News From the Centers for Disease Control and Prevention

Post-COVID-19 Symptoms Were Worse Than Cancer's Effects

Results from a recent study show the substantial toll that COVID-19 has taken on some people: those referred to outpatient rehabilitation clinics for post-COVID-19 care were twice as likely as the clinics' patients with cancer to be in poor physical health or in pain.

The analysis is based on data comparing the physical and mental health status of 1295 patients who had post-COVID-19 symptoms with a control group of 2395 patients with cancer, all of whom were referred for outpatient rehabilitation between January 2020 and March 2021.

About one-third of the patients who had COVID-19 described their general health as fair or poor compared with one-quarter of the patients with cancer. A greater proportion of patients with post-COVID-19 symptoms also said their mental health was fair or poor. And although they were more likely than the control group to be male, younger, and employed, 72% of patients who had COVID-19 had generalized muscle weakness compared with about 40% of the patients with cancer.

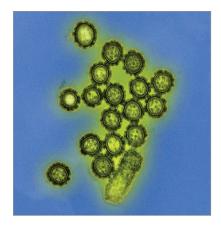
Pain and difficulty with physical activities were more common among patients with post-COVID-19 symptoms: more than onethird said they found it difficult to complete chores, navigate stairs, run errands or shop, and walk for 15 minutes. Working in or outside the home was more difficult than usual for 37% of those who survived COVID-19, and 33% said social activities were challenging. In contrast, about 20% of the control group said either activity was problematic.

After COVID-19, patients averaged 9 outpatient rehabilitation visits compared with 5 visits for the control group. "Health care systems and providers should be prepared to recognize and meet the ongoing needs of this patient population," the authors wrote.

Drug-Resistant Pandemic Influenza Found at Texas Detention Facility

Four cases of oseltamivir-resistant 2009 influenza A(H1N1) detected in January 2020 at a US Border Detention Facility in Texas raised concern about the spread of antiviralresistant strains, according to a study published in *Emerging Infectious Diseases*.

When 2009 influenza A(H1N1) was declared a pandemic strain, the virus was susceptible to oseltamivir. However, strains of the virus that were resistant to the drug—a neuraminidase inhibitor that's the most commonly prescribed antiviral for influenza had spread worldwide. Those strains had the H275Y mutation in the neuraminidase gene, which enabled them to evade oseltamivir's



antiviral effects. Although susceptible 2009 influenza A(H1N1) was more widespread, sporadic clusters of oseltamivir-resistant strains have been identified.

During the 2019-2020 US flu season, the CDC's routine surveillance detected ten 2009 influenza A(H1N1) isolates with the H275Y mutation from among 1233 samples that were genetically sequenced. Four of the 10 isolates had been collected on the same day from people being held at the Texas detention center. A subsequent investigation found that 8 detainees at the facility had developed a fever, cough, sore throat, and body aches in late January 2020.

Next-generation sequencing of samples from 4 detainees showed they were genetically identical, suggesting a single infection source. All of those samples had a hemagglutinin gene with a N156K amino acid substitution that may allow the virus to evade immunity resulting from previous 2009 influenza A(H1N1) infection.

The H275Y mutation in the neuraminidase gene wasn't found in any of the 36 other 2009 influenza A(H1N1) cases from Webb County, Texas, where the detention center is located. However, the authors expressed concern that antiviral-resistant 2009 influenza A(H1N1) could spread.

"Escape from preexisting immunity may contribute to the spread of oseltamivirresistant viruses in coming seasons," the authors wrote. – Bridget M. Kuehn, MSJ

Note: Source references are available through embedded hyperlinks in the article text online.



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