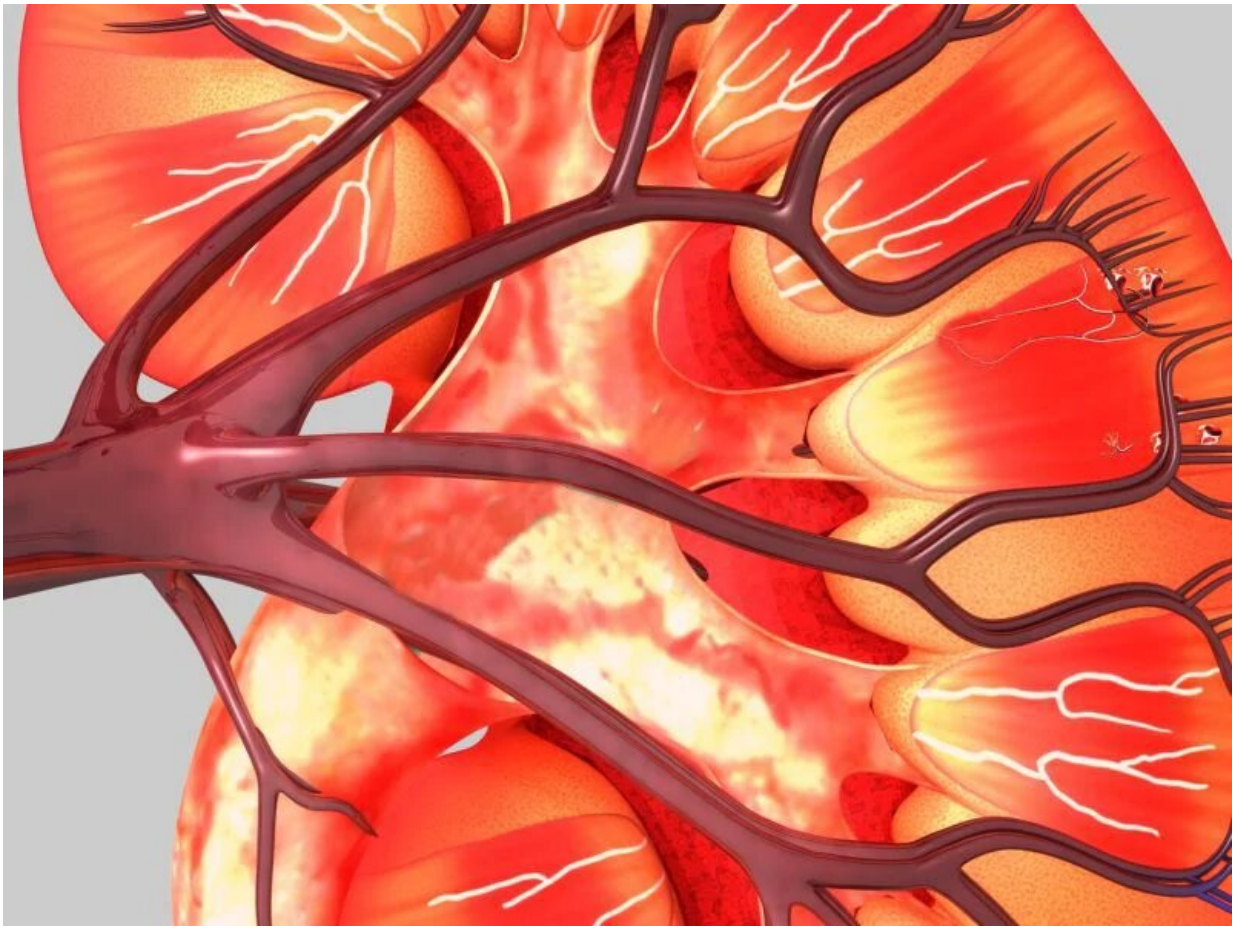
Medical Xpress

# Acute kidney injury ups risk for death in COVID-19 patients

September 24 2020



(HealthDay)—Acute kidney injury (AKI) in hospitalized patients with

COVID-19 is associated with a significantly higher risk for in-hospital death, according to a study published online Sept. 19 in the *American Journal of Kidney Diseases*.

Jia H. Ng, M.D., from the Donald and Barbara Zucker School of Medicine at Hofstra/Northwell in Great Neck, New York, and colleagues assessed survival and kidney outcomes in 9,657 adult patients hospitalized with COVID-19 at 13 hospitals in metropolitan New York between March 1, 2020, and April 27, 2020.

The researchers found that the AKI incidence rate was 38.4 per 1,000 patient-days. The incidence rate of in-hospital death among patients without AKI was 10.8 per 1,000 patient-days versus 31.1 for patients with AKI not requiring kidney replacement therapy (AKI non-KRT) and 37.5 for patients with AKI receiving KRT (AKI-KRT). The risk for in-hospital death was higher for patients with AKI non-KRT and AKI-KRT versus those without AKI (hazard ratios, 5.6 and 11.3, respectively). This risk for death remained higher among those with AKI non-KRT (adjusted hazard ratio, 3.4) and AKI-KRT (adjusted hazard ratio, 6.4) versus those without AKI, after adjusting for demographics, comorbidities, and illness severity. For surviving patients with AKI non-KRT, 74.1 percent achieved kidney recovery by the time of discharge, whereas among survivors with AKI-KRT, 30.6 percent remained on dialysis at discharge. Prehospitalization chronic kidney disease was the only independent risk factor associated with needing dialysis at discharge (adjusted odds ratio, 9.3).

"Regardless of need for dialysis or kidney recovery at discharge, hospitalized COVID-19 patients who experience any form of AKI should probably be followed closely postdischarge to assess ongoing kidney function," the authors write.

**More information:** Abstract/Full Text