-COVID-19

Long Covid sufferers have changes in brain function — Study

The Borneo Post · 3 May 2023 · 14 · — Bernama-Xinhua

Those who experience Long Covid have been found to have abnormal brain activity, according to a new study led by researchers at the University of Maryland School of Medicine (UMSOM).

Long Covid sufferers who experience brain fog, memory issues or other neuropsychiatric symptoms for months after a Covid-19 diagnosis have abnormal brain activity during memory tests on functional magnetic resonance imaging (MRI), according to the study published in the journal Neurology.

Long Covid accompanied with neurological symptoms was associated with less activity in certain brain regions normally used for memory tasks but more activity in other areas of the brain, according to the researchers, said Xinhua.

"The greater activity occurred outside of the normal working memory brain network. We often see such changes in patients with a brain injury: Deficits in the default mode network of the brain leads to an increase in activity in other regions to help maintain brain function," said study leader Linda Chang, professor of diagnostic radiology and nuclear medicine at UMSOM.

"While our study doesn't prove that Covid caused these brain changes, there appears to be a strong association with these changes and lingering neuropsychiatric symptoms," she said.

The research team performed functional MRI scans on 29 patients who had Covid-19 an average of seven months earlier. Nine of them were hospitalised for their illness.

Each patient had at least one ongoing neuropsychiatric symptom like memory loss, depression, or anxiety.

The study group was matched with a control group of 21 people with no known history of Covid infection.

The Long Covid group did have poorer scores on tests of dexterity and motor endurance than the non-COVID group. They also reported more negative feelings, such as anger and sadness, and higher levels of stress, and they had lower scores for life satisfaction compared to those who never had Covid.

In addition, they had higher scores for depression, anxiety, fatigue and pain than the control group, according to the study.