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**Obstructive sleep apnea as a risk factor for incident end-stage renal disease:
A Nationwide Population-based Cohort Study from Korea**

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Objectives: Obstructive sleep apnea (OSA) is known to be associated with metabolic dysregulation and incident cardiovascular diseases. However, its association with end-stage renal disease (ESRD) has not been clarified. This study aimed to evaluate longitudinally whether OSA is an independent risk factor for ESRD.

Methods: This retrospective nationwide population-based cohort study included data on 93,051 patients with OSA and 465,255 age- and sex-matched controls without OSA obtained from the Korean National Health Insurance Service database from 2009 to 2014. A Cox proportional-hazards model with multivariable adjustment was used to evaluate the association between OSA and incident ESRD.

Results: A significantly higher incident ESRD rate (odds ratio 1.274, 95% confidence interval 1.018-1.583) was observed for patients with OSA than for matched controls. The OSA group remained predictive of higher risk of ESRD incidence in subgroups of age ≥ 65 years, hypertension, dyslipidemia and chronic kidney disease (CKD).

Conclusions: OSA was an independent predictor of incident ESRD.