The Best Foot Drop Treatment for Stroke Recovery

January 12, 2018



Which is the best treatment for foot drop: AFO's or rehab exercises?

In this article, you'll learn why both are important for recovering from foot drop. We'll also discuss which deserves priority. Let's dig in.

Foot Drop Defined

Foot drop is a condition that causes difficulty with ankle dorsiflexion; meaning that you can't lift the front part of your foot. Foot drop can cause your foot to drag on the floor while you walk, which can lead to poor balance. Many stroke survivors compensate by hiking their hip and knee excessively, which can lead to other problems too (like poor movement patterns).

Traditional Treatment for Foot Drop Isn't the Best

Many therapists will suggest an Ankle Foot Orthotic (AFO) to help with foot drop. An AFO is a brace that's often inserted inside your shoe to help keep your foot lifted.

When you walk with an AFO, your foot cannot drag on the ground because it's supported by the AFO. However, this means that you're not using your foot at all, and that's a huge a problem.

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. With this in mind, you can see why AFOs are problematic. They discourage you from using your foot at all, which can lead to learned non-use. This perpetuates the problem of foot drop and creates a dependency on the AFO. And when you're dependent on an AFO, you'll never get your foot back. Luckily, there's a better way.

The Best Way to Recover from Foot Drop

The problem with foot drop is that your brain cannot communicate with your foot and tell it when to move. If you can restore your brain's ability to "talk" to your foot, then you can regain movement in your foot. *Relinking mind to muscle* is the key to recovering from foot drop and gaining independence from an AFO. Here's how to do it:

The Process of Getting Your Foot Back

First, you need to activate neuroplasticity, your brain's ability to rewire itself and form new connections. Neuroplasticity is activated by repetitive practice. Whatever you repeat over and over and over is what your brain gets good at. Therefore, practicing foot drop exercises (2/3/2017) will help restore your foot mobility.



As you begin to practice moving your foot, you will form new connections in your brain that tell your foot when to move. The stronger these connections become, the more your foot drop will improve.

How to Heal with Foot Drop Exercises

The best foot drop exercises are the ones you can stick with and do repetitively. Since repetition is how you activate neuroplasticity and relink your mind to your muscles, it should be your primary focus. So find some foot drop exercise guides online, or ask your therapists if they have any they recommend, and start doing them *repetitively*.

You'll also want to add some balance exercises (9/18/2015) to the mix because balance is important for restoring a healthy gait (walking pattern).

What 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 (10/6/2015) 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!)

Give Yourself a Boost

If you have difficulty sticking with written sheets of exercises, then FitMi home therapy can help. FitMi is a fun rehab exercise device that helps give your hand, arm, core, legs, and foot a therapeutic workout! FitMi is great for stroke patients because it encourages you to perform 12x more repetition than the average physical therapy session. This helps rewire your brain faster so that you can regain movement in your foot quickly. The device comes with leg and core exercises too, which helps improve your gait (walking pattern) and balance.

Our Best Recommended Foot Drop Treatment

As you can see, exercise is really important for overcoming foot drop after stroke. *But does this mean you shouldn't wear AFO's at all?* Nope! The use of an AFO can greatly improve your safety and wellbeing during your activities of daily living.

Our recommendation is to avoid becoming dependent on your AFO by exercising your foot repetitively and regularly.

You can try simple written exercises, or use devices like FitMi to help keep you motivated.

As long as you're practicing repetitive, therapeutic movements, your brain will start to rewire itself and regain control of your foot. Then, you can use an AFO when you've run out of patience and just want to get some things done! Happy exercising.