

## Long COVID: What is Known and What We Still Need to Know

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## Abstract

### Objective

A subset of patients who survive acute COVID infection may have a postviral syndrome of prolonged symptoms which may or may not be the same as their acute symptoms. There is a paucity of evidence and studies about Long COVID although emerging information, largely from patient self-reports, has helped to describe the condition. Our goal was to better describe what is known about Long COVID and to better define our knowledge gaps.

### Methods

This was a narrative review of the literature that included only peer-reviewed literature supplemented by information from authoritative websites. Patient-generated materials and online patient sources were excluded.

### Results

There are over 50 symptoms that may occur in Long COVID ranging from fatigue, cough, joint pain, cognitive deficits, exercise intolerance to arrhythmias, hypertension, heart failure, pulmonary edema, and other. Long COVID is treated by supportive care, triaging patients with more severe symptoms to higher levels of care. However, diagnosis of Long COVID remains a challenge. The duration of Long COVID varies as widely as symptoms, from a few weeks to months. Many healthcare professionals have been dismissive of this postviral syndrome, but viral persistence is a well-recognized phenomenon. Risk factors for Long COVID include female sex and obesity. There is speculation that Long COVID may be more than one syndrome, including a relapsing/remitting syndrome.

### Conclusion

Long COVID is a real condition that can be challenging to diagnose. Only a subset of those who survive acute COVID infection will develop Long COVID, which in many cases is relatively mild and resolves. However, Long COVID may put patients at risk for more severe symptoms, including myocarditis, arrhythmias, pulmonary edema, and others. A better understanding of the trajectory of Long COVID is needed.

### Open Access

#### Abstract

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