

Decline in kidney function faster after COVID-19-related AKI

March 11 2021



(HealthDay)—For patients with in-hospital acute kidney injury (AKI),

those with COVID-19-associated AKI have a greater rate of decrease in the estimated glomerular filtration rate (eGFR) after discharge, according to a study published online March 10 in *JAMA Network Open*.

James Nugent, M.D., M.P.H., from the Yale University School of Medicine in New Haven, Connecticut, and colleagues conducted a retrospective cohort study at five hospitals from March 10 to Aug. 31, 2020. The rate of change in eGFR after hospital discharge was compared for patients with and without COVID-19 who experienced in-hospital AKI (182 and 1,430 patients, respectively).

The researchers found that compared with those without COVID-19, patients with COVID-19-associated AKI were more likely to be Black (40.1 versus 15.7 percent) or Hispanic (22 versus 8.8 percent) and had fewer comorbidities, but they had similar rates of preexisting [chronic kidney disease](#) and hypertension. In the unadjusted model and after adjustment for baseline comorbidities, patients with COVID-19-associated AKI had a greater decrease in eGFR (-11.3 and -12.4 mL/min/1.73 m², respectively). After controlling for comorbidities, peak creatinine level, and in-hospital dialysis requirement, in the fully adjusted model, the eGFR slope difference persisted (-14.0 mL/min/1.73 m²). COVID-19-associated AKI was associated with reduced kidney recovery during outpatient follow-up in the subgroup of patients who had not achieved AKI recovery by discharge (adjusted hazard ratio, 0.57).

"A better understanding of COVID-19-associated AKI should provide opportunities for [clinical trials](#) to improve outcomes and inform the guidelines of post-COVID-19-associated AKI outpatient management," the authors write.

One author disclosed [financial ties](#) to Efference LLC, a medical communications company; a second author reported owning a patent for

System And Methods for Diagnosing Acute Interstitial Nephritis.

More information: [Abstract/Full Text](#)

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Citation: Decline in kidney function faster after COVID-19-related AKI (2021, March 11)
retrieved 27 April 2024 from
<https://medicalxpress.com/news/2021-03-decline-kidney-function-faster-covid-related.html>

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