## Carpe Diem – Seize the Day Blog

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Do seizures hurt? Seizures do not typically hurt or directly cause pain. However, in certain cases, seizures may lead to pain as an effect of other symptoms, such as convulsions. Seizures can cause a wide range of symptoms depending on the type of seizure you have and other personal factors. While some people may experience symptoms that cause pain, others may not.

Seizures that hurt are rare. The phrase "ictal pain" refers to pain during a seizure as a direct symptom of the seizure activity. According to a 2016 research review looking at EEG reports over a 12-year period, ictal pain itself is rare.

Researchers observed that seizure pain is more common in psychogenic nonepileptic seizures (PNES) than in epileptic seizure types.

Additionally, as many seizures cause a loss of consciousness, you may not be aware of pain during a seizure episode.

If you feel hurt, it could instead be a side effect of a seizure symptom that causes pain, such as muscle contractions. You may experience this discomfort or pain when the seizure ends, and you regain awareness.

Below are some examples of how seizures may hurt:

## **Muscle contractions**

Some seizures may cause muscle contractions. This can make your muscles tired, tense, or sore and may cause you discomfort when you move your muscles after a seizure.

This may particularly happen if you experience a seizure that causes myoclonic movements — stiff or jerking movements or contractions that involve the muscles.

## **Iniury**

Some seizures, such as generalized tonic-clonic seizures, can cause involuntary jerking movements that may lead to blows or falls, causing painful injuries. Other symptoms of seizures, such as a loss of muscle tone or a lack of consciousness, may also cause falls or injury. Injuries may include:

- bites on your tongue or dental injuries
- broken bones
- a head injury
- cuts
- bruises

Try and move to a safe area if you suspect a seizure is coming. If you believe a seizure may occur soon, try, and take precautions and make sure you are in a safe environment. This can include sitting or lying down on a soft area, making sure you are away from any hard items, such as furniture or other hazards moving away from water. Alternatively, if you believe someone is having a seizure or is losing consciousness, ensure their surroundings are clear and safe.

Ictal abdominal pain refers to stomach pain resulting from a seizure. Frontal lobe epilepsy may frequently cause abdominal pain, according to a 2020 research review citing older research. A rare type of epilepsy known as "abdominal epilepsy," or "autonomic epilepsy" can also cause abdominal pain alongside symptoms such as:

- cramps
- vomiting
- pain or pressure in the abdomen that may radiate to other areas
- heart palpitations
- stuttering
- pain without convulsions or loss of consciousness
- fatigue and sleepiness

In some cases, the abdomen may be the only area affected by epileptic brain activity.

Headaches due to an epileptic seizure are common. In fact, headaches and seizures can be clinically related in many different ways. For example, a migraine episode may trigger a seizure in some people. Conversely, seizures can cause migraine, and in very rare cases, a seizure may cause a migraine episode as its only obvious symptom.

Other instances of headaches that relate to seizures include:

**Pre-ictal headache:** This occurs before a seizure happens. It may be a warning or aura of an upcoming seizure.

**Ictal headache or hemicrania epileptica:** This headache develops at the same time a seizure starts. It may improve after the seizure ends.

**Post-ictal headache:** This is a headache that occurs within 3 hours after you have had a seizure. It may last for up to 72 hours.

Seizures can feel different for each person. Symptoms and feelings may also depend on what type of seizure you have and if you are aware or lose consciousness during the seizure. Before a seizure starts, you may experience a seizure aura. Aura symptoms can include: a feeling of anticipation or déjà vu

- intense feelings of joy or fear
- an unusual taste or smell
- stiffness or twitching in the body
- numbness or tingling
- visual disturbances such as hallucinations

During a seizure you may experience:

- confusion
- difficulty speaking or breathing
- lack of consciousness or responsiveness

- uncontrolled stiffness or jerking movements
- muscle contractions or twitching
- loss of muscle strength or falling
- making uncontrolled noises
- repetitive or focused motions, such as chewing or picking at clothes

In addition to pain, you may also experience other symptoms after a seizure episode ends. Seizure after-effects may include:

- confusion
- difficulty speaking
- fatigue or sleepiness
- weakness
- nausea
- vertigo or dizziness
- memory loss

It can be concerning to experience pain before, during, or after a seizure.

While not all seizures and seizure symptoms require emergency care, it's necessary to call 911 for one or more of the following circumstances:

- If it could be the person's first seizure.
- The person has difficulty regaining consciousness or breathing.
- The seizure lasts 5 minutes or more.
- The person has a second seizure soon after the first seizure.
- The person has another underlying health condition or is pregnant.
- The seizure happens in water.
- The person becomes injured during or after the seizure.

If you already have a diagnosis of a seizure disorder, it is also advisable to promptly seek advice from your doctor if:

- your symptoms change, such as experiencing pain when you did not before
- your current symptoms do not improve or worsen despite treatment
- you feel like your treatment is not effectively managing your symptoms
- you are finding it difficult to follow your treatment plan

According to a 2015 study, isolated and brief seizures probably **do not** kill brain cells. Additionally, the National Institutes of Health (NIH) suggest that most seizures do not hurt the brain, but some can cause developmental difficulties in children. Researchers note that this lack of damage to the brain can be very difficult to prove definitively. Prolonged seizures that last 5 minutes or longer, known as status epilepticus, may cause permanent injuries to the brain.

In summary, having a seizure does not hurt. Since many seizures cause you to lose consciousness, you may also be unaware of what is happening or unable to feel pain during a seizure.

However, you may feel pain or have a headache during a seizure if you are conscious. You may also feel pain after the seizure ends. This could be due to the effects of other seizure symptoms, such as experiencing muscle soreness from convulsions or sustaining injuries during the seizure. If you have a condition that causes seizures, talk with your doctor to develop a safety plan to reduce the risk of getting injured during a seizure episode. It is important to also reach out to your doctor if you have any concerns about your seizure symptoms or treatments. Seek immediate medical care for anyone who becomes injured before, during, or after a seizure.

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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