

Letter to the Editor

Letter to the Editor From Karakilic and Saygili: “Radiological Thoracic Vertebral Fractures Are Highly Prevalent in COVID-19 and Predict Disease Outcomes”

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To the Editor,

We read with great interest a published article in the *Journal of Clinical Endocrinology & Metabolism* titled “Radiological thoracic vertebral fractures are highly prevalent in COVID-19 and predict disease outcomes” (1). This article focuses on an exciting topic about COVID-19 that has not been covered before and reports that the presence of vertebral fracture may predict COVID-19 mortality and that mortality is higher in those with moderate/severe fractures.

It is well known that one of the most critical determinants of COVID-19 mortality is age, and deaths due to COVID-19 increase significantly, especially over age 65 years (2). Therefore, recent studies investigating the causes predicting mortality in COVID-19 adjust the age factor between groups using statistical methods such as propensity score matching. Age is also one of the most critical determinants for vertebral fractures (3).

The study by di Filippo and colleagues reports increased mortality in COVID-19 patients with vertebral fractures, but the median age of the fracture group was 64 years, whereas the median age in the nonfracture group was 54. It was noteworthy that statistical methods, which would eliminate cofounders of mortality such as age, were not used.

In this situation, it is difficult to argue that vertebral fractures increase the mortality of COVID-19; this is probably due to the higher age in the fracture group. In particular, the mortality risk between the fifth and sixth decades is close to 3 times in meta-analyses (2). This significant effect suggests that

evaluating the vertebral fracture–COVID-19 mortality relationship independent of age may be an incomplete assessment. Therefore, we suggest that the evaluation of age-adjusted vertebral fracture mortality risk will be more accurate.

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Additional Information

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