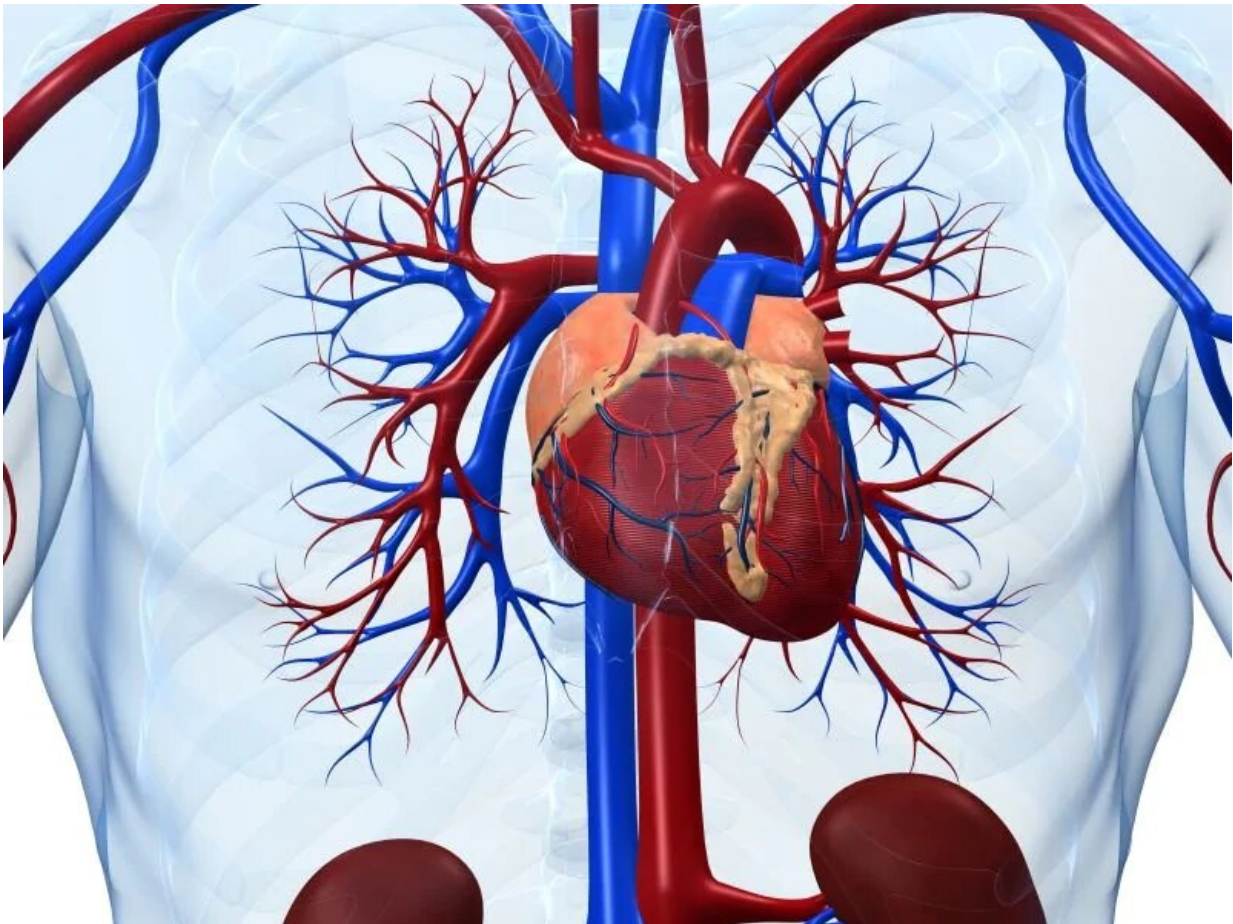


# Right ventricular dilation linked to mortality in COVID-19

May 26 2020

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(HealthDay)—Right ventricular dilation is associated with in-hospital

mortality among patients hospitalized with COVID-19, according to a study published online May 15 in *JACC: Cardiovascular Imaging*.

Edgar Argulian, M.D., M.P.H., from the Icahn School of Medicine at Mount Sinai in New York City, and colleagues enrolled consecutive [patients](#) hospitalized due to COVID-19 who underwent clinically indicated echocardiograms from March 26 to April 22, 2020. The associations between clinical and echocardiographic variables and mortality were explored.

Echocardiograms of 110 patients were reviewed, with five excluded due to inadequate study quality. The researchers found that at the time of echocardiographic examination, 31 patients were intubated and mechanically ventilated. Thirty-two patients (31 percent) had right ventricular dilation. Patients with right ventricular dilation were more likely to have renal dysfunction than those without right ventricular dilation, but there were no significant differences noted in the prevalence of major comorbidities, laboratory markers of inflammation, or myocardial infarction. Patients with right ventricular enlargement had a higher prevalence of right ventricular hypokinesis and moderate or severe tricuspid regurgitation. Five of 10 patients with right ventricular enlargement who underwent computed tomography angiography of the chest had evidence of pulmonary embolism. During the study period, 21 patients died: 13 and eight (41 and 11 percent) patients with and without right ventricular dilation, respectively. Right ventricular enlargement was the only variable significantly associated with mortality in a multivariable analysis (odds ratio, 4.5).

"This study provides important evidence associating right heart strain with adverse outcomes in hospitalized patients with COVID-19 infection," Argulian said in a statement.

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Citation: Right ventricular dilation linked to mortality in COVID-19 (2020, May 26) retrieved 18 April 2024 from

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