



## COMMENTARY

## Evolution of COVID-19 in Elderly Patients: The Need to Focus on Post-COVID-19 Syndrome

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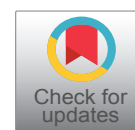
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The COVID-19 pandemic has raised many questions about the long-, medium- and short-term prognosis of this disease. Studies such as that of Sosa Frias, et al. [1], where the authors inquired about prognostic factors of the evolution of patients who developed the severe phenotype of COVID-19, who required invasive ventilation and died, showing that the leukogram and the initial chest X-ray are predictors of unfavorable evolution [1]. However, it is necessary to widen the time window of the short- and medium-term prognosis of the patient with severe or mild phenotype of COVID-19, which should be considered in the investigation of predictors and functional prognosis.

Post-COVID-19 syndrome consists of the presence of residual symptoms following the acute phase of COVID-19, the severity of which depends on the phenotype developed and the target organ lesion presented; or also the triggering of a major pathological event secondary to the organ lesion [2,3]. There is evidence that has observed organ and systemic involvement even in those who overcome the positivity phase for SARS-Cov-2 infection, but remain in the intensive care unit or hospitalization due to decompensation of a personal history (mainly heart disease), or involvement by the same COVID-19 [2,3]. This is a predictive and functional prognostic factor that must be taken into account and strictly monitored to

guarantee the safety and maintenance or recovery of the affected person's functional capacity in the short, medium and long term.

Recently, Menges, et al. [4] calculated the burden of disease generated by post-COVID 19 syndrome and implications on health services during a 6-month follow-up period, showing that of 431 people included in the study, 55% reported persistent fatigue, 25% dyspnea, and 26% some degree of depression, and 26% some degree of fatigue [4]. Likewise, 10% of those who were hospitalized were rehospitalized within one month; and up to one third of those with post-COVID 19 syndrome did not seek medical attention [4]. Bierle, et al. [5] observed the persistence of additional symptoms such as pain or orthostatic intolerance, as well as the presence of nonspecific chest pain and paresthesias [5]. Although there is still a lack of evidence of the highest quality (Grade I or II) that summarizes the real impact of this syndrome, it is a fact that it is a factor to consider when establishing the prognosis of the COVID-19 patient, especially in those with comorbidities that increase the risk of mortality in isolation or associated with complications of this disease (Essential Arterial Hypertension, Diabetes Mellitus type II, Chronic Kidney Disease, Chronic Obstructive Pulmonary Disease, Obesity, among others) [3].



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In particular, the post-COVID 19 neurological syndrome [6] was described, where neuropsychiatric symptoms persist both in those patients who suffered from COVID-19 and had or did not have a personal history of neuropsychiatric disease [6]. However, a significant finding that may generate a substantial change on the concept of cerebrovascular disease and repercussion on the post-COVID status and functional prognosis of this type of patients is the development of silent strokes in patients under prolonged sedation, which may not exhibit a characteristic clinical picture [7,8]. Bruce, et al. [7] conducted a study in which they screened for central nervous system integrity through computed tomography and nuclear magnetic resonance imaging in COVID-19 patients with prolonged sedation, observing that although a minority presented with stroke during this period (12/363), all had a history of cardiovascular disease, and only two exhibited pupillary changes [7], those with hemorrhagic events died [7]. Therefore, caution must be exercised in establishing a definite cause of death, since there may be coexisting disorders that can simultaneously trigger major events and compromise the life of the COVID-19 patient, not only those who are hospitalized in intensive care, but also those isolated at home who do not seek medical assistance due to fear or confusion.

In this order of ideas, it is imperative to modify the vision of the management of the patient with COVID-19, focusing also on the follow-up and diagnosis of complications derived from post-COVID-19 syndrome and other phenotypes, which can be decisive during hospital stay and short-, medium- and long-term prognosis. Likewise, it is necessary to carry out studies of the highest quality to resolve questions related to this topic and, above all, about the possible use of neuroprotective tools [9] during the acute phase for those at risk of nervous system injury or with a history of neuropsychiatric disease.

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### Conflicts of Interest

None.

### Authors Contribution

All authors have contributed for this manuscript.

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