

# Muscle Stiffness After Stroke



After a stroke, it's normal to notice changes in your muscles. Certain muscles might feel stiff and tight all the time—a condition called spasticity. This can make moving around and doing everyday activities a bit challenging. Spasticity can also be uncomfortable or even painful at times.

This can be a frustrating condition. But there are ways to stop it from disrupting your life. Here's what you need to know and how to treat it.

## Why do muscles get stiff after a stroke?

A stroke can damage the nerves in your brain or spinal cord that are responsible for muscle movement. If you're dealing with muscle stiffness, it's not because you're doing anything wrong. It's because the muscle contractions are out of your control.

Spasticity is a fairly common issue. It can appear days, weeks, months, or sometimes even years after a stroke. Between 25% and 43% of people will have muscle stiffness within 1 year after their stroke. It often affects the elbow, wrist, or shoulder. But it can also happen in the feet, ankles, and legs. You might feel it only in 1 muscle. Or it could affect several at once.

## What does muscle stiffness look like?

People with spasticity have increased muscle tone. It means their muscles look and feel as if they're always flexed and tight.

While more muscle tone may sound like a good thing, the stiffness that comes with it often makes it hard to move. Your motions might start to feel jerky or robotic. And things like walking, sitting, bathing, and grabbing or holding objects aren't as easy as before. This can interfere with everyday tasks and your ability to socialize and engage in hobbies.

You might also have 1 or more of these other symptoms:

- Hands balled into fists
- Pointed or curled toes
- Arms or elbows bent
- Involuntary crossing of the legs
- Stiff joints
- A weak foot that drops, meaning you can't lift the front of the foot

In some cases, spasticity can lead to muscle spasms. These are uncontrollable, sudden muscle contractions that can be very painful.

## How is it diagnosed?

First, your healthcare provider might check for increased muscle tone or a loss of range of motion. Another key sign is whether a muscle resists when it's being stretched. Sometimes more specialized tests may be needed to fully understand the condition. For instance, you may need to get an MRI.

The earlier spasticity is diagnosed, the better.

## How is it treated?

Muscle stiffness often requires long-term care. There are many different treatment options. So it's best to talk with your healthcare provider about the approach that works for you. In some cases, a combination of treatments may be the most effective. Recommendations will vary based on your level of muscle stiffness and overall health.

Treatment may include:

- **Physical or occupational therapy.** A physical therapist (PT) can help you stretch and exercise your muscles. Plus, they can teach you stretches to do at home. An occupational therapist (OT) can offer tips to make everyday tasks easier.
- **Botox.** When injected, this medicine can help relieve stiffness in the muscles.
- **Oral medicines.** These help relax the nerves so that they stop sending messages to the muscles to contract.
- **Intrathecal baclofen therapy (ITB).** For this treatment, medicine goes through a small pump that's implanted in the body.
- **Electrical stimulation (e-stim).** The pulses may help improve spasticity. But there isn't a lot of research on this method yet.
- **Orthoses or braces.** These can hold a muscle in its correct position and stop it from contracting.
- **Surgery.** If other treatments don't work, you may need surgery on the affected muscle, joint, or tendon. This is often done as a last resort.

## What other changes may be needed?

To help with day-to-day living at home—and lower your risk for falls and other accidents—consider:

- Adding a ramp
- Installing bars or railings to hold onto
- Putting a bench in the shower or bathtub
- Getting a raised toilet seat
- Using a cane, walker, or wheelchair as needed

Be sure to always follow your healthcare provider's advice after a stroke. They have the expertise and experience to guide you toward the most effective treatment. This helps ensure you have the best possible quality of life moving forward.

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