

Muscle spasticity after stroke

What you need to know

- › Messages travel between our brain and our muscles. These messages control how our muscles feel and move. If the part of your brain that sends and receives these messages is injured by a stroke, you may experience muscle spasticity.
- › Muscle spasticity can make your muscles feel stiff and tight. Your muscles may resist movement. They may not work like you want them to.
- › Physiotherapists and occupational therapists provide treatment. For severe muscle spasticity, your doctor may prescribe medicine.
- › Be as active as possible. Keep doing your exercises. The less you move, the worse muscle spasticity may get.
- › Talk with your doctor, physiotherapist and occupational therapist about any changes to your muscles.

Muscle tone and spasticity

Messages travel between our brain and our muscles. These messages control how our muscles feel and move. If the part of your brain that sends and receives these messages is injured by a stroke, you may experience muscle spasticity.

Muscle spasticity can make your muscles feel stiff and tight. They may not work like you want them to.

Your muscles may resist movement. For example, you try to move your arm, but it doesn't move easily, or as much as you expect.

If someone tries to move your arm away from you, it may jerk back towards you in response. Your arm may also shake after movement. This is called clonus.

Talk with your doctor, physiotherapist and occupational therapist about any changes to your muscles.

Effects

Spasticity in your leg muscles can make it difficult to walk, affect your balance and increase your risk of falling. Spasticity in your arm can affect your ability to open your hand or reach for something. Moving may take more effort, making you more tired.

You may have:

- › A clenched fist or fingers
- › A bent arm held against your chest
- › Tightness in your knees
- › A pointed or dropped foot.

Muscle spasticity can cause contracture. Contracture is when muscles can become so tight that your joints:

- › Have only limited movement
- › May become fixed in one position.

It usually happens in hands, elbows, knees or ankles. If muscle spasticity is not treated, the risk of contracture is higher.

Treatment and recovery

Keep moving

It is important to be as active as possible. The less you move, the worse muscle spasticity may get.

Talk with your physiotherapist or occupational therapist about being more active. Join an exercise group. Get into activities you enjoy. Invite friends and family to join in.

Physiotherapy and occupational therapy

Physiotherapy and occupational therapy aim to:

- › Improve movement and control
- › Prevent other problems, including pain.

Your physiotherapist or occupational therapist will recommend exercises to lengthen and strengthen your muscles. Muscle spasticity may become worse if your muscles become weaker. Keep doing your exercises.

They may recommend:

- › Casts to help stretch and lengthen tight muscles
- › Taping to improve movement
- › Electrical stimulation if you can't move the affected area very much or at all. A machine sends electrical currents to your muscles to get them working.

They can tell you about:

- › Protecting the affected part of your body from injury
- › Different ways of doing things
- › Aids and equipment that will help.

If you have contracture, your physiotherapist or occupational therapist may recommend exercises and electrical stimulation.

If you have severe, long-term contracture, they may repeatedly apply a cast over a few weeks.

Medications

If you have severe muscle spasticity, your doctor may prescribe medicine.

The most common medicine is botulinum toxin A, which comes in different brand names. It is injected into the affected muscles.

Botulinum toxin A is effective for about three months. It gives you an opportunity to strengthen muscles and improve movement. Botulinum toxin A should always be combined with exercises set by your physiotherapist or occupational therapist.

Your doctor may also prescribe muscle relaxant tablets. These work on all your muscles, not just the ones affected by spasticity.

Spasticity clinics

Your doctor can refer you to a spasticity clinic. Spasticity clinics can help you manage your spasticity.

Getting help

StrokeLine provides advice on stroke prevention, treatment and recovery.

Call **1800 787 653** Monday to Friday 9am to 5pm, AEST (Australian Eastern Standard Time)

Email strokeline@strokefoundation.org.au

EnableMe can help with your stroke recovery and with your life after stroke.

Visit enableme.org.au

To find a physiotherapist:

Australian Physiotherapy Association
choose.physio/findaphysio

To find an occupational therapist:

Occupational Therapy Australia otaus.com.au

About us

Stroke Foundation partners with the community to prevent, treat and beat stroke. We do this through raising awareness, facilitating research and supporting survivors of stroke.

Contact us

 **StrokeLine 1800 STROKE (1800 787 653)**

 strokefoundation.org.au

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