P-47

복막투석 환자에서 혈청 나트륨과 사망률 간의 관계

가톨릭대학교 의과대학 내과학교실[1], 중앙대학교 의과대학 내과학교실[2]
경북대학교 의학전문대학원 내과학교실[3], 서울대학교 의과대학 내과학교실[4]
연세대학교 의과대학 내과학교실[5], 전남대학교 의과대학 내과학교실[6]

정성진[1], 김형욱[1], 김수현[2], 김영옥[1], 진동찬[1], 송호철[1], 최의진[1]
김용림[3], 김연수[4], 강신욱[5], 김남호[6], 양철우[1], 김용균[1]

Serum Sodium Level and Outcomes in Patients with End-Stage Renal Disease on Peritoneal Dialysis

Sungjin Chung[1], Hyung Wook Kim[1], Su-Hyun Kim[2], Young Ok Kim[1], Dong Chan Jin[1]
Ho Chul Song[1], Euy Jin Choi[1], Yong-Lim Kim[3], Yon-Su Kim[4], Shin-Wook Kang[5]
Nam-Ho Kim[6], Chul Woo Yang[1], Yong Kyun Kim[1]

Department of Internal Medicine[1] The Catholic University of Korea College of Medicine
Department of Internal Medicine[2] Chung-Ang University College of Medicine
Department of Internal Medicine[3] Kyungpook National University School of Medicine
Department of Internal Medicine[4] Seoul National University College of Medicine
Department of Internal Medicine[5] Yonsei University College of Medicine
Department of Internal Medicine[6] Chonnam National University Medical School

Background: Hyponatremia is relatively common in patients with end-stage renal disease (ESRD), and hypernatremia is rare. The prevalence and significance of dysnatremias in Korean patients with ESRD have been poorly studied. The present study aimed to examine associations with serum sodium level measured at baseline with clinical outcomes in patients with ESRD on peritoneal dialysis therapy.

Methods: This was a prospective cohort study based on the 1069 patients enrolled in the Clinical Research Center for End-Stage Renal Disease in Korea. The association of serum sodium level with all-cause mortality was examined in Cox models with adjustment for potential confounders.

Results: A total of 118 patients died during a median follow-up of 30.7 months. Patients with serum sodium levels of <130 (n=35), 130 to 136 (n=307) and ≥145 mEq/L (n=19) compared with 136 to 145 mEq/L (n=708) had unadjusted mortality hazard ratios of 1.979, 1.962 and 0.000 (p=0.110, p=0.000, and p=0.994), indicating that serum sodium with less than 136 mEq/L has a clinical significance. Patients with <136 mEq/L (n=342) had higher mortality when compared with patients with ≥136 mEq/L (n=727) (hazard ratio 2.021, p=0.000). Furthermore, there were similar associations in models with incremental multivariable adjustments.

Conclusions: These results show that hyponatremia is associated with increased mortality in ESRD patients on maintenance peritoneal dialysis, suggesting that identification of dysnatremia would be critical to determining optimal management on electrolyte abnormalities.

Key Words: 복막투석, 나트륨, 사망률
Peritoneal Dialysis, Sodium, Mortality