

# How to Open Clenched Hands and Fingers After Stroke

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“How can I get my stiff hand to open after stroke?”

We hear this question *a lot*, and there’s a lot of confusion around what works and what doesn’t work. So we’re clearing it all up today.

**Because unfortunately, many treatments for stiff hands after stroke only treat the symptoms.**

In this article, you’ll learn why that is and you’ll also learn the permanent treatment for stiff hands after stroke.

Let’s get to it.

# The Cause of Clenched Hands After Stroke

**Spasticity** is the main culprit of stiff hands after stroke. On the surface, spasticity seems like a problem with your muscles. While that is partially true, the root cause of spasticity is **brain-muscle miscommunication**.

After stroke, your muscles get tense and tight because they cannot receive signals from your brain like they once did before stroke. So even though your brain is trying to tell your muscles to relax, your muscles can't hear that command.

Therefore, the permanent solution to regaining hand movement after stroke should address that communication.

Now, let's dig deeper.

## Temporary vs. Permanent Treatments

### Temporary treatment:

Getting Botox injections (or other locally administered drugs or medication) is a common treatment for spasticity, especially in the hands – *but it only fixes the symptom*.

These medications work to relax your muscles. They don't address your brain-muscle communication.

So if you get Botox treatments, you will need to keep getting treatments when it wears off. Because since the root problem was not addressed, it will continue to persist each time the Botox wears off.

### Permanent treatment:

To address the root problem, you need to fix your brain-muscle communication, and you can do this by rewiring the connections in your brain using **neuroplasticity**. And the best way to engage neuroplasticity is through rehab exercise. But not just any rehab exercise – it has to be *very repetitive*. The more you repeat your exercises, the stronger your brain-muscle communication becomes.

This is very important information, so let us repeat:

**To permanently treat spasticity, you need to retrain your brain how to control your hand muscles through repetitive rehab exercise.** By performing **hand therapy exercises** over and over and over, you can fix the communication between your brain and your muscles. Then, after plenty of repetitive practice, the muscles in your hand will slowly learn to open and relax – for good.

## Combining Treatments

However, this is NOT to say that Botox or other medication is bad. In fact, some stroke survivors find that Botox helps motivate them to do their rehab exercises since it would be too painful to do otherwise. We think this is a great solution.

If you suffer from painfully clenched hands after stroke, you can try doing both treatments at once: use Botox to relax your muscles, and then use that relaxed freedom to do your rehab exercises.

Note: Please be sure to talk with your doctor to make sure that Botox is a safe choice for you.

## Treating Really, Really Stiff Hands

Some stroke survivors have intense spasticity in their hand that has been left untreated for so long that they develop *contractures*. Contractures are painfully stiff muscles that are very hard to open.

In these cases, you can use hand splints to stretch out the affected muscles. And if you don't have any splints around, then you can stretch out your hand on a basketball or table.

**Once you are able to stretch out the muscles – it's important not to stop. The only way to introduce movement back into the affected muscles is with rehab exercises.**

Stretching is the first step, exercise is the second step towards regaining movement in your hand.

And if you can't move your affected hand, then you can still do rehab exercises! You just have to start with [passive exercises](#) where you assist yourself. Passive exercises still help retrain the brain.

Then, once you regain enough movement, you can perform [active exercises](#) to continue improving your hand function.

## Rehab Tools That Can Help

There are two types of tools that can help with hand movement after stroke: hand splints and hand therapy tools.

For hand splints, look for equipment that will help prop your affected hand open to help stretch out the affected muscles. But don't just stop there. Remember, [rehab starts in the brain](#), not the body. So while splints are useful for opening your hand, you still need to practice rehab exercises to train your brain to *keep* your hand open.

So look for hand therapy tools that motivates a *very high number of repetitions*.

**The more repetitions you complete per rehab session, the faster you will heal.**

Our patients see great improvement in hand mobility with [MusicGlove](#), for example, because it motivates you to complete *hundreds* of repetitions per session.

### 3 Steps to Open a Clenched Hand

So, in summary, there are 3 steps that you need to open up tight, clenched hands after stroke:

1. Use splints or other flat surfaces to stretch open your hand
2. After opening up your hand, practice *passive* exercises to start retraining your brain
3. After regaining some movement, practice *active* exercise to regain as much movement as possible

During your exercise, be sure to perform a high number of repetitions in each session so that you can heal as quickly as possible.

Please know that you can improve hand function at ANY STAGE of recovery. There's no such thing as a hand that's 'too far gone.'