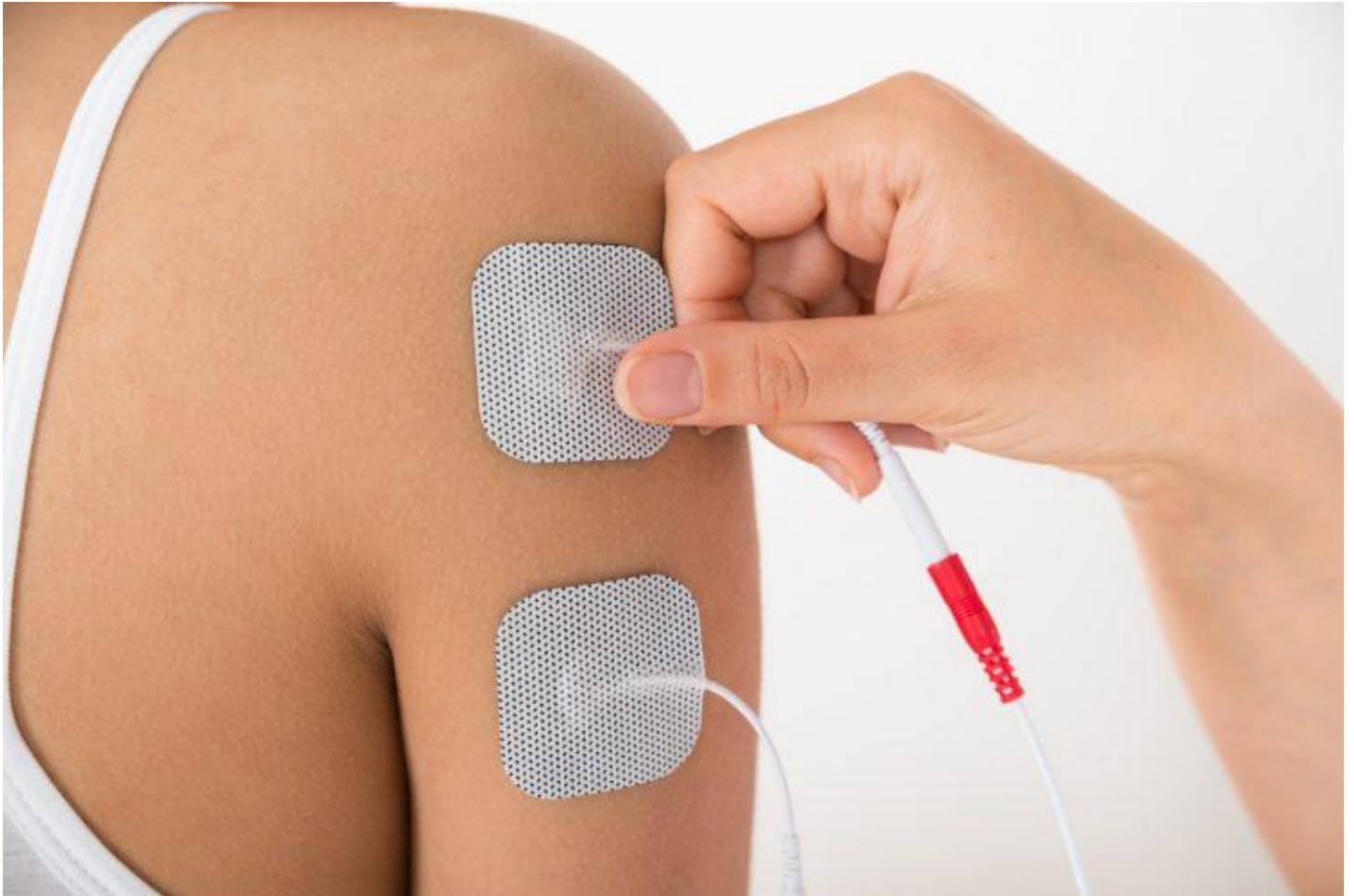


5 Benefits of Using Electrical Stimulation for Stroke Recovery

November 17, 2017



Electrical stimulation for stroke recovery can help you improve movement in your affected muscles – even if you have severely limited movement. This article will explain how electrical stimulation for stroke recovery can benefit you. To start, we'll cover a little movement anatomy.

