A Guide to Different Types of Gloves for Stroke Patients

January 8, 2018



Rehabilitation gloves are a great way to get your hand back after stroke. However, understanding the different types of gloves, and the purpose of each one, can often be confusing. To help simplify things, we'll discuss the 3 different types of gloves for stroke patients and their pros and cons.

Then we'll discuss why neuroplasticity is key for permanent, lasting results. Let's get started.

Type 1: Hand Braces for Stroke Patients

The first type of glove is called a *brace*.

A brace is beneficial for patients with clenched hands because it helps open your hand and keep it propped open. This helps prevent contractures, a condition where spastic muscles become extremely stiff and often painful.

Pros:

- Helps prevent painful contractures
- Gives your hand a good, passive stretch

Cons:

- Does not help rewire your brain (more on this later) or improve hand function
- Does not allow you to use your hand

Type 2: Assistive Gloves for Stroke Patients

The second type of glove is called an assistive device.

Assistive gloves are used to help temporarily open your hand and enable you to actually use it. For example, with an assistive glove, you would be able to grasp and pick up a glass of water when you couldn't otherwise.

Pros:

Allows you to use your hand and participate in activities of daily living

Cons:

- Can't use your hand unless you're wearing the device
- Minimal help with rewiring the brain and improving hand function long-term

Type 3: Hand Exercisers

The final type of glove is an exercise device.

These devices are designed to give your hand an intense workout and help rewire the brain through neuroplasticity (which we will discuss next). This is how you achieve permanent results.

Hand exercise gloves like our <u>MusicGlove</u> are specifically designed to activate neuroplasticity so that you can rewire your brain and get your hand back long-term.

Pros:

- Helps permanently improve hand function
- Maximum help with rewiring the brain

Cons:

• Does not help open your hand (but your hand will eventually open on its own through the rewiring process)

Why Does Neuroplasticity Matter so Much?

The best way to improve your hand function after stroke is to activate neuroplasticity, your brain's built-in mechanism for rewiring itself. Neuroplasticity allows healthy parts of the brain to take over the functions that were damaged by stroke, like hand movement. Neuroplasticity helps reconnect mind to muscle. The best way to activate neuroplasticity is through repetition. Each time you repeat something, you start to strengthen the new connections in your brain. That's why repetition is the king of skill.

While braces and assistive devices are great for preventing contractures and helping you get things done, they don't really help activate neuroplasticity or rebuild the skill of hand function. So if you want to get your hand back, you need to focus on activating neuroplasticity with repetitive rehabilitation exercise.

How to Fix Extremely Limited Hand Mobility

But if you have extreme impairments in your hand, then you might not feel like exercise is even possible. In cases like these, you will probably need to start with passive exercise where you assist your affected hand with your non-affected hand. Although you aren't "doing it yourself," you're still sending stimulation to your brain and sparking the rewiring process. In time, this will help rewire your brain and restore enough movement for you to do the exercises on your own (without help from your non-affected hand).

The Best Rehabilitation Glove for You

So, which glove is best for you?

Since neuroplasticity is the best way to improve hand function, and exercise is what activates neuroplasticity, you might assume that exercise gloves would be our top recommendation. However, one type does not fit all. People with severe impairments will need to follow a slightly longer process than people with small impairments.

Here's our recommendation for both:

Recommendation if your hand is severely clenched and spastic:

It would be a good idea to invest in a brace and a hand exerciser. The brace is the first step because it will help open your hand and stretch it out. Since you can't really do any exercises until your hand is slightly open, this step must come first. Then, once you get your hand open, you can invest in a hand exercise glove to help you get your reps in and activate neuroplasticity.

Recommendation if your hand is relatively open but limited in movement:

It would be smart to invest in a hand exerciser that encourages high repetition to help rewire your brain, like our MusicGlove. MusicGlove is clinically proven to improve hand function in 2 weeks because it helps activate neuroplasticity to the max. If you're looking for the best option with fast results, MusicGlove is a great choice.