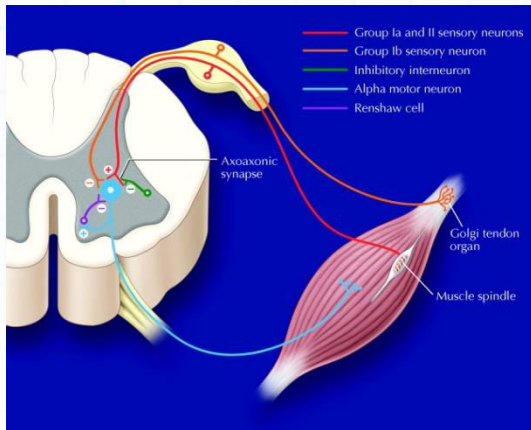


Spasticity



Spasticity is a muscle control disorder that is characterized by tight or stiff muscles and an inability to control those muscles. In addition, reflexes may persist for too long and may be too strong (hyperactive reflexes). For example, an infant with a hyperactive grasp reflex may keep his or her hand in a tight fist.

What Causes Spasticity?

Spasticity is caused by an imbalance of signals from the central nervous system (brain and spinal cord) to the muscles. This imbalance is often found in people with cerebral palsy, traumatic brain injury, stroke, multiple sclerosis, and spinal cord injury.

What Are the Symptoms of Spasticity?

- Increased muscle tone
- Overactive reflexes
- Involuntary movements, which may include spasms (brisk and/or sustained involuntary muscle contraction) and clonus (series of fast involuntary contractions)
- Pain
- Decreased functional abilities and delayed motor development
- Difficulty with care and hygiene
- Abnormal posture
- Contractures (permanent contraction of the muscle and tendon due to severe persistent stiffness and spasms)
- Bone and joint deformities

How Is Spasticity Diagnosed?

Your doctor will evaluate your medical history in order to diagnose spasticity. He or she will look at what medications you have taken and whether you have a history of neurological or muscular disorders in yourself or your family.

Several tests can help confirm the diagnosis. These tests evaluate your arm and leg movements, muscular activity, passive and active range of motion, and ability to perform self-care activities.

How Is Spasticity Treated?

Treatment for spasticity may include medications like baclofen(Lioresal), clonazepam (Klonopin), dantrolene (Dantrium), diazepam(Valium), or tizanidine (Zanaflex). Occupational and physical therapy programs, involving muscle stretching and range of motion exercises, and sometimes the use of braces, may help prevent tendon shortening. Rehabilitation also may help to reduce or stabilize the severity of symptoms and to improve functional performance. Local injections of botulinum toxin (Botox) has been shown to be more effective than oral medicines for many kinds of spasticity. Deep brain stimulation is being studied as a treatment when these other measures fail to bring relief. Surgery may be recommended for tendon release, to cut the nerve-muscle pathway, or to implant a baclofen pump (intrathecal baclofentherapy).

How Painful Is Spasticity?

The pain associated with spasticity can be as mild as a feeling of tight muscles, or it can be severe enough to produce painful spasms of the extremities, usually the legs. Spasticity also can cause low back pain and result in feelings of pain or tightness in and around joints.

What Is the Outlook for People With Spasticity?

The outlook varies per person. An individual's outlook depends on the severity of his or her spasticity and any disorder associated with the spasticity.

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