

# How to Heal a Hand Contracture After Stroke and Relax into Openness

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Dealing with a hand contracture after stroke can be quite painful and frustrating. Luckily, we can help you get your hand open and relaxed again. In this article, you'll learn:

- The cause of hand contractures after stroke
- 2 short-term treatments to get you by
- The best long-term treatment available

Are you ready to get your hand opened up? Let's dive in.

## When Spasticity Worsens into Contractures

Contractures happen when spasticity worsens, often from lack of movement and use of the hand. Spasticity is muscle stiffness that's caused by miscommunication between your brain and your hand. Simply put: When your brain cannot tell your hand to move, it also cannot tell your hand to relax. As a result, your hand stiffens up, and eventually leads to contractures. Although it's unfortunate when the hand becomes stiff and curled after stroke, **it's totally reversible**. So let's reverse it!

# Treating a Hand Contracture After Stroke

Before we dig into the treatments, you need to know that the first two treatments below are short-term solutions. If you do them without any treatments for the long-term, then your spasticity will return. However, the 3<sup>rd</sup> treatment below is a long-term solution that will “seal in” your results. So don’t skip that one! You’ll see what we mean as you keep reading.

## Short-Term But Effective Treatment #1: Botox



*Botox isn't just for wrinkles*

Botox is a very useful treatment for spasticity and hand contractures after stroke. *While it does not address your spasticity directly*, it temporarily relieves the contractures in your hand so that it can relax and open. If you’re eager to relieve the pain from hand contractures after stroke, then talk to your therapist about Botox.

Results are temporary though, and you need to keep getting Botox every few months to keep your hand open. But don’t worry – the 3<sup>rd</sup> treatment that we discuss below will help you seal in these results permanently!

## Short-Term But Effective Treatment #2: Hand Splints

Hand splints can help open your hand and reduce the spasticity. They work by propping your hand open on something sturdy. While they do not help you regain movement in your hand, they are useful for opening your hand back up.

If you don’t have a hand splint, you can try using a basketball or other object to stretch your hand out on. You can even use your leg to stretch your hand out on (although it’s not as “grippy”).



*Just don't stretch to the point of pain!*

Botox and stretching are temporary treatments, though. If you want lasting results, then pay close attention to these next few parts.

## Long-Term and Very Effective Treatment #3: Hand Exercise

If you're serious about relaxing your hand *for good*, then the best treatment is repetitive rehab exercise. Repetitive movement helps activate neuroplasticity, the mechanism your brain uses to rewire itself. **Neuroplasticity is the “magic sauce” for overcoming contractures and spasticity long-term.**

As you practice hand exercises, you create and strengthen neural pathways in your brain that control your hand. Repetition is the key. The more you repeat your hand exercises, the more you will strengthen the neural pathways. With consistency, your hand will start to open up, relax, and cooperate. This is the most important step, but sometimes it can be difficult...

## What If Your Contractures Prevents Exercise?

A common complaint among stroke survivors is that the hand is too clenched and paralyzed to do any exercise!

We understand this frustration, and you can work around it with *passive exercise* (10/6/2015). Passive exercise simply means that you use your non-affected hand to assist your affected hand through various *hand rehab exercises* (4/10/2017). Although you aren't “doing it yourself,” the repetitive movement still activates neuroplasticity and starts to relink mind to muscle.

As you keep up with your repetitive passive exercise, your hand will slooowly open up. In due time, your hand will recover enough to begin exercise without any help from your non-affected hand. And after enough repetitive exercise, your contractures will slowly disappear.

## Which Treatments Are Best for You?

Now, why did we bother with the first two treatments if the third one (rehab exercise) is clearly the best?



Our answer: Because Botox and hand splints can help clear the path towards repetitive exercise. If your hand is severely clenched and stiff with contractures, then doing passive exercise might be very difficult at first. Our advice is to use Botox, if you can, to temporarily relieve your spasticity, and then use that new range of motion to get lots of exercise in.

Although the Botox will wear off, the exercise will help heal your brain and reconnect mind to muscle. Then, once the Botox wears off, you will still retain some results from all the neuroplasticity you activated. So, if you have the resources, try to use all 3 treatments combined. Use hand splints and Botox to open up your hand enough to get some good exercise in.

**But make sure that hand exercise is always the star of your regimen. It's the ticket to lasting results.**



*See her? She didn't skip her hand exercises*

## Your Next Steps

Alright. Let's tie this all together with some practical steps that you can start taking today:

1. Call your therapist and ask if you're a good candidate for Botox (if you are, schedule an appointment ASAP)
2. Start gently stretching your hand using a splint or other flat-ish surface (like a basketball)
3. When your hand is open enough to do some passive exercise, start with the hand therapy exercises that you can do at home
4. If you want to really speed up your results, consider using [FitMi](#) to motivate yourself to accomplish a lot more reps than normal!

If you follow these steps, then we're confident that your hand contracture will heal. Just be patient, put in the work, and trust that results will follow.