

# Carpe Diem – Seize the Day Blog

*Editor's Note: Content presented in the Carpe Diem – Seize the Day Blog is for awareness and informational purposes only, and it is not meant to be a diagnostic tool.*

Stress can cause patients with epilepsy to have more neuroinflammation, which can put them at risk for more frequent seizures. The condition of a person with epilepsy can significantly affect their quality of life in many ways. All medical professionals treating a person with epilepsy should be aware of how these conditions can affect their patient's mental health. Epilepsy, partly due to the nature and effects of recurring seizures, can cause psychiatric comorbidities. Major depressive disorder, generalized anxiety disorder, and posttraumatic stress disorder have been identified as common comorbidities of epilepsy.

Health care professionals may need education about how epilepsy affects a person's day-to-day life, in what ways the effects of a seizure can linger, and how the ensuing stress and depression can have an impact on the patient's overall health. A 2021 study in the International Journal of Molecular Sciences examined the impact of stress on patients with epilepsy by focusing on neuroinflammation. Neuroinflammatory responses to seizures can potentially make an epileptic condition worse, and the researchers put forth a theory that neuroinflammation caused by both acute and chronic stress may make patients even more susceptible to seizures.

Health care professionals may credit much of the stress that patients with epilepsy face to the disease itself: the stigma of the disease, the fear related to the unpredictable nature of seizures, and the lifestyle changes patients must make. Working with patients to understand their stress and find a coping mechanism, with or without pharmacologic agents, can be important in-patient management.

## **Seizure frequency**

The researchers note that chronic stress in patients with epilepsy often is directly related to an increase in seizure frequency. Increased frequency can be common in epilepsy if a patient has psychiatric comorbidities; anxiety and depression often predict an increase in seizures, and the inflammatory response to acute stress can possibly last for weeks after the stressor. Stress reduction mechanisms and psychiatric treatment should be included in harm management that seeks to reduce seizure frequency in patients.

## **Disability**

Patients with epilepsy who also have depression are at a greater risk for a reduced quality of life, which can manifest in several ways. For instance, these patients have a higher rate of disability than those without depression. The way depression is triggered or exacerbated can also manifest in different ways; the researchers claim that men may be more likely to be influenced by social factors, whereas women may be more likely to be influenced by the epilepsy itself.

### **Decrease in sleep and activity**

Stress and depression can lead to lifestyle changes in patients, including problems sleeping and decreased physical activity. A February 2021 study in *Seizures* looked at how young people with epilepsy feel the COVID-19 pandemic has had an impact on their care and mental state. Most young people surveyed in the study reported that they were sleeping less and performing less physical activity. Caregivers also reported increases in their own stress and anxiety. Sleep deprivation can lead to even more stress and depression, so determining how patients are sleeping could be important to managing their condition.

### **Treatment-based anxiety**

As mentioned earlier, much of the stress and anxiety in patients with epilepsy comes from the epilepsy itself and its treatment. Finding ways to manage both epilepsy and depression can be stressful. Some depression medications can even increase seizure risk. The fear of inconsistent or ineffective treatment may cause much of the stress a patient is feeling.

*Editor's Note: The Carpe Diem – Seize the Day Blog will be distributed and posted weekly.*

Always remember – **CARPE DIEM – SEIZE THE DAY!**

[Steve.Hutton@epilepsy-ohio.org](mailto:Steve.Hutton@epilepsy-ohio.org)