

## Obesity ups odds for dangerous lung clots in COVID-19 patients

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(HealthDay)—Obesity makes COVID-19 worse and may lead to deadly



blood clots in the lungs, a new study finds.

The researchers said that <u>obese patients</u> with COVID-19 may have nearly three times the risk of developing what is known as a pulmonary <u>embolism</u>.

"Clinicians can utilize our findings to aid in determining which patients should have evaluation for pulmonary embolism with pulmonary CT angiography, as the symptoms for COVID-19 and pulmonary embolism overlap," said lead researcher Dr. Neo Poyiadi, from the department of diagnostic radiology at Henry Ford Hospital in Detroit.

"Early detection of pulmonary embolism can allow prompt treatment with anticoagulation and minimize clinical problems," he said.

Hospitalized obese patients with COVID-19 should be evaluated for increases in clotting indicated by a rising D-dimer—a <u>blood test</u> for clotting.

According to the study, 22% of 328 patients suffering from COVID-19 who had a CT scan angiography had a pulmonary embolism.

Researchers also found that patients taking statins to lower cholesterol before coming down with COVID-19 were less likely to have a pulmonary embolism.

"Further studies are needed to determine if statins have a protective effect against pulmonary embolism in COVID-19 patients," Poyiadi said.

Poyiadi added that a recent study suggests that COVID-19 patients should be placed on blood thinners to prevent clotting.



Obesity may make COVID-19 worse because it's associated with an increase in inflammation. Inflammation also increases the risk of clotting.

The report was published online May 14 in the journal *Radiology*.

Dr. Marc Siegel is a professor of medicine at NYU Langone Medical Center in New York City. He said, "This study underscores a point that's becoming more widely known about COVID-19—that obesity leads to an inflammatory cascade. We know that inflammatory chemicals increase with obesity. That's the suspected mechanism of why obese patients are more at risk for complications."

Inflammation can lead to blood clots, although that's not been proven, he noted.

"The complications of COVID-19 that we've been seeing are inflammation and a cytokine storm, which causes inflammation in the arteries and <u>blood</u> clots throughout the body—and obesity is a culprit in high-risk patients," Siegel said.

"To say that's why we're seeing more <u>pulmonary embolism</u> in obese patients is plausible. It's early small numbers, but it's a very important finding and it's not surprising," he said.

What is surprising is it looks like using statins might be helpful. Statins are anti-inflammatories, Siegel noted.

But whether statins are protective is something that would have to be carefully studied, he said. There's no clear-cut reason to start obese patients on statins if they weren't already taking them when they were admitted to the hospital, he added.



Obese patients with COVID-19 need the same care as other patients, Siegel said. That includes anticoagulation. Many of the complications of COVID-19 seem to be caused by clotting, and starting patients on <u>blood thinners</u> may become a standard treatment.

"We're already starting to look at preventative anticoagulation," he said. "It's already something we're highly aware of, but this study adds evidence to a direct correlation between obesity and <u>blood clots</u>, that's what's new here."

**More information:** For more on pulmonary embolism, head to the <u>U.S. National Library of Medicine</u>.

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