

Predictors of post-COVID syndrome. Getting ready for the future

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Dear Editor,

We have read with interest the study by Gulian *et al.* [1] (published in July 2022 as Early Access,) where the authors describe the impact of prolonged symptoms or developing complications following an initial recovery from COVID-19, also called post-COVID syndrome. In this aspect, there are a small number of studies based on clinical extrapolation. First, it is evident that the findings in this study, which arise from a highly selected group of a specific hospital without a control group, have several limitations. This study does not include COVID-19 patients who were not hospitalized and it is not clear which criteria for laboratory-confirmed SARS-CoV-2 were used. Patients-reported outcomes are important to ensure that clinical care is truly patient-centered but Gulian *et al.* [1] used the Functional Assessment of Chronic Illness Therapy Fatigue scale: this scale is validated for cancer patients and the answers are related to the past 7 days. It is also not clear if this was self-administration or by interview which can be a selection bias. One of the strengths of this study is the information on symptom history before acute COVID-19. Most patients who developed post-COVID syndrome did not have a preexisting comorbidity which suggests that the complications could be attributable to the effect of SARS-CoV-2. However, fatigue was the most common symptom which could be overlaps with breathlessness, cognitive dysfunction, and psychological

distress as demonstrated in the study by Halpin *et al.* [2]. Dyspnea was the second more frequent symptom which could also be related to deconditioning after hospitalization. The type of ventilation as a requirement for oxygen therapy needed could also have an impact on these results.

All the patients perform a CT scan of the chest at the time of enrolment and at the end of this study to quantify the presence or absence of fibrosis and according to the authors, it was the most common complication. Post-COVID-19 pulmonary fibrosis may be defined as the presence of persistent fibrotic tomographic sequelae observed during follow-up but there are many uncertainties related to the clinical impact and the need for treatment, so longer follow up are necessary [3]. This aspect may have a clear clinical implication.

This is a very interesting topic and a very interesting study that try to establish predictors of post-COVID syndrome. It is clear that these patients continue to struggle following recovery, but more studies are necessary. Further clinical trials need to evaluate these results and clinical implications.

References

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