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## Editorial article

## Pandemic due to a pandemic?☆

## ¿Pandemia a causa de una pandemia?

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Two years into the pandemic, in addition to the many doubts that have arisen regarding prevention, vaccination and treatment in the acute phase, doubts are once again being raised about the understanding and classification of the complications arising from SARS-CoV-2 infection.

So far, and not by absolute consensus, three clinical situations related to or resulting from COVID-19 infection have been identified.

A first would be the clinical manifestations resulting from damage to different organs caused by COVID-19 infection, such as the lung, which would also include multisystemic inflammatory syndrome. The second would be manifestations secondary to hospital admission, admission to the Intensive Care Unit (ICU) and treatment of COVID-19 infection. But without doubt, the form that generates most uncertainty and doubt is the so-called *long COVID*.

None of them are mutually exclusive, and the same patient can be diagnosed, for example, with persistent long COVID with complications from prolonged ICU admission, such as critical patient myopathy.

Long COVID is accepted as a persistent clinical pattern that can occur after SARS-CoV-2 infection, even in mild and asymptomatic forms. There is no consensus regarding delay in its onset, but it is generally accepted when symptoms persist for more than 4–12 weeks without an explanation by an alternative diagnosis. The main clinical manifestations are fatigue, difficulty thinking or concentrating (known as brain fog), orthostatism, palpitations, muscle and joint pain, and headache; all these symptoms worsen after exertion.<sup>1,2</sup> Although loss of taste and smell is included, it remains to be agreed whether it is a symptom of long COVID, or whether it is a complication of the SARS-CoV-2 infection itself.

But are we really defining a clinical entity, a new disease?

Myalgic encephalomyelitis, also called chronic fatigue syndrome, or systemic exertion intolerance disease, has been known since 1988. Although the aetiology is unknown, attempts have been historically made to link the onset or development of chronic fatigue syndrome (CFS) to viral infections; Epstein–Barr virus infection, Q fever and Lyme disease<sup>3</sup> have received special attention, but

without conclusive studies. The different scales and scores for the diagnosis of CFS coincide on the presence of physical and mental fatigue, unrefreshing sleep, orthostatism, headache, muscle pain; symptoms that limit the quality of life of patients and the performance of many daily tasks, symptoms that worsen after efforts that may be minimal, and symptoms that persist for more than six months. The diagnosis, which is clinical, is based on the exclusion of alternative diagnoses that could justify the symptoms.<sup>4</sup>

The term fatigue deserves special attention because of its poor ability to be well defined. Fatigue, is it tiredness? Is it dyspnoea? Is it weakness? In both CFS and long COVID, fatigue usually refers to the inability to perform ordinary tasks due to tiredness. If the patient's perception is of breathlessness or muscle weakness, a thorough examination is required to rule out other cardiorespiratory or muscular diseases. Probably for such cases, the term fatigue is completely inappropriate.

For those patients diagnosed with long COVID and in whom their symptoms last beyond six months, will there be any difference with respect to patients diagnosed with chronic fatigue syndrome?

Current knowledge of what is known as long COVID may be very different in the coming months and these two questions are likely to be the defining ones of the disease: Is it a chronic and as such persistent disease or a reversible and as such curable disease? And if it is reversible, will the cure occur through the natural course of the disease or through therapeutic intervention?

Against these answers, two further questions arise. If it is a chronic disease, isn't this really a chronic fatigue syndrome triggered by a viral infection, in this case by SARS-CoV-2? In the case of a reversible/curable disease by therapeutic intervention, can the treatments used for the treatment of long COVID be equally useful and effective in patients with chronic fatigue syndrome?

Probably, and based on the different data that are being published, this is a disease that will be persistent, and in my opinion, we will have to reconsider its name. Perhaps we are facing a spectacular increase in the incidence and prevalence of chronic fatigue syndrome.

Perhaps another pandemic will emerge from this pandemic, this time from a disease already known as chronic fatigue syndrome.

## Conflict of interests

The authors declare that they have no conflict of interest.

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