



Long Covid: is it a Fact?



Nahla AM Hamed*

Department Hematology Unit, Faculty of Medicine, Alexandria University, Egypt

Submission: February 15, 2022; Published: March 11, 2022

*Corresponding author: Nahla AM Hamed, Internal Medicine Department (Hematology Unit), Faculty of Medicine, Alexandria University, Alexandria, Egypt

Abstract

Coronavirus (COVID-19) can cause symptoms that last weeks or months after the infection have gone in some people. This is sometimes called “long COVID” or post-COVID-19 syndrome. They commonly experience: tiredness or fatigue worsened after physical or mental activities (post-exertional malaise); difficulty in thinking or concentrating (“brain fog”); cough; chest or stomach pain; headache; fast-beating or pounding heart (heart palpitations); pins-and-needles feeling; diarrhea; sleep problems; fever; dizziness on standing (lightheadedness); rash; mood changes; smell or taste change; menstrual period cycles changes.

Abbreviation: MIS: Multisystem Inflammatory Syndrome; PTSD: Post-Traumatic Stress Disorder

Introduction

“Post-COVID syndrome” is an umbrella term that includes a wide range of physical and mental health problems occurring four or more weeks after SARS-CoV-2 infection [1]. Long-term COVID-19 symptoms have been referred to by The National Institutes of Health as post-acute sequelae of SARS-CoV-2 (PASC). Common terms are long COVID or long-term COVID. People with post-COVID syndrome are sometimes known as “long haulers” [2]. In October 2021, WHO defined long COVID as persistent or fluctuating symptoms with an impact on everyday function following history or probable history of SARS-CoV-2 infection that last for at least 2 months and cannot be explained by an alternative diagnosis in adults. However, the definition has not yet been specified for children or adolescents [3].

What are the long-term effects of coronavirus infection?

Long-term COVID-19 symptoms can occur in some COVID-19 infected patients including those with initial mild or asymptomatic acute infection [1]. The condition seems to be more common in women than in men (23% of women and 19% of men had symptoms 5 weeks after infection). There is also a distinctive age distribution. Long COVID is most common in middle-aged people (25.6% at 5 weeks in patients between 35 and 49 years old). It is less common in younger and older people. This age distribution pattern may probably be explained by ‘survivor bias’. About 9.8% of children aged 2–11, who are virus positive, still have symptoms after at least 5 weeks [4]. It’s not known whether

COVID-19 infected children are more or less likely than adults to experience continuing symptoms [2]. Those who had positive COVID-19 PCR tests are more likely to have long-COVID symptoms than those with a negative test result — and were almost twice as likely to report three or more symptoms [5]. There isn’t a clear link between certain risk factors (including high blood pressure, smoking, diabetes, obesity and other) and long-term problems [2]. A team at University College London found 205 symptoms in a study of more than 3,500 people with long COVID. By month 6, the most common symptoms were “fatigue, postexertional malaise, and cognitive dysfunction” [6]. Long-term COVID-19 in children is shown up as fatigue, depression, shortness of breath and other long-hauler symptoms [2]. The persistence of these health problems in some people could be due to organ damage, a persistent inflammatory or autoimmune response or another reason [2].

Types of Post-COVID Conditions

New or Ongoing Symptoms

According to the CDC, the most common lasting symptoms are fatigue, shortness of breath, cough, joint pain and chest pain. Other issues include cognitive problems, difficulty concentrating, depression, muscle pain, headache, rapid heartbeat, and intermittent fever. They occur in different combinations and last for weeks or months even in COVID-19 infected person with mild illness or no initial symptoms [2].

Multiorgan Effects of COVID-19

Some people with severe COVID-19 experience multiorgan effects or autoimmune conditions for weeks or months after COVID-19 illness. Multiorgan effects can affect many, or all, body systems, including heart, lung, kidney, skin, and brain functions. Some people, mostly children, experience very rarely multisystem inflammatory syndrome (MIS) during or immediately after a COVID-19 infection [7].

Effects of COVID-19 Illness or Hospitalization

Hospitalizations including post-intensive care admission for severe COVID-19 can cause severe weakness and exhaustion during the recovery period. Other effects include problems with thinking and judgment, and post-traumatic stress disorder (PTSD) [7].

Prevention

The best way to prevent post-COVID conditions is to prevent COVID-19 illness. For eligible people, vaccination against COVID-19 has to be given as soon as possible [7].

Treatment

The disease mechanisms causing long COVID are unknown, and there are no evidence-based treatment options. Clinical guidelines focus on symptom management, and various treatment options are being evaluated [8].

What about the impact of vaccines in people who already have long COVID?

A UK survey of more than 800 people with long COVID, reported an overall improvement in their symptoms in 57% of

cases, no change in 24% of cases and deterioration in 19% of cases after their first dose of vaccine. The vaccine might improve symptoms by eliminating any virus or viral remnants left in the body, or by rebalancing the immune system [9].

Conclusion

Understanding of post-COVID conditions remains incomplete. It seems unlikely that there is a single explanation for long COVID. Several mechanisms are likely at work, and guidance for healthcare professionals will likely change over time as evidence evolves.

References

1. Evaluating and Caring for Patients with Post-COVID Conditions: Interim Guidance. CDC 2021
2. COVID 'Long Haulers': Long-Term Effects of COVID-19. Hopkinsmedicine.org/health
3. Berg SK, Nielsen SD, Nygaard U, Bundgaard H, Palm P, et al. (2022) Long COVID symptoms in SARS-CoV-2-positive adolescents and matched controls (Long COVID Kids DK): a national, cross-sectional study. *Lancet Child Adolesc Health*.
4. Buonsenso D, et al. *Acta Paediatr* 2021.
5. Editorial (2022) Long COVID and kids: more research is urgently needed. *Nature* 602(7896): 183.
6. Ziauddeen N, et al. Preprint at medRxiv 2021.
7. Post-COVID Conditions CDC 2021.
8. Crook H, Raza S, Nowell J, Young M, Edison P, (2021) Long covid-mechanisms, risk factors, and management. *BMJ*, 374: 1648.
9. Marshall M, (2021) The four most urgent questions about long COVID. *Nature* 594(7862): 168-170.



This work is licensed under Creative Commons Attribution 4.0 License
DOI: [10.19080/CTOIJ.2022.21.556054](https://doi.org/10.19080/CTOIJ.2022.21.556054)

Your next submission with Juniper Publishers will reach you the below assets

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats
(Pdf, E-pub, Full Text, Audio)
- Unceasing customer service

Track the below URL for one-step submission

<https://juniperpublishers.com/online-submission.php>