# How to Recover from Stroke: A Guide to Treating Almost Any Side Effect

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To recover from stroke, you must overcome the various stroke side effects that occur (see 2/27/2017 article).

In today's article, you'll learn how to treat these side effects by applying what we believe are the 3 most important concepts for stroke recovery. It's good stuff, so let's get right into it.

#### Important Concept #1: Neuroplasticity Is the Healer

To understand the cause of stroke side effects, you must first understand what a stroke is. A stroke occurs when a clogged or burst artery cuts off the supply of oxygen-rich blood to the brain. The lack of oxygen causes damage to the affected areas of the brain.

This brain damage is what causes stroke side effects. Areas of the brain that once controlled certain functions can no longer serve those functions, such as movement, memory, or speech. The key to healing these stroke side effects is by healing the brain

damage, which is possible by activating neuroplasticity. Neuroplasticity is how the brain rewires and heals itself after injury. When neuroplasticity is activated during stroke recovery, the brain begins to form new neural connections around the damage. You can rewire your brain to relearn anything. From movement to memory to happiness, your brain can relearn *anything*. Here's how.

#### Important Concept #2: Repetition Is the Tool

Neuroplasticity is activated whenever you repeatedly practice something. For example, if you repeatedly practice leg exercises, then your brain starts to form new neural connections that control leg movement. The more you practice, the stronger those connections become.

This is the science behind "practice makes perfect." The more you repeat something, the better you get at it because the brain is continuously changing itself.

## Important Concept #3: Consistency Is the Key

There's a way to boost your results from repetitive practice even more, and it's by being consistent. You need to feed your brain with repetitive practice, and you need to feed your brain regularly. This will help your brain heal as efficiently as possible. Without consistency, the new neural connections in your brain begin to weaken and fade. So make sure that you're consistent with your rehabilitation efforts to see the best results possible.

#### 3 Examples of Solving Almost Any Stroke Side Effect

These 3 concepts are extremely important for recovery from stroke because they can help you solve almost any problem. And we say almost because there will always be exceptions to the rule.

Since no two stroke are alike, there's always a chance that some stroke side effects simply cannot be healed through repetitive practice. However, that's the exception, and we won't get into that here. Instead, let's look at some specific examples of how to heal various physical, cognitive, and emotional stroke side effects using these concepts.

### 1. Physical Example: Spasticity in the Arm

It's important to understand that spasticity (stiff muscles) after stroke is caused by miscommunication between your brain and your muscles. Muscles tense up after stroke because they cannot receive signals from your brain. Therefore, the cure for spasticity is to re-link your brain to your muscles through repetitive rehab exercises.

Each time you repeat arm exercises, you send signals to your brain and it begins to rewire itself. The more you practice, the more your brain strengthens those new connections that control your arm movement.

Through time and practice, your brain will relearn how to communicate with those spastic muscles, and the tension in your arm will start to be relieved.

#### 2. Cognitive Example: One-Sided Neglect

One-sided neglect is a stroke side effect that occurs when a stroke patient does not notice what's happening in their environment on their affected side.

For example, if a stroke patient has one-sided neglect on their left side, then they might not see you if you approach him on his left side. Or, he might only eat the food on the right side of his plate because he simply does not notice what's on the left. To alleviate this stroke side effect, the stroke patient can simply practice bringing attention into his left side by purposely turning to his left side and noticing what's going on there.

It sounds simple, but if he practices repetitively and consistently, it's simple enough to work. Because each time he turns to his left side, he's telling his brain to notice what's there. And by repeatedly doing this over and over and over, his brain will start to rewire itself. New connections will form and the patient will get better at noticing their left environment.

#### 3. Emotional Example: Pseudobulbar Affect

Pseudobulbar affect occurs when the emotional center of the brain is damaged by stroke. This results in a condition where stroke patients lose control of their emotions and find themselves laughing for no reason or crying for no reason. To help alleviate pseudobulbar affect (without the use of medication), you can intentionally practice feeling your emotions.

Conjure up appropriate emotions, and it will train your brain to feel the appropriate emotions. For example, if you're watching a sad movie, purposely try to feel sad. Or, if you're playing with your children, purposely try to feel happy.

Think we're oversimplifying it? Just read any book on positive psychology. Psychologists have proved that your brain changes based on what you repeatedly think and feel; and by repeatedly thinking and feeling positive things, you train your brain to naturally be more positive.

# Stroke Survivors Have Rewired Happier Brains Using these Concepts

Stroke survivors agree on this. There's even an article about a stroke survivor who intentionally practiced feeling happy, and indeed boosted her happiness!

Here's an excerpt from Alison Shapiro's article on Psychology Today:

"Now having learned more about how the brain works, I have come to understand that practicing happiness builds connections in the brain. Practicing happiness is another form of paying attention.

As I pay attention to being happy and to doing things that give rise to happiness, this activity is reflected in the way connections between the neurons in my brain develop.

When I practice happiness, I build pathways in my brain that reinforce the tendency to be happy no matter what is going on."

Alison noticed how repetitive practice could help her get better at anything – and she chose to get better at happiness.

#### Is It Possible to Get Better without These Concepts?

Now, there are many other solutions out there besides practice. Most of them come in the form of compensation techniques, which aren't necessarily bad. Sometimes you really need them for your safety and wellbeing. An example of a compensation technique is an AFO that helps with foot drop. AFOs are incredibly necessary for your safety as they prevent your foot from dragging on the floor.

But it's only treating the symptom instead of the root problem. Instead of retraining your brain to control your foot through foot drop exercises, you're neglecting your foot and weakening the connections in your brain even more. That's why repetitive practice is soooo important. It addresses the root problem directly and empowers you to regain your independence without compensation techniques.

#### Summary

And there you have it. The way to solve almost any problem during stroke recovery is through practice, practice, practice.

Repetition helps rewire your brain and create new neural connections, which become stronger and stronger with consistency.