

# 5 Best Treatments for Foot Drop Recovery After Stroke

May 21, 2018



*Speed up your foot drop recovery with these 5 treatments.* You don't need all of them, but it's best to understand all of your options before you decide on treatment.

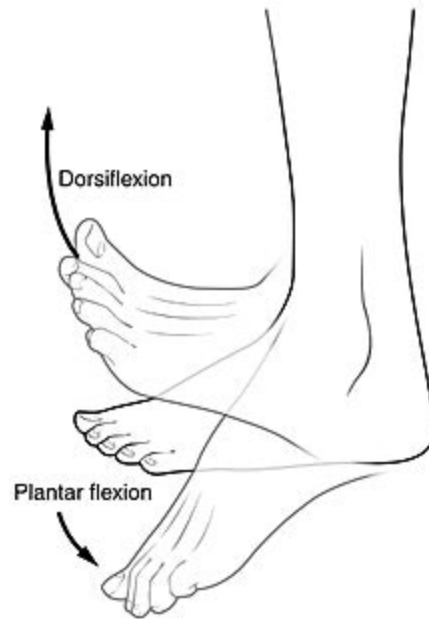
To help you make the best decision, we will teach you about:

- The cause of foot drop after stroke
- 2 of the best science-backed treatments
- 3 more helpful treatments

Here we go!

## What Is Foot Drop?

Foot drop happens when you have difficulty lifting the front part of your foot up toward your shin (a movement known as *dorsiflexion*).



When stroke damages the part of the brain that controls dorsiflexion, then foot drop can occur. Foot drop also leads to other problems like poor balance and abnormal walking patterns, so addressing the issue is a must.

## Foot Drop Recovery Is About Healing the Brain

Foot drop recovery is all about reconnecting mind to muscle by rewiring your brain through neuroplasticity.



Neuroplasticity is your brain's built-in mechanism for creating new neural pathways. **When part of the brain becomes damaged by stroke, the surrounding brain tissue can actually pick up the slack through neuroplasticity.** This means that you can train new parts of your brain to control your dorsiflexion by activating neuroplasticity; and we'll teach you how to do this next!

### 1. Rehabilitation Exercise (The Best Method)

**Rehabilitation exercise is the best treatment for foot drop – especially when it's *repetitive*, because repetition activates neuroplasticity.** Your brain likes to be efficient. So whenever you start to do something repetitively, your brain will strengthen its neural connections to make that task

easier. The more you practice your dorsiflexion exercises, the more efficient you will get at dorsiflexion.

## Mind Over Muscle

As you can see, rehab exercise isn't just about strengthening your muscles. Although strengthening is a goal, it's not the primary goal. Rather, foot drop exercise is mostly about strengthening the *connections in your brain* that control your foot. And best of all, there's another way to facilitate neuroplasticity and heal foot drop after stroke:

## How to Exercise If You Can't Move Your Foot at All

If your foot is completely paralyzed, don't worry, you can still exercise to get your foot back! This just means that you need to start with passive exercises first. Passive exercise simply means that you use your non-affected muscles to assist your affected muscles.



This will provide stimulation for your brain and help restore your mind/muscle communication. In time, your movement can improve enough for you to progress to active exercise where you perform the movement independently. (Our foot drop exercise guide (2/3/2017) contains both passive and active exercises for you to try!)

## 2. Electrical Stimulation (Best Paired Treatment)

Electrical stimulation can be a great way to kick-start your foot drop recovery.



It works by sending electrical impulses to your affected muscles, which stimulates your brain, as if saying, "Hey! There's a foot here! Let's get things moving!" Because your brain uses electrical impulses to control your muscles, electrical stimulation helps spark neuroplasticity even more.

## Studies Say that Exercise + E-Stim = Best Results

**Studies show that combining electrical stimulation with rehab exercise produces better results than just one or the other.** It's no surprise, really. After all, both treatments help activate neuroplasticity; and when you put them together, it's a recipe for even more success! So if you can afford a small e-stim machine – or if your local clinic has one – pair it with your foot drop exercises to see the best results.

### 3. Ankle Foot Orthotics (See Warning Before Use)

Ankle Foot Orthotics (AFOs) are foot braces that you can use to prop your foot up.



This helps prevent your forefoot from dragging on the ground and dramatically improves your safety. If your therapist recommended an AFO for you, then be sure to use it! Just know that there are consequences for relying on an AFO too much.

### Warning: You Might Lose Your Foot Forever

Have you ever heard a therapist say “**use it or lose it**”? Well, it's true. The phrase comes from the concept of **learned non-use**, where your brain literally forgets how to move muscles that you don't use. When you become too dependent on an AFO and neglect to do your exercises, your brain doesn't get the stimulation it needs.

In time, your foot drop will continue to worsen until your brain completely forgets how to use it. This is why AFOs can be problematic. It creates a dependency on the AFO. And when you're dependent on an AFO, you'll never get your foot back.

***This is why foot drop rehab exercise is the best treatment.*** It addresses the root problem and helps rewire the brain, so that you can use your foot more and more instead of less and less.

### 4. Medication

Sometimes foot drop creates pain in your lower leg and foot. If this pain is preventing you from exercising, then using medication to alleviate the pain could be beneficial. If you struggle with pain in your foot after stroke, consult with your doctor.

## 5. Surgery (A Last Resort)

If none of these methods provide relief for your foot drop (give yourself time before the results from repetitive exercise set in!), then you might consider surgery like a tendon transfer.



A tendon transfer could potentially help relieve foot drop after stroke. A tendon transfer works by surgically taking a working tendon (usually the posterior tibial tendon) and attaching it to another part of your foot to replace the missing function. This surgery will only work (without guarantee) if there is some movement in other areas of the lower leg. A rule of thumb is that surgery is reasonable to consider after about a year of no improvement.

## How Long Will Foot Drop Recovery Take?

Now that you know about all your treatment options, you might wonder how long healing will take.



Honestly, foot drop recovery is tough. It's one of the slowest functions to come back after stroke. However, don't give up hope! **If you do your foot drop exercises regularly (every other day or daily), then you should see some results within 1-3 months.**

For example, stroke survivor Ronald was able to target the gas pedal in his car after 1 month of repetitive exercise with [FitMi](#). While he still has more work to do on his foot drop, 1 month of repetitive exercise was enough to get him back behind the steering wheel. Your recovery might take more or less time than Ronald, so try not to compare your recovery to anyone else's. Trust that if you put in the work, results will follow.

## Summary: The Best Methods for Foot Drop Recovery

Overall, the best treatment for foot drop is *repetitive rehab exercise* paired with electrical stimulation.

To improve your safety and quality of life while you recover, you can try using an AFO, pain medication, and even surgery as a last resort.

But give your brain a chance to recover from foot drop naturally by practicing those foot drop exercises regularly. When you put in the work, results will show!