

Editorial

Fibromyalgia Through the Lens of COVID-19: New Research Opportunities

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Fibromyalgia (FM), a complex chronic pain syndrome affecting 5% of the global population, has a multifactorial etiology involving genetic, neuroendocrine, and environmental factors. The COVID-19 pandemic has brought new insights into FM, with emerging evidence showing that COVID-19 survivors may develop FM-like symptoms. It raises the possibility of an overlap with post-viral syndromes. Studies indicate that nearly one-third of post-COVID patients meet FM criteria, with factors like obesity and male gender influencing susceptibility. Additionally, the heightened anxiety associated with COVID-19 exacerbates FM symptoms, suggesting the role of psychological stress. Recognizing FM in the context of long-term COVID-19 can enlighten treatment strategies, particularly with insights from rheumatology, which may enhance disease outcomes. This research intersection underscores an urgent need for comprehensive studies to clarify the impact of viral infections on chronic pain syndromes, potentially refining the management and classification of FM.

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Fibromyalgia (FM) is a complex and prevalent chronic pain syndrome that affects about 5% of the world's population, predominantly women. FM is characterized by widespread musculoskeletal pain and often co-occurs with symptoms such as fatigue, sleep disturbances, cognitive difficulties, and mood disorders. The diagnosis of FM has evolved from relying solely on tender points to a more comprehensive assessment of chronic pain and associated symptoms [1]. The etiology of FM is complex and includes genetic, neuroendocrine, and environmental factors. FM shows a strong familial clustering, suggesting a polygenic inheritance pattern [2]. Polymorphism in the genes related to serotonin, dopamine, and catecholamines is considered important in the etiology of FM, which is also associated with other functional somatic disorders [3]. Abnormalities in neuroendocrine and autonomic functions contribute to the pathogenesis of FM. Central sensitization leads to increased sensitivity to pain, which is exacerbated by psychosocial stress factors [2]. Although the triggers are difficult to pinpoint, FM symptoms often occur following physical or emotional trauma. While the prevailing view emphasizes a complex interplay of these factors, the lack of evident organic damage complicates the understanding, pointing to the need for further research into its pathophysiology.

The relationship between FM and COVID-19 has become an important area of research, particularly concerning the long-term effects of the virus on musculoskeletal health. Studies suggest that individuals recovering from COVID-19 often have symptoms similar to FM, suggesting a possible overlap in post-viral syndromes. A web-based survey of FM symptoms after COVID-19 found that 30.7% of individuals recovering from COVID-19 met the criteria for FM, with obesity and male gender affecting the risk of post-COVID-19 FM [4]. Myalgia on hospital admission was associated with a higher incidence of persistent musculoskeletal pain after COVID-19, with 38% of patients reporting such symptoms. A significant association was found between COVID-19-related anxiety and worsening FM symptoms, suggesting that psychological factors play a crucial role in symptom control [5].

Research into FM in individuals recovering from COVID-19 is critical due to the overlapping of related symptoms and potential long-term health implications. Understanding these relationships can improve patient care and promote treatment strategies. The potential chronic

disease, including fibrotic lung disease, is an important concern for the long-term health of COVID-19 survivors. Many symptoms of long-term COVID-19, such as fatigue and musculoskeletal pain, are similar to those of FM. Identification of the fibrogenic mechanisms associated with COVID-19 may help identify its pathophysiology. FM in post-COVID patients may lead to more targeted therapies and better monitoring that takes into account both the physical and psychological aspects of recovery.

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