# Fibromyalgia and COVID-19

Dear Editor,

In your earlier issue, the article "Prevalence and impact of obesity on fibromyalgia syndrome and its allied symptoms" very well shows the link between obesity and fibromyalgia. [1] Fibromyalgia is a debilitating chronic painful condition that causes widespread musculoskeletal pain, stiffness, fatigue, disturbed sleep, and cognitive abnormalities. Fibromyalgia is estimated to affect 2%—4% of the population worldwide, and it is more common in women than in men. [2] The exact cause of fibromyalgia is unknown, but it is thought to be caused by a combination of genetic, environmental, and psychological factors. The coronavirus disease 2019 (COVID-19) pandemic has had a significant impact on people with fibromyalgia. The pandemic led to increased levels of stress, anxiety, and fear of social isolation, all of which can worsen fibromyalgia symptoms.

The symptoms of post-COVID-19 fibromyalgia are similar to those of fibromyalgia in general; however, some studies have reported that post-COVID-19 fibromyalgia may be associated with more severe symptoms, such as more widespread pain, fatigue, mental stress, depression, and disturbed sleep. [3,4] COVID-19 may affect the central and peripheral nervous systems, manifesting as musculoskeletal pain, anxiety, stress, and depression, all of which can worsen fibromyalgia symptoms. Chronic stress and psychological factors can lead to neurogenic inflammation in fibromyalgia.<sup>[5]</sup> COVID-19 can also cause immune system dysregulation, leading to the production of autoantibodies, which can attack healthy tissues and contribute to the development of fibromyalgia symptoms. [6] Central sensitization can lead to the perception of pain, even in the absence of any tissue damage. Decreased sleep or poor quality of sleep could also act as a triggering factor in nociception, with an elevation of serum concentration of interleukin (IL)-6.[7]

The most effective treatment for post-COVID-19 fibromyalgia is likely to be a combination of different treatment modalities which include the following:

- Exercise can help to reduce pain, improve sleep, and boost mood.
- Cognitive behavioral therapy (CBT) can help to manage the psychological symptoms of fibromyalgia, such as anxiety and depression.
- Medications include antidepressants, selective serotonin norepinephrine reuptake inhibitors (SNRIs) such as duloxetine and milnacipran, and analgesics like tramadol which may be efficacious in some patients.

The COVID-19 pandemic has had a significant impact on people with fibromyalgia. Numerous studies have shown that awareness, counseling, and early diagnosis can improve the patients'

perception. As the patients complain of chronic musculoskeletal pain, which may be due to central, peripheral or cognitive causes, therefore, the management of fibromyalgia involves the drugs that target the central, peripheral, and cognitive causes of the chronic pain. Pharmacological treatment alone is inadequate for most fibromyalgia patients, and a combined approach, such as exercise, yoga, meditation, CBT along with medication, is preferred. Although there is no cure for fibromyalgia, family care physicians can help manage the symptoms in a fibromyalgia patient.

As the quality of life is diminished due to pain, anxiety, and posttraumatic stress disorder post COVID-19, counselling and support to the patients with exacerbated fibromyalgia symptoms post-COVID-19 would go a long way to manage them better.

Thank you

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#### **Conflicts of interest**

There are no conflicts of interest.

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#### Letter to Editor

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