

복막투석환자에서 복부비만과 사망과의 관계

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Association of Abdominal Obesity with the Mortality in Continuous Ambulatory Peritoneal Dialysis Patients

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Background: Several studies suggested that abdominal fat deposition is associated with an increased mortality risk in hemodialysis patients. However, there are few data about this issue in continuous ambulatory peritoneal dialysis (CAPD) patients.

Methods: An observational study after the baseline nutritional assessment was performed to evaluate whether the abdominal obesity is associated with mortality in 130 CAPD patients. The conicity index(COID), waist circumference/[0.109×square root of (weight/height)], was used as a parameter of abdominal obesity. Patients were classified according to the percentile of COID [group 1 (n=35) <25th percentile; group 2 (n=65) between 25th and 75th percentile, group 3 (n=30) >75th percentile]. After 9 years follow-up, all-cause and cardiovascular-cerebrovascular (CVCB) mortalities were evaluated.

Results: Mean age was 51±12 years. Male to female ratio was 1:1.4. Thirty percent was diabetics. Previous durations of CAPD were 21.5±22.3 (range 1-111 months). Age-adjusted Charlson comorbidity index (CCI) score was 3.4±1.4 (range 2~8). COID was 1.27±0.13 (range 0.50-1.54). Previous peritonitis rate was 0.05±0.12/year. Mean serum albumin was 3.3±0.5 g/dL. Twenty six (20.0%) were dead during follow-up. Twelve died of cerebral infarction or cardiovascular disease. Five year survival rate was 40.8%. Kaplan-Meier analysis revealed that 5-year survival rate was significantly lower in group 3 than in group 1 (23.3 vs. 53.3%, p=0.01). In multivariate analysis adjusted for age-adjusted CCI score, serum albumin, hemoglobin, body mass index, subjective global assessment group, sex and previous peritonitis rate, increased COID was an independent risk factor of all-cause mortality [hazard ratio (HR) 5.43, 95% confidence interval (CI) 1.16-25.4 in group 2; HR 14.98, 95% CI 2.73-82.24 in group 3] and CVCB mortality [HR 19.82, 95% CI 2.13-184.2 in group 3].

Conclusion: The abdominal obesity seems to be a strong predictor of mortality in CAPD patients.

Key Words: 복부비만, 복막투석, 사망

Abdominal obesity, Continuous ambulatory peritoneal dialysis