

中文題目:血液透析病人中較高的血鈉與尿酸濃度與較佳的長期存活率相關

英文題目:Higher serum sodium combined with higher uric acid concentrations associated with better long-term survival in hemodialysis patients

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ABSTRACT

Background: The purpose of this study was to evaluate the combined effect of different pre-hemodialysis (HD) serum sodium (S[Na]) and uric acid (S[UA]) concentrations on long-term prognosis of HD patients.

Methods: A cohort of 424 maintenance HD patients (age: 58±13years, male: 47%, diabetes: 39%) from a single center were divided into four groups based on both median of S[Na] (138.4 mEq/L) and normal S[UA] (7.0 mg/dL). Group 1: lower S[Na] & lower S[UA]: $n = 68$; Group 2: lower S[Na] & higher S[UA]: $n = 137$; Group 3: higher S[Na] & lower S[UA]: $n = 60$; Group 4: higher S[Na] & higher S[UA]: $n = 159$. The median observation period was 21 months.

Results: Both higher S[Na] and S[UA] groups had better cumulative survival than their counterparts ($p=0.010$, and 0.003 respectively). By combination, Group 4 had lowest long-term mortality than the other 3 groups ($p<0.001$). After multivariate logistic regression analysis, Group 4 was characterized by less percentage of diabetes (OR=0.52, 95% CI= 0.32-0.82), and higher normalized protein catabolism rate (nPCR) (OR=2.20, 95% CI = 1.10-4.42). Adjusting for age at study, nPCR, serum albumin concentration, HD vintage; Group 4 was still an independent factor for long-term better survival.

Conclusion: HD patients with both higher S[Na] and S[UA] were characterized by less percentage of DM, and high nPCR. They were associated with better long-term survival. By contrast, those patients with lower levels of S[Na] and normal S[UA] tended to have worse clinical outcomes.