High rate of pulmonary embolism found for patients with COVID-19

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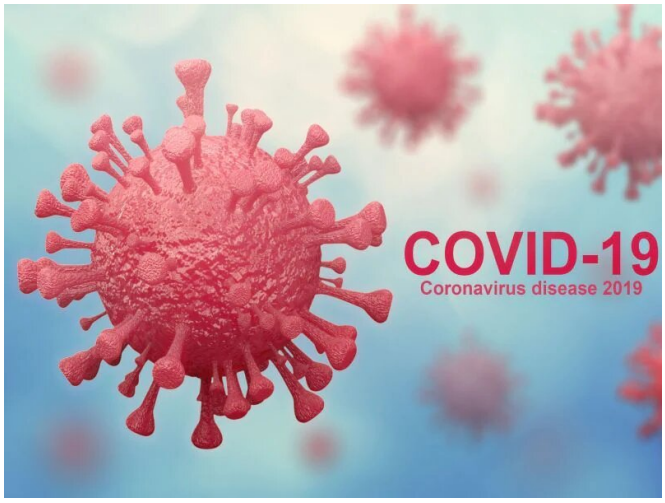

(HealthDay)—COVID-19 is associated with a high rate of pulmonary embolism, according to two research letters published online April 23 in *Radiology*.

Ian Leonard-Lorant, M.D., from the Nouvel Hôpital Civil in Strasbourg, France, and colleagues described the rate of pulmonary embolus in 106 patients classified as having COVID-19 infection who underwent pulmonary computed tomography (CT) angiography. The researchers found that 30 percent of the patients with COVID-19 had positive findings for acute pulmonary emboluson pulmonary CT angiogram; the remaining patients had negative findings on CT. D-dimer levels were higher in patients with COVID-19 infection and pulmonary embolus versus those without pulmonary embolus (median, 6,110±4,905 versus 1,920±3,674 µg/L, respectively), and patients with COVID-19 infection and pulmonary embolus were more likely to be in the intensive care unit (75 versus 32 percent). A D-dimer level greater than 2,660 µg/L had a sensitivity of 100 percent and specificity of 67 percent for pulmonary embolism on CT angiography.

Franck Grillet, M.D., from Centre Hospitalier Universitaire de Besancon in France, and colleagues examined pulmonary embolus in association with COVID-19 infection using pulmonary CT angiography. A total of 100 hospitalized patients with COVID-19 infection and severe clinical features were examined with contrast-enhanced CT. The researchers found that 23 percent of the patients had acute pulmonary embolism. Patients with pulmonary embolism were more frequently in the critical care unit (74 percent versus 29 percent without); they also required mechanical ventilation more often (65 versus 25 percent). Requirement for mechanical ventilation remained associated with acute pulmonary embolism in a multivariable analysis (odds ratio, 3.8).

"Our results suggest that patients with severe clinical features of COVID-19 may have associated acute pulmonary embolus," Grillet and colleagues write. "Therefore, the use of contrast enhanced CT rather than routine non-contrast CT may be considered for these patients."

More information: Abstract/Full Text—Leonard-Lorant (subscription or payment may be required) Abstract/Full Text—Grillet (subscription or payment may be required)