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Heart & Lung

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Letter

Comment on: Evaluation of pulmonary function and exercise capacity after COVID-19 pneumonia

To the Editor,

We were pleased to read the article "Evaluation of Pulmonary Function and Exercise Capacity after COVID-19 Pneumonia" by S. Okan et al. ¹ The article provides valuable and informative insight into the potential long-term effects of the disease on pulmonary function. It is important to recognize that individuals who have recovered from COVID-19 pneumonia and been discharged from the hospital may develop restrictive pulmonary dysfunction. Therefore, it is recommended that survivors be evaluated for their pulmonary function and rehabilitation needs and treated accordingly.

While we acknowledge the limitations of the study, such as its small sample size, we suggest that alternative viewpoints could be considered in order to further refine and enhance the findings. Data collected on pulmonary function, radiological outcomes, quality of life, and cardiopulmonary exercise testing following severe COVID-19 pneumonitis is not well-defined and more information on crucial factors such as baseline characteristics, underlying comorbidities, concomitant medications, disease severity at hospital admission, and other important considerations would be helpful. In addition, the peak value of C-reactive protein on the World Health Organization (WHO) scale is only provided at the time of hospital admission. A study by Kathleen et al. took into account additional factors such as length of stay, pulmonary rehabilitation following hospital discharge, and radiological findings.² Rehabilitation and Physical Medicine and Rehabilitation (PM&R) physicians have played a crucial role in restoring function and limiting disability during this pandemic. PM&R interventions and pulmonary rehabilitation provide us with additional tools to combat COVID-19 such as nutrition, airway clearance techniques, oxygen supplementation, breathing exercises, stretching, manual therapy, and physical activity.³ There are concerns about the potential for long-term pulmonary sequelae and functional impairment in COVID-19 survivors. Additionally, there is a growing realization that 30–60% of people report persistent symptoms such as fatigue and dyspnea after the acute illness has resolved.⁴

Early pulmonary rehabilitation and mobilization in the ICU should be approached with caution and must not risk the safety of healthcare personnel. SARS-CoV-2 particles are aerosolized during surgical procedures and in ICUs. While early mobilization by additional rehabilitation staff is not recommended in the ICU, it could be considered by dedicated ICU staff to conserve personal protective equipment. Due to the questionable efficacy of early mobilization in the ICU,^{4,5} D-dimer concentrations at hospital admission can accurately predict DLco impairment during follow-up. Additionally, a high percentage of COVID-19 patients have irreversible functional abnormalities, even though radiological and functional parameters diverge (e.g., fibrosis).⁵ In conclusion, the study has limitations and highlights the need for

further research into and rehabilitation interventions for COVID-19 survivors, incorporating alternative viewpoints and safety measures.

Disclosure

None.

Funding

None.

Declaration of Competing Interest

None.

Acknowledgment

None.

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Received 28 January 2023

Accepted 31 January 2023