# Carpe Diem – Seize the Day Blog

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An aura can be the first sign that an epileptic seizure is about to happen. An epilepsy aura is also called a focal aware seizure. These focal aware seizures, or auras, typically happen less than a minute before a tonic-clonic seizure — auras can develop into a more serious seizure. Focal seizures, such as focal aware seizures, tend to start in one specific area of the brain (even if they spread). This might explain the sensations associated with auras.

But what are auras? What types of seizures are associated with auras? This article will explore these questions and more.

#### What Is an Aura?

An aura is a focal aware seizure that typically precedes a more severe seizure. Loss of consciousness does not occur during an aura as it does during a tonic-clonic seizure. However, the causes of auras are not well understood.

According to the Epilepsy Society, people describe their auras as:

- A "rising" feeling in their stomach
- Déjà vu (that feeling like you have been somewhere before)
- Unusual smells or tastes
- An intense emotional feeling, such as fear or joy
- Muscle stiffening or twitching
- Feelings of numbness (or tingling)
- The sensation that a limb feels bigger or smaller than it actually is
- Visual disturbances or hallucinations

Sometimes a person experiencing an aura will see things out of the corner of their eyes a lot. However, when they looked, there was nothing there. There are occasions when a person having an aura will smell cardboard, burning tires, or water running in their ears. Additionally, there is a strong out of body feeling that you have been there or done that before – Déjà vu. Usually, the person experiencing the aura does not have enough time to tell someone.

#### What Causes Auras?

Like most seizures, the exact causes of seizure auras are unknown. However, data from electroencephalogram (EEG) readings and brain imaging studies suggest that a measurable preictal state (a period of increased seizure probability) precedes seizure onset. This means that fluctuations in brain wave or activity patterns occur before a seizure occurs, even during auras.

Additionally, one study found that people with partial epilepsy who felt an aura before a seizure also frequently experienced other prodromes (a subjective feeling or sensation that precedes a

seizure). The most common seizure prodromes include confusion, irritability, anxiety, tremor, and headache, as well as mood disturbances.

## What Types of Seizures Have Auras?

Although auras are technically a type of seizure, they precede more serious tonic-clonic (or grand mal) seizures. A tonic-clonic seizure involves both sides of the brain. These seizures can start on both sides of the brain at the same time, or they can begin on one side of the brain (also called a hemisphere) and then spread to the whole brain.

Auras have typically been seen in the context of generalized epilepsy. In one study, approximately 21 percent of people with generalized epilepsy reported (in open-ended questions) that they had auras before their grand mal seizures. However, in this same study, 64 percent of people indicated in closed-ended questions that they had at least one type of aura. This difference might show that sometimes even people with epilepsy do not fully understand what an aura is and how it can occur in the context of generalized epilepsy.

### What Should You Do If You Experience Auras?

If you experience auras in connection with your seizures, an aura is your warning sign to take seizure safety steps. This may include getting to a safe place as quickly as possible or alerting someone that you are about to have a seizure. Every person's seizure action plan will look different based on their health needs and circumstances. Your neurologist or epileptologist can help you develop an action plan for what to do if you experience an aura.

Editor's Note: The Carpe Diem – Seize the Day Blog will be distributed and posted weekly. Always remember – CARPE DIEM – SEIZE THE DAY!

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