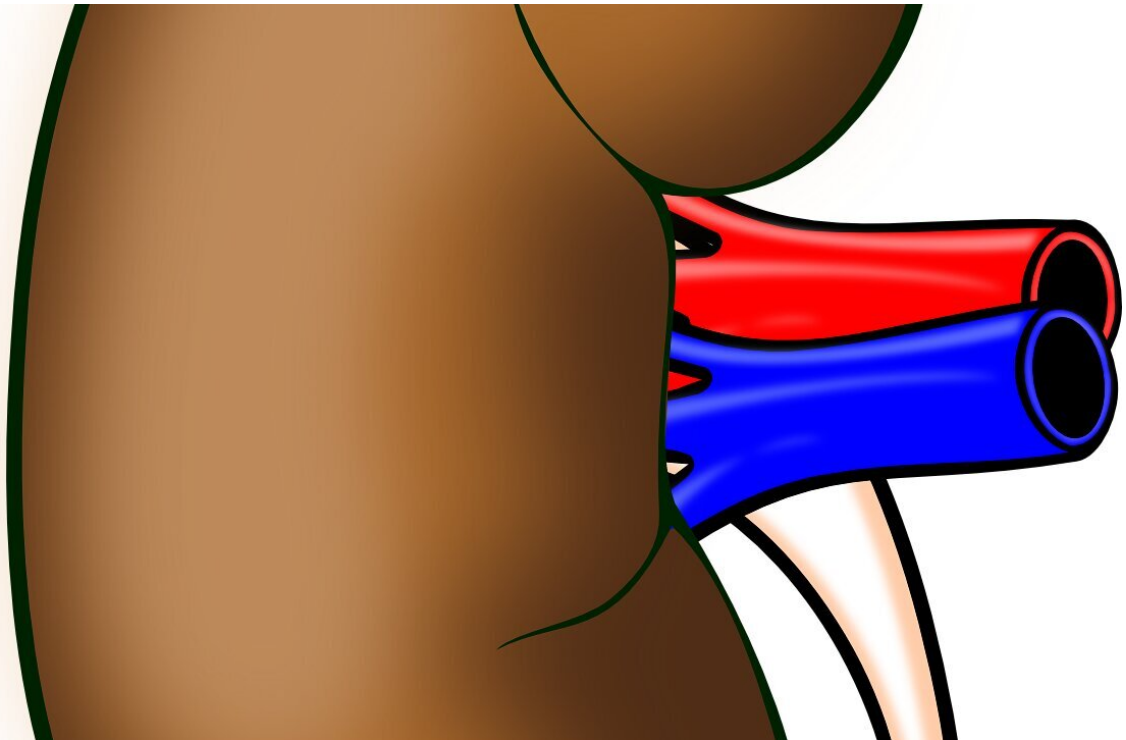


# Kidney damage from COVID-19 linked to higher risk of in-hospital death

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Many individuals who develop COVID-19 experience kidney damage, or acute kidney injury (AKI). Investigators recently evaluated the incidence, risk factors, and prognosis of AKI in adults with COVID-19. Their findings appear in an upcoming issue of *CJASN*.

The study was conducted in Tongji hospital in Wuhan, China, which was assigned responsibility for the treatment of severe COVID-19 cases by the local government. Investigators led by Gang Xu, Ph.D. and Shuwang Ge, MD analyzed information pertaining to 1,392 patients who tested positive for the virus that causes COVID-19.

The team found that, in patients with COVID-19, AKI is uncommon but is linked with a high risk of in-[hospital mortality](#). Seven percent of patients developed AKI during hospitalization, many within 7 days after admission. The in-hospital mortality rate was 10% in patients without AKI vs. 72% in patients with AKI. After adjusting for potential confounding factors, AKI was associated with a 5-times higher odds of dying while in the hospital. Also, the risk of death was higher with greater severity of AKI.

Factors associated with a higher risk of AKI included severe COVID-19 disease, high blood levels of creatinine (an indicator of kidney dysfunction), low blood levels of certain immune cells, and high blood levels of a protein fragment indicative of elevated [blood clot formation](#) and breakdown.

"Prior to this study, there was [limited information](#) concerning epidemiological characteristics and outcomes associated with AKI in patients with COVID-19," said Dr. Xu. "Our results indicate that AKI is strongly associated with mortality, and that careful monitoring of AKI is necessary early in the course of infection."

An accompanying editorial notes that additional studies are needed to investigate why AKI is linked with such a high risk of premature death in patients with COVID-19.

**More information:** "The Incidence, Risk Factors, and Prognosis of Acute Kidney Injury in Adult Patients with Coronavirus Disease 2019,"

*CJASN*, [DOI: 10.2215/CJN.04650420](https://doi.org/10.2215/CJN.04650420)

"COVID 19-Associated AKI: An Evolving Picture," [DOI: 10.2215/CJN.13600820](https://doi.org/10.2215/CJN.13600820)

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