Letters to the Editor

Fulminant myocarditis and COVID-19

Miocarditis fulminante y COVID-19

To the Editor,

We found the article titled “Fulminant myocarditis due to COVID-19” very interesting. Irabien-Ortiz et al. report a COVID-19 patient and note that “the clinical picture was consistent with acute myocarditis, with no initial respiratory symptoms and with rapid clinical progression to cardiogenic shock and need for venoarterial ECMO support.” We would like to share ideas on this clinical issue. There are some sporadic reports on this cardiac problem in COVID-19. In our country, Thailand, the second country to experience COVID-19, there are still no patients with myocarditis due to COVID-19, although there are many severely ill patients and the infection has been in circulation for 4 months. An important clinical consideration is the pathophysiology of myocarditis in COVID-19. There may be direct viral invasion or the disease may be an immune disease. Finally, there is a possibility that the patient reported by Irabien-Ortiz et al. may have had a concurrent medical disorder such as another viral infection that could have induced the myocarditis.

References


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Fulminant myocarditis and COVID-19. Response

Miocarditis fulminante y COVID-19. Respuesta

To the Editor,

First of all, the authors would like to thank Joob et al. for the interest shown in our article. We consider that the questions they raise are highly interesting and deserve further analysis and debate. Unfortunately, the pathophysiology of this virus is still unknown. As described in the article, previous studies have highlighted that patients infected with coronavirus disease 2019 (COVID-19) have high concentrations of interleukin (IL)-1 beta, interferon (IFN)-gamma, IFN-inducible protein (IP)-10, and monocyte chemoattractant protein (MCP)-1. It has been shown that patients with severe illness have higher concentrations of granulocyte colony-stimulating factor (GCSF), IP-10, MCP-1, macrophage inflammatory protein (MIP)-1A, and tumor necrosis factor (TNF) alpha; this might indicate that many of the pathological mechanisms of COVID-19 (such as respiratory damage) seem more related to an exaggerated immune response rather than to direct damage from virus, but in the case of myocarditis this (as in other viruses) has not been confirmed.

References


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