

# Odds of pulmonary embolism up for obese COVID-19 patients

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(HealthDay)—Patients with COVID-19 with a body mass index (BMI)

>30 kg/m<sup>2</sup> have increased odds of developing pulmonary embolism (PE), according to a research letter published online May 14 in *Radiology*.

Neo Poyiadi, M.D., from the Henry Ford Health System in Detroit, and colleagues assessed the clinical characteristics of COVID-19 patients who developed PE in a retrospective analysis involving 328 COVID-19 patients who underwent pulmonary computed tomography (CT) angiography.

The researchers found that 22 percent of the patients had PE. Patients with a BMI >30 kg/m<sup>2</sup> were observed more often in the PE versus the non-PE group (58 versus 44 percent). Compared with the non-PE cohort, fewer patients with PE were on [statin therapy](#) prior to admission (27 versus 46 percent). In a multivariate model, patients taking statin therapy prior to admission had significantly reduced odds of developing PE (adjusted odds ratio, 0.4), while those with a BMI >30 kg/m<sup>2</sup> had an adjusted odds ratio of 2.7. The odds ratio was 4.8 for PE with a 6 µg/mL increase in D-dimer. The area under the receiver operating characteristic curve (AUC) was 0.86 for the multivariable model. A D-dimer of 3.11 µg/mL had sensitivity and specificity of 78 and 81 percent, respectively, for development of PE (AUC, 0.85).

"Our study, in [conjunction](#) with recent and future studies, may prompt early evaluation with pulmonary CT angiography in COVID-19 [patients](#) who are at increased risk for developing [pulmonary embolism](#) based on demographic, clinical, and laboratory variables," the authors write.

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