Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Letter to the Editor

Re: 'Post-COVID-19 chronic symptoms' by Davido et al.

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Davido et al. [1] describe a subset of coronavirus disease 2019 (COVID-19) patients in the Paris-Ile-de-France area with persistent symptoms of at least 2 months' duration after severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection characterized by fatigue, myalgias, subjective fevers, headaches and symptoms of autonomic impairment. The authors hypothesize that these symptoms represent a postviral syndrome that requires no specific treatment, possibly related to microangiopathy and endothelial injury in susceptible patients.

We too have observed that a subset of individuals with COVID-19 may develop a chronic condition that persists well after initial presentation, with prominent fatigue, cognitive slowing and symptoms of autonomic impairment such as orthostatic intolerance, exaggerated postural tachycardia and episodic hyperadrenergic surges; however, we disagree that these sequelae require no specific treatment. On the contrary, there are several treatment paradigms to consider for such patients with precedent in the autonomic literature, including fluid and salt loading [2], graduated exercise therapy starting in a reclined position [2] and targeted pharmacologic treatment [3] for symptomatic improvement, depending on the symptom complex. In addition, postviral autonomic impairment may have an autoimmune basis and in some cases is amendable to immunotherapy [4,5].

Nonpharmacologic and symptomatic pharmacologic treatments are commonly used to treat postural orthostatic tachycardia syndrome (POTS) and orthostatic intolerance (OI), common autonomic disorders that are frequently reported after viral infection [6,7]. While we have observed many phenotypic similarities between POTS, OI and the postviral syndrome that appear in some COVID-19 patients, presenting, as we observe, in women aged 40 and younger, there may be significant clinical variation in such patients, and further research is necessary to confirm and further characterize these initial reports. While at the moment there is no universal treatment protocol, it should be emphasized that treatment does exist for postviral autonomic impairment and has the potential to reduce symptom burden and improve quality of life in affected patients. However, it should be noted that while these treatment recommendations are based on evidence supported by studies on patients with POTS, there are no such studies in patients with autonomic impairment resulting from COVID-19. Thus, prospective longitudinal studies are needed to quantify the symptom burden in those with persistent symptoms—and, more importantly, evaluate the response to these and other potential therapies.

Transparency Declaration

All authors report no conflicts of interest relevant to this letter.

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