

LETTER

Management of long COVID fatigue: the overlooked impact of anemia

Dear Editor,

We read with immense interest the study performed and reported by Sotiriadou et al¹, aiming to apprehend the characteristics of the long/post-COVID syndrome in patients referred to a primary care facility during the initial months of its operation. The study enrolled 71 patients who had recovered from COVID-19 but were still experiencing persistent symptoms. Notably, fatigue emerged as the most prevalent symptom reported (63.4 %), and we believe the significant occurrence of fatigue in post-COVID patients underscores the need to address its debilitating consequences and calls for further research and medical attention to effectively manage and alleviate its impact on patient's well-being and quality of life².

While the authors shed light on factors influencing the manifestation of long/post-COVID syndrome, which included female gender, older age, pre-existing comorbidities, obesity, and the number of initial symptoms during COVID-19, we stress the importance of conducting comprehensive laboratory and physical examinations to explore alternative explanations contributing to post-COVID fatigue, such as anemia, endocrinopathies, and neuropathies.

Anemia, in particular, has often been overlooked as a potentially significant contributor to fatigue in long COVID patients, with researchers primarily focusing on complex explanations for the pathophysiology of fatigue in this patient population. However, a recent community-based population study³ highlighted on the occurrence of anemia post-COVID-19 diagnosis and its prevalence within this group. Approximately one-third of the study population experienced anemia at 180 days (32.2 %) and 365 days (33.1 %) after their initial COVID-19 diagnosis.

Expanding on the understanding of anemia and its association with long COVID, the CovILD cohort study⁴ investigated the relationship between iron dysmetabolism and COVID-19 pathobiology, evaluating 109 patients 60 days after their initial COVID-19 symptoms. The study revealed that even after two months of COVID-19 onset, iron deficiency was still present in 30 % and anemia in 9 % of the patients, mainly classified as anemia of inflammation. Interestingly, patients with anemia showed elevated inflammation marker levels, including C-reactive protein and interleukin-6, and they had experienced a more severe COVID-19 course.

These investigations provide valuable insights into the role of iron homeostasis in COVID-19 pathogenesis and suggest that iron dysmetabolism may persist beyond the onset of COVID-19, potentially contributing to impaired physical performance and fatigue. While the pursuit of novel therapies remains essential, we must not overlook the impact of anemia on patients' well-being. In certain cases, the simple intervention of iron supplementation may hold significant promise in alleviating long COVID-related fatigue, especially among patients with anemia. An integrated approach is needed among healthcare personnel, considering routine assessments of basic health parameters, including hemoglobin levels, together with both traditional (iron supplements) and innovative treatments. This will be crucial to effectively address the multi-faceted challenges faced by patients afflicted with long COVID fatigue.

Keywords: coronavirus disease 2019, COVID-19, post-COVID syndrome, long COVID syndrome, fatigue, anemia

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Conflict of interest

Authors declare no potential conflicts of interest.