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Letter to the Editor

Musculoskeletal Symptoms Following SARS-CoV-2 Infection are more Diverse and Prevalent than Expected

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Letter to the Editor

We read with interest the article by Choudhari *et al*. on a prospective, single-center observational study on the type and frequency of musculoskeletal symptoms (MSKS) in patients with a history of SARS-CoV-2 infection (SC2I) at a one-year follow-up using a structured questionnaire administered by telephone [1]. Of the 1954 patients included, 1087 (55.6%) had MSKS, with fatigue (50.71%) being the most common, followed by myalgia, back pain, and joint pain [1]. The incidence of MSKS was higher in symptomatic SC2I patients than in asymptomatic patients [1]. Joint pain was 3.4 times more common in patients with SC2I symptoms and 2.3 times more common in patients with >1 comorbidity than in patients without symptoms or with 0-1 comorbidities [1]. The study is noteworthy, but several points deserve discussion.

First, it was not mentioned whether the MSKS persisted from the SC2I until the telephone interview, whether it completely disappeared after a certain period of time after the SC2I, or whether it was not present immediately after the SC2I but reappeared after a certain period of time. In the case of recurrence, how could it be ruled out that the MSKS was actually causally related to the SC2I or actually had other causes, especially in patients with comorbidities?

Secondly, depression was not ruled out as a cause of the FMD [1]. Since the telephone interviews were conducted in 2021, at a time when the pandemic was still raging, it cannot be ruled out that, at least in some of the patients, the symptoms were a manifestation of depression or could be explained by psychosomatic conversion. Commonly used depression scales include the Hamilton Depression Scale, the Beck Depression Inventory, the Center for Epidemiological Studies Depression Scale, the EQ-5D, the Montgomery-Åsberg Depression Rating Scale, and the Social Problem-Solving Inventory-Revised [2]. One of these should have been applied.

The third point is that the reason for the disparity in group sizes between men and women has not been explained [1]. Did men develop more severe symptoms than women due to SC2I, leading to admission, or did women experience more severe symptoms due to SC2I and more often died before reaching the hospital? This discrepancy should be clarified.

The fourth point relates to the selection of only four MSCS (fatigue, myalgia, joint pain, and back pain) for analysis [1]. This reduces the spectrum of symptoms and thus simplifies the complexity of the problem. In addition to the four selected MSCS, SC2I patients may develop muscle cramps, fasciculations, chest pain, bone pain, fascial pain, muscle swelling, or cola-coloured urine (rhabdomyolysis) [3]. The inclusion of these symptoms would most likely increase the frequency of SC2I-related MSCS.

Fifth, it is incomprehensible why only 83.7% of patients hospitalized for SC2I were symptomatic [1]. One would expect that only symptomatic SC2I patients were admitted. What was the reason for including the 16.3% of patients without SC2I symptoms? Was SC2I discovered incidentally in these patients during hospitalization? This question should be clarified.

In summary, the study has limitations that affect the results and their interpretation. Addressing these limitations could strengthen the conclusions and support the study's message. Musculoskeletal symptoms following SARS-CoV-2 infection are more diverse, severe, and prevalent than expected.

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