

SCI Resource of the Month

May 2014: Spasticity and SCI

What is spasticity?

Spasticity is the involuntary, uncontrolled tightening and contracting of muscles, which is caused by an overactive muscle response due to the damage of the central nervous system. It varies from mild muscle stiffness to severe, resulting in uncontrollable leg movements. Spasticity does not take place immediately following an SCI.

Why does spasticity occur?

Nerve cells below the level of injury become disconnected from the brain at the level of injury, following a spinal cord injury. This happens because the scar tissue in the damaged area of the spinal cord blocks messages from below the level of injury reaching the brain.

What are the symptoms and triggers?

Symptoms include increased muscle tone, rapid muscle contractions, exaggerated deep tendon reflexes, muscle spasms, scissoring (involuntary crossing of the legs) and fixed joints. Any time the body is stimulated below the level of injury, muscle spasms may occur. Just about anything can trigger spasticity, but it is typically common when a muscle is stretched.

What are the benefits of spasticity?

Spasticity is not always harmful or inconvenient; it can help with functional activities such as standing or transferring. It can also be an indication that you may be developing a urinary tract infection, fracture, or pressure sore. Spasticity may improve circulation, in turn preventing deep venous thrombosis and edema. It also may reduce the risk of developing osteoporosis.

How is spasticity treated?

Physical treatments and medications can help manage muscle spasms you may be experiencing. Discuss your specific needs and treatment options with a health care professional. You may need to try different methods, medications, or combinations of treatments before you feel your spasticity is under control.

Resource Links:

<http://www.apparelyzed.com/spasticity.html>

<http://www.christopherreeve.org/site/c.mtKZKgMWKwG/b.4453419/k.3757/Spasticity.htm>

<http://emedicine.medscape.com/article/318994-overview>