

Mirror Therapy for Stroke Rehab

September 8, 2015



Why should you care about mirror therapy? Well, it could help reduce persistent pain and [improve motor skills](#) after stroke or other injury. Oh, the power of the mirror. Let's dig into what mirror therapy is and how it can help with stroke rehabilitation.

How Mirror Therapy Works

Mirror therapy involves the use of a mirror – surprise, surprise – to create a reflection of your unaffected arm in place of your affected arm during therapy (see image above). The mirror image ‘tricks’ your brain into thinking that your affected arm is moving like your unaffected arm. You're not actually tricking your brain though – you're a little too smart for that – but the illusion helps your brain rewire itself through a phenomenon known as [neuroplasticity](#). Mirror neurons also play a role, but we'll get to that in a second.

To practice mirror therapy, place a mirror on a table with the mirror facing your unaffected arm. Position the mirror so that it looks like the reflection of your unaffected arm is taking

the place of your affected arm. In this position, practice 30 minutes of any [arm](#), [wrist](#), or [finger exercises](#) of your choice. While performing rehab exercises as normal, the mirror will help your brain rewire itself and improve your motor skills.

While this phenomenon revolves around neuroplasticity, some of the success can be attributed to the [mirror neurons](#) in your brain. We'll discuss the difference between motor neurons and mirror neurons, then move on to how it helps with rehabilitation.

How Mirror Neurons Help

When you move, it's because motor neurons fired in your brain which told your muscles to move. Every time you walk, talk, sit, or stand, it's the result of motor neural activity going on in your brain. These motor neurons are found in the same area of the brain that mirror neurons are located.

Mirror neurons are a little different, though, in that they fire when you simply SEE a movement occur. In other words, when you watch someone move, your mirror neurons are firing off.

It's no coincidence that the word 'mirror' is used here. Mirror therapy triggers mirror neurons to fire when you see the illusion of your affected arm moving in the mirror. Even though it's just a reflection of your unaffected arm, [studies have shown](#) that your brain still perceives it as your affected arm and your mobility can improve.

Pretty cool stuff, right?