

Unraveling the Link Between Stroke and Seizure

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What's the link between stroke and seizure? In this article, you'll find out!

You'll also learn:

- Why seizures after stroke happen
- What factors increase your chance of having a seizure
- How to treat seizures
- What to do if someone is having a seizure

Let's get started.

A Shocking Link Between Seizure and Stroke

Did you know that your body moves because of electricity? Your brain is constantly interpreting electrical impulses that travel along your neurons all over your body. Your brain is also sending electrical impulses to these nerves. It's a constant, electric back-and-forth.

For example, when you move your arm, it's because your brain sent an electrical impulse to your arm muscles. When there is scar tissue in the brain from stroke, it impacts the electrical activity in your brain.



A seizure happens when there's sudden disorganized electrical activity in the brain, as a result from the damage from stroke. During a seizure, the person's body often shakes rapidly with convulsions as their muscles relax and contract repeatedly. It can be very scary because it's uncontrollable. You just have to wait it out. (More advice on what to do later.)

There are many [different types of seizures](#), though, and they all look different.

Types of Seizures

Most seizures involve repetitive convulsions of the body, either with or without consciousness. Sometimes seizures don't involve convulsions, though. A *tonic seizure* involves muscle stiffness, and an *atonic seizure* involves loss of muscle tone. So just because you aren't convulsing doesn't mean that you're not having a seizure. Be sure that you're aware of all the [types of seizures](#). And if you experience seizures, we give advice on when to call 9-1-1 later.

When Seizures Usually Happen

Seizures are not uncommon. In fact, about 22% of stroke survivors will experience seizures after stroke. Usually these seizures happen within the first year after stroke. Your risk of having a seizure goes up if you had a hemorrhagic stroke – the type of stroke caused by a burst artery in the brain (vs. an ischemic stroke caused by a clogged artery).

Types of Stroke and Risk of Seizure

According to the National Stroke Association, you're more likely to have seizures after stroke if your cerebral cortex was affected. The cerebral cortex receives sensory input from all over your body. Brain damage here could result in seizures.

Also, [this study](#) concluded that those who suffered massive stroke also have a higher risk of experiencing seizures post-stroke.

How to Treat Seizures



Seizures are often treated with medication, the same way that epilepsy is treated. Anyone who has had two or more unprovoked seizures is considered to have epilepsy. Even if you just have one seizure after stroke, though, doctors will likely put you on anti-seizure medication to prevent it from happening again.

What to Do When Someone Is Having a Seizure

There's a chance that your loved one might have a seizure before you can get onto anti-seizure medication.

If that happens, here are some important tips to follow:

- **Do NOT hold them down!** Stopping their movement will not stop the seizure. It's very likely that the seizure is confusing and scary to them, and holding them down will only make them more confused and afraid.
- **Do NOT put anything in their mouth!** It's not true that someone could swallow their tongue during a seizure, so don't make this mistake. It could cause serious harm.
- **DO roll them onto their side** if they are on the floor. This will prevent choking on saliva (not their tongue).
- **DO stay with them** until the seizure is over.
- **DO keep track of how long the seizure lasts.** If it goes beyond 5 minutes, call 9-1-1 immediately.
- **DO keep them safe** by moving sharp objects away from them. Make them as comfortable as possible until the seizure stops.

Sometimes it's unclear if you should call 9-1-1 for help. Here are a few guidelines:

You should call 9-1-1 for help if...

- Your seizure lasts for longer than 5 minutes
- You experience multiple seizures back-to-back
- The person appears to be choking or has trouble breathing
- The person is injured during the seizure
- The person asks for medical help
- This is the first seizure you've had

Seizures can be very scary; so even if your seizure lasts less than a few minutes, you can still seek medical attention if would help give you peace of mind.

Understanding Seizure and Stroke

Now you have a solid understanding of seizures after stroke. Seizures are the result of disorganized electrical activity in the brain, which become more likely to happen when there is scar tissue in the brain after stroke. Seizures are even more likely if you had a hemorrhagic stroke or massive stroke.

If you have a seizure, it's important to seek medical attention.

Use our guidelines to determine if you need to be rushed to the emergency room or if you can afford to take the time to schedule an appointment with your doctor for medication.