



Spasticity is a common symptom in MS and refers to muscle stiffness and spasms. It results from MS-related nerve damage and causes an increase in muscle tone when the muscles are moved, creating more resistance to movement than there would normally be. Depending on the muscles affected, spasticity may make it difficult to perform delicate movements with the hands and fingers, or make larger movements difficult, including walking. Sometimes spasticity may cause particular problems at night.

Recognizing possible triggers

If you know of any triggers that may worsen your spasticity, avoiding them may help you deal with some of the symptoms. The following are some common triggers you may consider:

- Increase in body temperature
- Infection or disease
- An MS relapse
- Constipation
- A full bladder
- Tight clothing
- Emotional stress
- Sudden movements

When might some stiffness be beneficial?

If your legs become weak due to MS, a certain amount of stiffness can help keep the legs rigid and stable for walking and standing. If this might be the case, close monitoring of the symptoms may be best to prevent further complications, as removing the stiffness completely may “reveal” some leg weakness which may make walking a lot more difficult.



When stiffness becomes a problem

- **Contractures** may result after months or years of severe spasticity as a result of lack of muscle movement in which a joint becomes “locked” or immobilized. Contractures are very difficult to treat and may lead to permanent disability.
- **Pressure sores** may occur in the skin when patients with MS become unable to shift their own weight while sitting or lying down in bed. These may lead to serious infections if untreated and make spasticity worse.

Treatment

Medications can often help, especially when used together with physical therapy. Some of these drugs include:



MUSCLE RELAXANTS

This group of drugs include medications such as **baclofen, tizanidine, and cyclobenzaprine**. Possible side effects may include weakness, dizziness, dry mouth, and drowsiness.

BENZODIAZEPINES

Diazepam and clonazepam may help reduce spasticity. Side effects include drowsiness and a high potential for dependence and abuse. For this reason, these drugs are not commonly used as first-line therapy.

BACLOFEN PUMP

This is a surgically implanted pump which provides a continuous supply of baclofen to the fluid around the spinal cord. When other oral treatments fail, this may be an option you may wish to discuss with your healthcare provider.

CANNABINOIDS

CBD/TCH-based products are thought to help alleviate spasticity in MS. Side effects may include confusion, sedation, dry mouth, etc. These agents are not used as first-line therapy. Talk to your provider for more information.

Non-drug treatments

These may be used in conjunction with medical treatment depending on your condition:

Physical therapy

Range of motion exercises, stretching, and strengthening to avoid deconditioning and worsening of spasticity

Occupational therapy

Orthotics

Such as braces or splints to allow for greater mobility and prevent worsening disability