



Are People Living With HIV at Greater Risk of Developing Long COVID?

Scientists are exploring a wide variety of therapies to prevent and treat long COVID.

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Studies suggest that people living with HIV may be more susceptible to long COVID, the widely varying symptoms that can persist for months or years after SARS-CoV-2 infection.

In 2022, Michael Peluso, MD, of the University of California San Francisco, and colleagues reported results from a small study showing that people with HIV were about four times more likely to have long COVID symptoms along with lower levels of CD8 T cells targeting SARS-CoV-2 and higher levels of certain inflammatory biomarkers. A larger study by the same group found that HIV-positive people were about twice as likely to have neurocognitive symptoms, and Epstein-Barr virus (EBV) reactivation was linked to fatigue. In a review of data from more than 3 million people in the TriNetX health research database, people with HIV were more likely to experience persistent symptoms and had increased odds of developing multiple health conditions after a bout of COVID, but vaccination lowered the risk.

Peluso and Annukka Antar, MD, PhD, of Johns Hopkins University Medical School, suggested several reasons why people with HIV might be more prone to develop long COVID, including chronic inflammation, impaired immune function that leads to persistent SARS-CoV-2 infection, reactivation of EBV and other latent viruses, abnormal blood clotting, a leaky gut and a higher prevalence of comorbidities. What's more, a recent study found that HIV-positive people are more likely to experience SARS-CoV-2 reinfection, raising the odds of long-term consequences.

Scientists are exploring a wide variety of therapies to prevent and treat long COVID. Some studies suggest that COVID vaccines, the antiviral drug Paxlovid and the diabetes drug metformin may lower the risk, but data are mixed. Peluso and Antar stress that HIV-positive people must be included in this research. "Attention needs to be paid to contributors that might be unique or more important in driving long COVID among people living with HIV," they wrote.