

# Vertebral fractures marker of poorer prognosis in COVID-19

21 October 2020

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(HealthDay)—Vertebral fractures (VFs) are a clinical marker of fragility and poor prognosis in patients with COVID-19, according to a study published online Oct. 21 in the *Journal of Clinical Endocrinology & Metabolism*.

Luigi di Filippo, M.D., from the Vita-Salute San Raffaele University in Milan, and colleagues examined the prevalence and clinical impact of VFs in COVID-19 in a retrospective cohort study. One hundred fourteen COVID-19 [patients](#) for whom lateral chest X-rays were available were included; a semi-quantitative evaluation of vertebral shape on chest X-ray was used to detect VFs.

The researchers detected thoracic VFs in 41 patients (36 percent). Patients with VFs were older and more frequently had hypertension and [coronary artery disease](#). Hospitalization occurred in 88 versus 74 percent of patients with versus without VFs ( $P = 0.08$ ). Compared with those without VFs, patients with VFs required noninvasive mechanical ventilation more frequently ( $P = 0.02$ ). Mortality was 22 versus 10 percent in patients with versus without VFs ( $P = 0.07$ ). Mortality was higher in patients with severe versus moderate and mild VFs ( $P = 0.04$ ).

"Vertebral fractures are a marker of frailty, and for the first time we show that individuals who have such fractures appear to be at increased risk of severe COVID-19," a coauthor said in a statement. "A simple thoracic X-ray can detect these fractures and morphometric evaluation should be performed in COVID-19 patients at hospital admission."

Two authors disclosed financial ties to the pharmaceutical industry.

**More information:** [Abstract/Full Text](#)

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APA citation: Vertebral fractures marker of poorer prognosis in COVID-19 (2020, October 21) retrieved 23 January 2021 from <https://medicalxpress.com/news/2020-10-vertebral-fractures-marker-poorer-prognosis.html>

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