

복막투석 환자에서 잔여신기능에 따른 체성분의 변화

영남대학병원 내과학교실 신장내과

강석휘, 조규향, 박종원, 윤경우, 도준영

Change in Body Composition in Accordance with Residual Renal Function in Patients on Peritoneal Dialysis

Seok Hui Kang, Kyu Hyang Cho, Jong Won Park, Kyung Woo Yoon, Jun Young Do

Division of Nephrology, Department of Internal Medicine, Yeungnam University Hospital

Background: The aim of this study is to evaluate changes in body composition in accordance with residual renal function (RRF).

Patients and Methods: Two hundred-forty four patients with more than 1 year of follow-up were enrolled. The mean value of RRF at peritoneal dialysis (PD) initiation and 1 year after PD initiation was used as an indicator of the time-averaged RRF (TA-RRF). The patients were divided into 3 groups with respect to the tertile of the TA-RRF level: low tertile (n=81), middle tertile (n=82), and high tertile (n=81). Body composition measurement was determined from dual-energy x-ray absorptiometry and bioimpedance analysis. This analysis was performed at PD initiation and 1 year after PD initiation.

Results: Multivariate analysis showed that the high TA-RRF tertile was associated with an increase in lean mass index. Fat mass index in all tertiles and bone mineral content index in middle and high TA-RRF tertiles were increased, but no significant difference were observed in these changes among the 3 tertiles. The edema index decreased over the 1-year PD period. The high TA-RRF tertile was associated with a lower edema index. Although there was no statistical significance, the increase in fat mass/lean mass ratio (FM/LM) attenuated as the grade of TA-RRF tertile increased. The increase in fat mass index was similar to the trend in FM/LM.

Conclusion: TA-RRF was associated with an increase in total lean mass and a decrease in edema index.

Key Words: 복막투석, 체성분, 잔여신기능

Peritoneal dialysis, Body composition, Residual renal function