KSN 2019
Seoul, Korea · May 23 - 26

Abstract Type : Oral
Abstract Submission No. : OR-1431

Effect of Dietary Salt intake on Renal outcomes in Advanced CKD patients from KNOW-CKD study

Minjung Kang, Eunjeong Kang, Hyunjin Ryu, Curie Ahn, Kook-Hwan Oh
Department of Internal Medicine-Nephrology, Seoul National University Hospital, Korea, Republic of

Objectives: Lifestyle modification is important in patients with chronic kidney disease (CKD). Effect of dietary salt intake on renal progression in Korean CKD patients remains unresolved. The present study analyzed the effect of dietary salt intake on renal outcome for Korean CKD patients. This study aimed to suggest the optimal amount of salt intake for advanced CKD patients.

Methods: Data were extracted from The KoreaN cohort study for Outcome in patients With CKD (KNOW-CKD). 1,453 CKD patients at stages G3a to 5, who were enrolled in the KNOW-CKD from 2011 to 2016 were included in the analysis. After excluding 425 subjects with inadequate 24 hour urine collection and 21 without 24 hour sodium excretion, 1,007 non-dialysis CKD patients were finally analyzed. Dietary salt intake, assessed by 24-hour urine sodium excretion, was divided into four categories (C1-C4). Composite renal outcome was defined either as eGFR halving or as incident ESRD. The hazard ratios (HRs) for the risk of composite renal outcome was calculated after adjustment with multiple variables

Results: During follow-up for median 4 [3 – 6] years, 369 (36.6%) patients developed the composite renal event. After adjustment for confounders including baseline eGFR, multiple cox regression showed that the risk of composite renal outcome was significantly higher in the highest category group (C4, salt intake ≥13.1g/day, HR 2.1 [1.10 – 3.87]; P=0.023). Subgroup analysis showed that high salt intake was particularly strongly associated with higher risks of composite renal outcome in macroalbuminuric (>300mg/day) CKD patients and in the older groups (age>60 years).

Conclusions: High salt intake, assessed by 24 hour urine sodium excretion, is associated with increased risk of CKD progression in advanced CKD. We recommend lowering salt intake to 13.1g per day of sodium chloride in advanced CKD patients.