Ask Your Neurologist

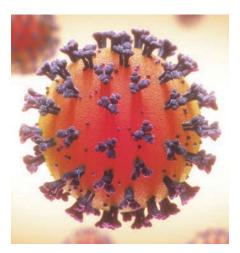
Is there a link between COVID-19 and seizures?

CHRISTOPHER NEWEY, DO, RESPONDS

ince the early days of the pandemic, neurologic symptoms such as confusion, delirium, headache, and loss of smell and taste have been documented. In rare cases, the virus has been reported to cause seizures, but no direct link has been established definitively. The seizures may be due to other factors such as fever, brain injury, infection, or stroke and may not indicate a new case of epilepsy.

For patients with no known history of epilepsy who develop seizures after contracting COVID-19, it's still too early to determine how they will recover. Ongoing studies are looking at EEGs for any epilepsy-related abnormalities due to COVID-19. So far, smaller studies don't show a clear connection. In COVID-19 patients with new seizures, experts believe the risk for a recurring seizure may diminish as virus-related inflammation resolves. Unfortunately, in rare cases, the infection may injure the brain and cause ongoing seizures that will require long-term monitoring, treatment, and follow-up.

To determine if COVID-19 exacerbates seizure frequency in people with epilepsy, the American Epilepsy Society conducted a survey of its members. Thirty percent of respondents said they had patients with epilepsy who also had COVID-19, and 83 percent of those patients experienced no increase in seizure frequency after contracting the virus. Of the 17 percent of patients who did see an increase, other stressors, including lack of health care access, sleep disturbances, and



medication shortages, could have triggered breakthrough seizures, the doctors noted.

People with a seizure disorder or epilepsy who contract COVID-19 and experience breakthrough or new types of seizures should be evaluated by their neurologists to see if there is a virus connection or a need to change their medication. Doctors want to minimize any potential side effects or interactions between antiseizure medications and drugs used to treat COVID-19. Since treatment for the coronavirus continues to evolve, you should expect your doctors to be well informed about the latest protocols. Now that a COVID-19 vaccine is available, be sure to ask questions or share any concerns about its safety with your doctor. Currently, there are no epilepsy-specific reasons to avoid getting vaccinated.

If you have a seizure disorder or epilepsy, it's especially important

during the pandemic that you have enough antiseizure medication on hand and take it as directed, communicate regularly with your treating physician either via telehealth or in person, get adequate sleep, exercise regularly, avoid recreational drugs and alcohol, and protect your mental health by doing what you can to limit stress and anxiety.

The best way to prevent the small risk of breakthrough or new seizures related to the coronavirus is to avoid exposure to COVID-19 by washing your hands frequently, wearing a mask, and practicing social distancing.

As always, review your emergency plan for a seizure at home. For example, your household members should know that if you have a seizure, they should stay calm and begin timing it. They should turn you on your side if you're unconscious and not put objects in your mouth. They should stay with you until you recover. A tonic-clonic seizure—characterized by a loss of consciousness, stiffening, and twitching or jerking—should last only about two or three minutes and won't necessarily require emergency attention. They should call 911 if the seizure lasts more than five minutes or occurs in clusters without complete recovery in between, or if the seizure is different from the usual, causes harm, or affects breathing.

Dr. Newey is medical director of the neurosciences intensive care unit at Ohio's Cleveland Clinic Akron General Medical Center and staff physician at the Cleveland Clinic Epilepsy Center.