

- Virus**'Long COVID' symptoms similar to chronic fatigue syndrome**

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People with “long-haul” COVID-19 have symptoms of chronic fatigue syndrome and other breathing problems months after first testing positive for the virus, a study published Nov. 29 by the Journal of the American College of Cardiology found.

Nearly half the participants in the small study met the criteria for chronic fatigue syndrome, or myalgic encephalomyelitis, the data showed.

In addition, nearly all of the participants, or 88 percent, exhibited abnormal breathing patterns referred to as dysfunctional breathing, while 58 percent had evidence of circulatory impairment during peak exercise performance, the researchers said.

“These findings suggest that in a subgroup of long haulers, hyperventilation and dysfunctional breathing may underlie their symptoms,” study co-author Donna M. Mancini said in a press release.

“This is important as these abnormalities may be addressed with breathing exercises or retraining,” said Mancini, a professor of cardiology at the Icahn School of Medicine at Mount Sinai in New York City.

Chronic fatigue syndrome is a medical condition that can often occur following a viral infection, according to the Centers for Disease Control and Prevention.

It can cause fever and muscle aches as well as prolonged tiredness and depression, the agency says.

Many people with COVID-19, even those who experience mild illness, have reported persistent symptoms after they recover from their initial infection, research suggests.

Those affected are commonly referred to as COVID-19 “long-haulers,” and their symptoms include severe fatigue, cognitive difficulty, unrefreshing sleep and muscle aches and pains, previous studies have found.

For this study, the researchers assessed 41 patients — 23 women and 18 men — ages 23 to 69 who’d previously been diagnosed with acute COVID-19 infection between three and 15 months before evaluation.

Participants were referred to the study from pulmonologists or cardiologists and all had normal pulmonary function tests, chest X-rays, chest CT scans and echocardiograms before infection with the virus.

All participants underwent a standard cardiopulmonary exercise test, which evaluates heart and lung function based on physical activity, and continued to experience unexplained shortness of breath.

For this test, they were seated on a stationary bicycle and used a disposable mouthpiece for measurement of expired gases and other breathing measurements, including peak oxygen consumption, carbon dioxide production and breathing rate and volume, the researchers said.

They were also connected to an electrocardiogram machine, pulse oximeter and blood pressure cuff to measure heart rate, pulse and blood pressure, respectively.

After a brief rest period, participants began exercises which increased in difficulty every three minutes, the researchers said.

Most of the participants had evidence of abnormal breathing patterns referred to as dysfunctional breathing, which is most commonly observed in asthmatic patients and is defined as rapid, shallow breathing.

In addition, they had low carbon dioxide values at rest and with exercise, suggesting chronic hyperventilation.

The circulatory impairment observed in many participants may be an indication of heart muscle dysfunction, according to the researchers.

“Recovery from acute COVID-19 infection can be associated with residual organ damage,” Mancini said.

“Many of these patients reported shortness of breath, and the... results demonstrate several abnormalities, including reduced exercise capacity, excessive ventilatory response and abnormal breathing patterns which would impact their normal daily life activities,” she said.