

Life in Motion Spasticity Fact Sheet

Symptoms

Each time you move, two or more of your muscles work together. One muscle shortens. Another muscle stretches or lengthens. Muscles get short or long, depending on signals from your brain or spinal cord.

Unlike a normal muscle, when a spastic muscle is pulled or stretched, it does not lengthen. Instead, the muscle tightens or the muscle may not move at all. The person with spasticity cannot control the tightening. The arm, leg, head, or body is then pulled out of normal position.

You may hear your doctors or therapists talk about your abnormal muscle tone. They mean the tightness that they feel when they try to move your muscles. Abnormal muscle tone may keep you from using your arms or legs. It may make it hard to open your hands or move your feet.

The problem with spasticity might seem to be in the muscles. It is not. Spasticity is caused by damage to the brain or spinal cord. This damage might happen due to:

- Not enough oxygen at birth (cerebral palsy)
- Not enough oxygen to the brain if your heart stops (anoxic encephalopathy)
- Injury (for example, from a car wreck or gunshot wound)
- A blocked or bleeding blood vessel in the brain (stroke)
- Damage to the covering of nerve cells (multiple sclerosis)
- Infection

Examination

Before treating your spasticity, it is very important for your doctor to find out which muscles are involved. The doctor will check your reflexes. He or she will feel how your joints move and watch how you move on your own or with help. The doctor may also ask you to drink from a cup, stand, sit, or walk.

The doctor is looking at:

- How you move
- How much control you have over your movements
- What can be done to make your spasticity better
- How spasticity affects your everyday activities, such as:
 - Bathing
 - Eating
 - Sleeping
 - Dressing
 - Going to the bathroom
 - Walking
 - Standing
 - Moving from a bed to a chair

Treatment

How well your treatment works depends on you and your caregivers working closely with your doctors and therapists. It is important to talk about what you hope treatment will do. You and your treatment team will discuss the goals of treatment and play out a plan for achieving these goals. Sometimes goals are achieved earlier than expected; however, for some patients goals may not be met as planned. When this happens, the team will meet again and change the treatment plan to suit your current needs. Goals may include:

- Decreasing your pain
- Making it easier for caregivers to assist you
- Making it easier for you to do the things that you can do
- Being able to sit more comfortably
- Reducing the chance that you will have problems in the future

Your doctor will want to know how your spasticity affects your life, your care and your comfort. The doctor may ask about eating, dressing, personal hygiene, transfer and other activities of daily living.

Usually, more than one type of treatment or procedure is necessary to help work toward your goals. Your treatment might include:

- Physical or occupational therapy
- Speech therapy
- Casts or braces
- Drugs taken by mouth such as antispasmodics including baclofen (Lioresal®), dantrolene sodium (Dantrium®) or tizanidine (Zanaflex®), or benzodiazepines such as diazepam (Valium®), clonazepam (Klonopin®), or others
- Drugs delivered by a tube inserted into the fluid-filled space around your spinal cord (intrathecal baclofen or ITB Therapy™)
- Injection therapy with botulinum neurotoxin (BoNT), which is injected into the place where your muscles and nerves connect—to block the signals that are causing the spasticity
- Surgical procedures or operations on your bones and muscles or nerves

Keep in mind that a spastic muscle might be very weak. Treatment might take away the spasticity, but the muscle will still be very weak. In fact, you may then have even more trouble walking or doing other things after treatment because of the weakness. Treatment improves muscle tightness and associated discomfort; however, for most patients, function does not necessarily improve. It is very important that you and your doctor talk about what you hope the treatment will do for you. It is important that you understand that you may seem weaker before you get stronger.

Questions to Ask Your Doctor

- Do the symptoms of spasticity get worse?
- How often will I have to see my health care team?
- How are the goals of treatment determined? How can I participate in this process?
- Will treatment help me to do the things that I want to do?
- How can I contribute to research studies on spasticity?

If you would like more detailed information on the symptoms, diagnosis, and treatment options or additional support (such as discussion forums and chat rooms), please visit www.wemove.org.