Movement Starts in the Brain

In order to move your muscles, your brain sends electrical signals to your muscles that tell them to move. When stroke damages your brain's ability to send these signals, it becomes difficult to move. So the problem isn't in your muscles – the problem is in your brain/muscle communication.

Read *“Stroke rehab starts in the brain, not the body”* article, dated 3/24/2017. Once you retrain your brain to send the correct signals to your muscles, your movement will improve. Electrical stimulation does just that.

Electrical Stimulation Helps Heal Your Brain

Electrical stimulation works by providing extra (subtle) electrical stimulation directly to your affected muscles, and this extra ‘jolt’ helps those muscles move. Although it looks like the healing is happening in your muscles, the electrical stimulation actually helps heal your brain by activating neuroplasticity.

Neuroplasticity is the mechanism that your brain uses to rewire itself – and this is how you will restore movement in your body. While electrical stimulation by itself is a great treatment, you won’t see great results unless you use it with repetitive rehab exercise.

The Best Way to Use Electrical Stimulation for Stroke Recovery

The best way to use e-stim is to accompany it with repetitive rehab exercise (article dated 9/25/2015). When you repeat a movement over and over, you activate neuroplasticity and strengthen those connections in your brain. The stronger those connections become, the better your mind/muscle connection becomes, and the better you get at moving.

Neuroplasticity is activated through electrical stimulation, and rehab exercise activates it even more, which helps you see noticeable results. So, electrical stimulation by itself can produce some results, but electrical stimulation combined with rehab exercise produces the best results.

5 Benefits of Using Electrical Stimulation for Stroke Recovery

Electrical stimulation can do a lot of good for stroke patients by improving various stroke side effects. Here are 5 different ways that it can benefit stroke recovery:

1. Improve Post Stroke Paralysis

When muscles have become paralyzed after stroke, electrical stimulation can help introduce some movement, which is critical for recovery. Because once a little movement seeps in, you can capitalize on the opportunity and practice paralysis recovery exercises to introduce even more movement.

2. Improve Functional Movement

You can use electrical stimulation for limited amounts of time (like a 20 minute session), or you can get wearable devices that provide stimulation while you go about your daily life. This can help promote functional gains.

3. Reduce Spasticity

Since spasticity is caused by brain-muscle communication, you can treat spasticity by activating neuroplasticity, which improves your brain-muscle connection. And that’s exactly what electrical stimulation and rehab exercise is good for.

4. Potentially Improve Sensory Issues

The stimulation from electrical stimulation can potentially help improve sensory issues after stroke. Examples of sensory issues include numbness, tingling, or hot/cold sensations (or anything that prevents you from feeling normally).

There isn't as much research on electrical stimulation for sensory reeducation article dated 3/27/2017, but if you're looking for a solution, it's worth a shot.

5. Boost Results from Botox

Botox is a useful treatment for post stroke spasticity. Botox helps relax your muscles temporarily by blocking the signals that are telling your muscles to tighten. Because it's a temporary treatment, though, Botox works best when combined with rehab exercise to activate neuroplasticity and create real improvement. (Rehab exercise truly is the best remedy for movement after stroke!) Then, by adding electrical stimulation to the mix as a third layer of therapy, you'll see the best results possible.

Electrical Stimulation for Stroke Recovery

Electrical stimulation can be very beneficial for stroke survivors because it helps activate neuroplasticity and bring movement into the affected muscles.

Electrical stimulation for stroke recovery can help ease a wide variety of stroke side effects like paralysis, spasticity, and sensory issues.

In order to see the best results, you should combine electrical stimulation therapy with repetitive rehab exercises (see "Full Body Exercises dated 9/25/2015).