

# I RYGG ≩ MÄRGS I SKADA

#### http://www.ryggmärgsskada.se

The following text is a selection from the website.

Author: Inka Löfvenmark, Physiotherapist



**Translation:** funded by Allmänna Arvsfonden & project RG Integration.

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# Spinalis®

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## Spasticity

Spasticity is a common symptom after a central nervous system injury, i.e. brain or spinal cord. In case of spinal cord injury below the first lumbar vertebra (L1), or peripheral nerve damage, spasticity does not develop.

Spasticity appears in the muscles below the spinal cord injury, which means that a person with tetraplegia can have spasticity in almost the entire body, while a person with paraplegia can have spasticity in the legs and torso. Due to differences in the actual spinal cord injury itself, spasticity can vary widely between people.

Spasticity can express itself as overactivity or resistance in the muscles, spasms or muscle tensions, such as the foot shaking. Often it can be triggered by touch or movement, but for some people it can appear spontaneously when you are just sitting or lying.

Spasticity is basically neither positive nor negative. It is a symptom of central nerve damage, but can be experienced very differently. Some people can use and benefit from it, for example, when you stand and become stable when moving. For others, it can be an obstacle to everyday life and sometimes painful. It is important to check the cause of sudden increase in spasticity as it may be a warning signal that something is not right, such as infection or pain. If you can't find the cause yourself, seek help from your healthcare provider. Try to learn to interpret your body's signals and find strategies to manage your spasticity.

### CAUSE OF SPASTICITY

Some activity in the body occurs without the involvement of the brain, such as when the leg extends when you hit the knee to check reflexes. So you often have reflexes even if you are paralysed because the reflex arch is regulated in the spinal cord.

There is a similar mechanism that forms part of the spasticity, i.e. an involuntary activity in the muscles that, due to spinal cord injury, is not attenuated by signals from the brain.

A few weeks after the injury, the so-called spinal shock begins to decline and the spasticity will then begin to appear. It increases gra-



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dually over the first few months until it reaches a certain level, and then remains relatively constant.

### LIVING WITH SPASTICITY

Spasticity can have some positive effects just like normal muscle action, such as increased circulation of blood, energy consumption and decreased muscle atrophy. Some people think that moving, walking or other activities are easier with spasticity, and sometimes continence and the erectile function can be improved. The legs can appear to move even if they are not moved voluntarily.

For others, spasticity is primarily negative. It can affect respiratory function, balance, movement, inhibit or complicate daily activities and cause sleep problems. It can also sometimes lead to an increased risk of wounds or contractures, i.e. stiff joints, or make hygiene and personal care more difficult. It can also be irritating or painful.

### If the spasticity suddenly increases, this may be a warning signal.

This may be due to a urinary tract infection, constipation, pressure, wounds or pain that you do not feel, if you have decreased sensitivity. It is important to act on the warning and try to find out what is wrong. Consider whether you have replaced the cushion, have new shoes that are too tight or have something else new and check it first.

If you cannot find what is wrong, seek help. Gradually increasing spasticity together with pain, reduced sensitivity and/or strength should be investigated.