

# How to Get Rid of Hand Spasticity and Pain after Stroke

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Hand spasticity and pain after stroke can be treated through a variety of methods. Some are common, others aren't as well-known.

So if you're looking for a complete guide to hand treatments for stroke recovery, you've come to the right place.

## Understanding the 2 Types of Post Stroke Pain

There are two types of [post stroke pain](#): localized and central pain.

Localized pain is usually felt in one specific area, like the arm or hand, for example. It often manifests as [spasticity](#), which is muscle tightness or stiffness, or *contractures*, which occurs when spasticity is ignored and the muscles become so stiff that they can't move.

That's why it's essential to treat spasticity as soon as possible.

Centralized pain is a severe pain caused by brain damage, which disrupts the brain's ability to interpret sensory responses. As a result, the brain can mistake regular touch with pain. This can also cause other side effects such as:

- Numbness
- Increased sensitivity to cold/heat
- 'Pins and needles' sensations

Unfortunately there is no cure for centralized pain, but medication can help relieve the side effects.

For those who suffer from localized pain and spasticity, the following advice can help.

## Treatments for Hand Spasticity and Pain

To temporarily relieve localized pain in the hand after stroke, you can try Botox, which is an injectable prescription drug that can help relax the muscles and reduce pain associated with spasticity.

Botox works by preventing the transmission of signals between the brain and body. This prevents your muscles from receiving messages to contract – which helps your muscles relax.

This is only a temporary treatment, though, so you'll need another dose once the Botox wears off.

A more sustainable treatment involves [reducing spasticity](#) with *repetitive practice*. But we will get to that in a bit once we discuss another temporary treatment.

## Getting Stiff Hands to Open

To further help reduce muscle stiffness, you can try using splints to open the hand. Splints are flat surfaces that strap to the palm of your hand/wrist to keep the hand open. Some of them are even smaller than your palm, like our [Xtend Thumb Orthosis](#) which is designed specifically for thumb support.

While splints can help open the hand after stroke, they do not help restore movement in the hand. The only way to restore movement is by retraining the brain how to move the hand through *repetitive practice*.

So, what does all this talk about repetitive practice mean?

# Get Your Hand Back Permanently

[Repetitive practice](#) means performing hand rehab exercises over and over and over in order to restore the brain's ability to move the hand. This is the essence of [neuroplasticity](#), which is the mechanism that heals your brain after stroke.

When you move your hand, you engage neural connections in the brain. At first, moving your hand may be difficult because those connections are broken from the damage caused by stroke. However, as you start to move your hand, new connections will form. And the more you repeatedly practice and engage those connections, the stronger they will become.

This means that each time you repeat a hand movement, the connections for hand movement in your brain become stronger. As a result, you slowly become more skillful at moving your hand – but only if you're repetitious and *consistent*.

Those are the [two most essential elements](#) to effectively regain hand movement.

## Should I Reduce Spasticity Before Doing Repetitive Practice?

Sometimes the difference between reducing spasticity and regaining movement can be a little confusing.

**To clarify, you don't need to reduce spasticity *before* you work on regaining movement. While it definitely helps to reduce stiffness before beginning therapy, you can effectively work on both at the same time.**

By using repetitive exercise to regain movement, you're retraining your brain how to use the affected hand. As the brain slowly relearns how to control the hand, it will also relearn how to properly communicate with it.

Through this improved communication, it will learn to stop sending signals that keep the hand contracted. As a result, your hand will both relax and become more functional. It's a win-win!

## Choosing Your Hand Therapy

As you consider your hand therapy options to start your own repetitive practice, our [free hand therapy rehab exercises](#) are a great place to start.

By performing the exercises 5-20 times a day, you can improve your hand function. However, standard exercises can eventually cause you to lose interest in pursuing recovery because they aren't very engaging or interesting.

To give your recovery an extra boost, you can invest in game-based hand therapy devices that are both fun and repetitious, like our [MusicGlove](#).

MusicGlove incorporates *hundreds* of repetitions per session – sometimes even thousands once you progress to the harder levels. And because the hand exercises are incorporated into a musical game (similar to Guitar Hero), time passes much quicker than during traditional rehab.

In fact, the engaging, repetitive nature of the device is the reason why it's [proven to improve hand function](#) in only two weeks!

So when choosing your hand therapy options, be sure to pick something with plenty of repetition and some fun!

## Hope for Hand Paralysis

If you suffer from hand paralysis, you may feel like this article doesn't apply to you; but don't worry – it does! Hand paralysis can be treated with these methods through very creative avenues.

To explore the idea, try reading our article about [a patient who regained movement in his paralyzed hand](#) with MusicGlove. Although MusicGlove is intended for survivors with some preexisting movement, this man went above and beyond and made it work for him anyway.

The story is truly inspirational, and the lesson can be applied to everything.