: In conclusion, prealbumin has a good correlation with other nutritional markers. Older age, diabetes, CVD, high CRP were independent predictors for mortality in incident PD patients.

Key Words: prealbumin, 복막투석, 만성신부전

Prealbumin, Peritoneal dialysis, ESRD