

# **SPASTICITY**

## WHAT IS SPASTICITY?

Spasticity is a relatively common neurological condition that impacts an estimated 500,000 people in the U.S.<sup>1</sup>

Spasticity is usually caused by damage to nerve pathways within the brain or spinal cord that control muscle movement and may occur in association with a **stroke**, **spinal cord injury**, **brain or head trauma, multiple sclerosis**, or other neurological conditions.<sup>1</sup>

Spasticity causes muscles to contract uncontrollably and leads to pain, stiffness, and limited movement. Spasticity is most common in the elbows, arms, and ankles.



Spasticity affects 25-43% of people in the first year after a stroke.<sup>2</sup>

## HOW IS IT DIAGNOSED?

Spasticity can spread beyond the affected muscle, making surrounding tendons and tissues tight or difficult to stretch.

There are several signs that are indicative of spasticity, including:

- Increased muscle tone
- Muscle spasms and clonus
- Muscular contraction
- Pain or discomfort
- Postural abnormalities

A clinical assessment to diagnose spasticity typically includes a comprehensive medical history followed by an analysis of posture, movement control, muscular strength, coordination, endurance, and spasticity. In some cases, an electromyography may be used to determine specific nerve conduction velocities, which can guide diagnosis<sup>3</sup>.

If left untreated, joints can become frozen in an abnormal and possibly painful position. For example, spasticity can cause an arm to remain stuck in a folded position or pressed against a person's chest with their wrist and fingers curled.

### LIVING WITH SPASTICITY

Although there is no cure, spasticity can be managed.

The second se



It's important to treat spasticity to improve comfort, mobility, and independence, and can include:

- Using assistive devices such as ramps, grab bars, raised toilet seats, braces, canes, walkers, and wheelchairs can help people with spasticity be safer and more independent.<sup>2</sup>
- Lifestyle changes such as, exercise, physical therapy, stretching, and positioning can help protect range of motion, improve flexibility, and ease stiffness and pain.
- Medications can help block the nerves causing muscles to contract. Oral medications and functional electrical stimulation can also help. In some cases, surgery is needed.<sup>2</sup>



Hear from Hub about his experience with post-stroke spasticity.

Immobility and pain can make sleep and simple tasks like dressing, walking, or getting in and out of a chair difficult. Muscle stiffness may also affect speech and swallowing.



Emotionally, living with spasticity can be draining, trigger sadness and frustration, and is often isolating.<sup>4</sup>

For more support information and resources, visit:

American Stroke Association, or Brain Injury Association of America

Ipsen is a proud sponsor of the American Stroke Association's Spasticity Education Initiative.

#### References

- https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC6065570/#:~:text=An%20estimated%20500%2C000%20 people%20
- 2. https://www.stroke.org/en/about-stroke/effects-of-stroke/ physical-effects-of-stroke/physical-impact/spasticity
- 3. https://doi.org/10.1016/j.ijge.2018.05.005
- Newsome S et al. Beyond the Physical Symptoms of Spasticity for People With MS Spasticity: Results From SEEN-MSS, a Largescale, Self-reported Survey. Neurology. May 3, 2022; 98 (18 Supplement)