Multisystem abnormalities persist after COVID-19 hospitalization

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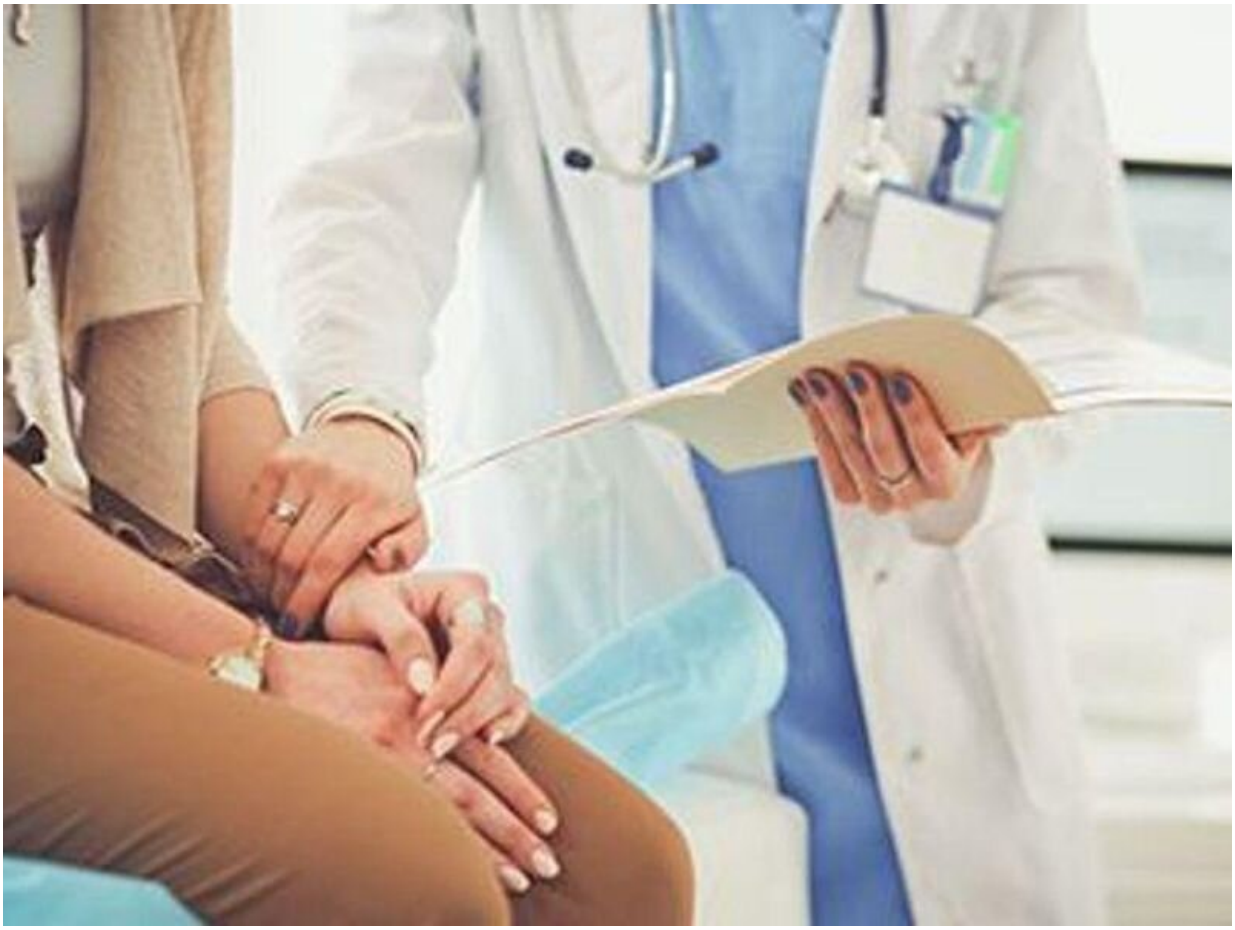

Patients after hospitalization with COVID-19 have persistent

multisystem abnormalities, including cardio-renal involvement and hemostasis pathway activation, according to a study published online May 23 in *Nature Medicine*.

Andrew J. Morrow, Ph.D., from the University of Glasgow in the United Kingdom, and colleagues conducted a prospective cohort study involving patients who had been hospitalized with COVID-19. Serial blood biomarkers, digital electrocardiography, and patient-reported outcome measures were obtained in hospital and at 28 to 60 days after discharge.

The researchers found that patients with COVID-19 (159 patients) had persisting evidence of cardio-renal involvement and hemostasis pathway activation compared with 29 controls at 28 to 60 days after discharge. The adjudicated likelihood of myocarditis was very likely, probable, unlikely, and not present in 13, 41, 35, and 11 percent of patients, respectively. COVID-19 was associated with worse health-related quality of life (EQ-5D-5L score, 0.77 versus 0.87), anxiety and depression (Patient Health Questionnaire-4 total score, 3.59 versus 1.28), and aerobic exercise capacity reflected by predicted maximal oxygen utilization (20.2 versus 29.5 mL/kg/min) at 28 to 60 days after discharge. Fifteen percent of patients and 7 percent of controls died or were rehospitalized during follow-up (mean, 450 days); 68 percent of patients and 26 percent of controls received outpatient secondary care.

"One of the most important findings of the CISCO study is that it is the severity of a patient's COVID-19 infection—not their underlying health conditions—that is most closely correlated with the severity of any ongoing health outcomes postdischarge," a coauthor said in a statement.

One author disclosed financial ties to the biopharmaceutical industry.

More information: Andrew J. Morrow et al, A multisystem, cardio-renal investigation of post-COVID-19 illness, *Nature Medicine* (2022).

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