

Kidney transplant patients at high risk of fatal COVID-19

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Because people who receive a donor kidney are often on immune-suppressing medications, they're at extremely high risk of dying if COVID-19 strikes, a new report warns.

The study, from doctors at Montefiore Medical Center in hard-hit New York City, looked at outcomes for 36 [kidney transplant patients](#) diagnosed with COVID-19 between March 16 and April 1.

Nearly a third of these patients died from their infection with the new coronavirus, and in most cases COVID-19 worsened rapidly, according to a team of Montefiore physicians led by Dr. Enver Akalin.

Thirty-nine percent of patients needed to be put on a mechanical ventilator, and nearly two-thirds (64%) of those ventilated patients died.

"Our results show a very high early mortality among kidney transplant recipients with

COVID-19—28% at three weeks as compared with the reported 1% to 5% mortality among patients with COVID-19 in the [general population](#)," the doctors wrote in a recent issue of the *New England Journal of Medicine*.

Patients who receive [donor organs](#) are placed on immune-suppressing drugs to help prevent rejection of the new organ. But this meant that most of the patients had low levels of [immune system](#) blood cells needed to mount a strong defense against any infectious disease.

So, the new study "supports the need to decrease doses of immunosuppressive agents in patients with COVID-19," its authors believe.

They said that's especially true for transplant patients who get a particular immunosuppressive drug called antithymocyte globulin, "which decreases all [immune system] T-cell subsets for many weeks," they said. Two of the eight patients in the study who did not require hospitalization but were monitored at home also died, and both had been taking antithymocyte globulin, Akalin's group pointed out.

One outside expert said the study highlights the special risks organ transplant recipients have in the COVID-19 era.

"Transplant patients are uniquely at risk for poorer outcomes from COVID-19," said Dr. Lewis Teperman, director of organ transplantation at Northwell Health in Manhasset, N.Y. "Many of the medicines need to be reduced or discontinued, and patients need to be monitored by their transplant team."

According to Teperman, organ transplant patients who develop COVID-19 may also pose heightened risks to health care workers.

"Early indications suggest that [transplant](#) recipients

may have higher viral loads and shed virus for an extended period of times, so-called 'super shedders,'" he said. "Investigation is underway at Northwell to prove this hypothesis, and proper personal protective equipment [PPE] is crucial in the care of recipients with COVID-19."

More information: There's more on the organ donation process at the [U.S. Health Resources and Services Administration](#).

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