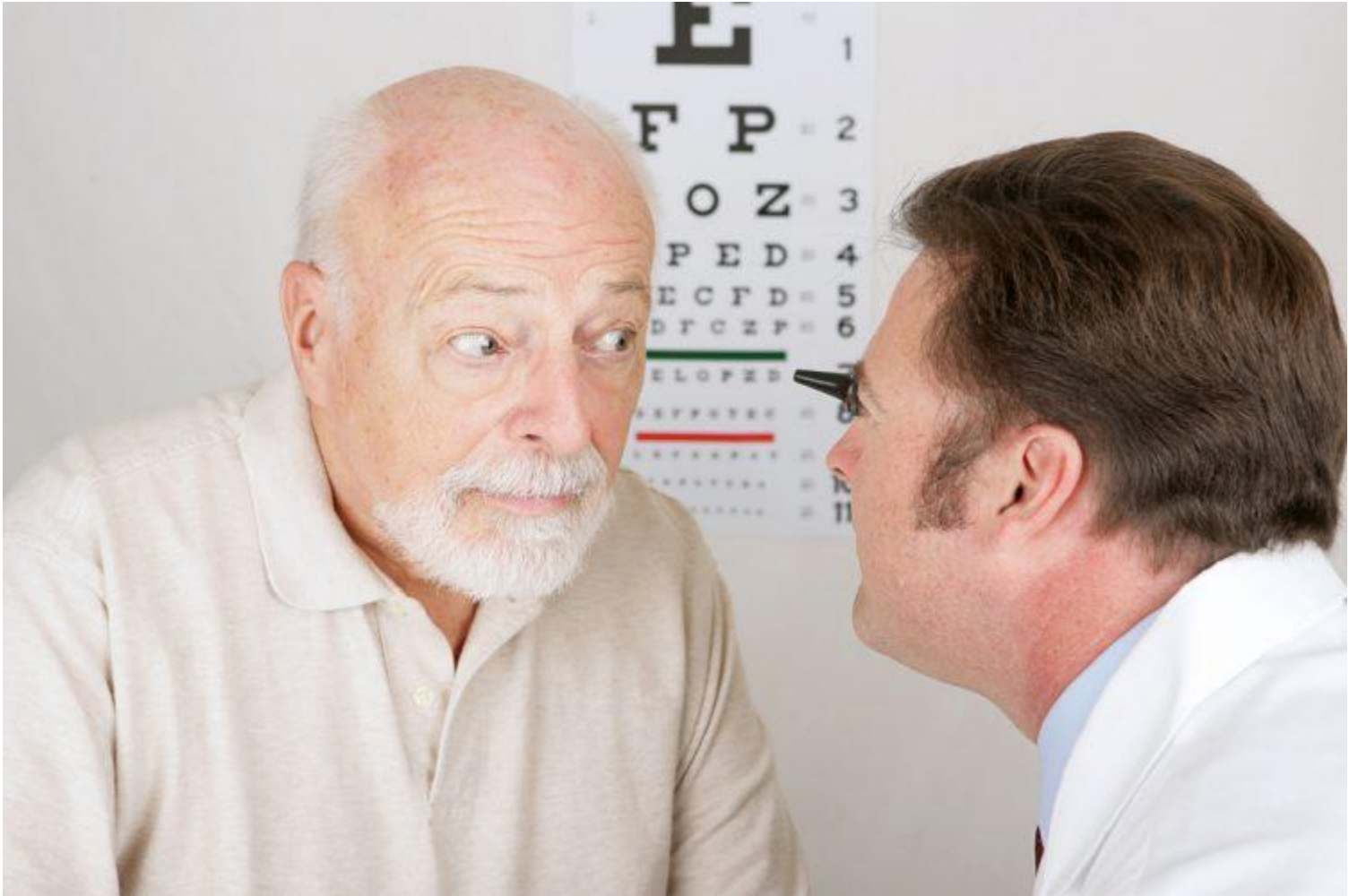


The Ultimate Guide to Treating Vision Problems After Stroke

April 17, 2017



If you have vision problems after stroke, then it's important to understand your vision treatment options.

Because despite what some people think, vision CAN be restored after stroke.

Just like you can restore movement in your body after stroke through [rehab exercise](#), you can restore your ability to see through treatment, too.

Your potential improvement depends on both the type of vision problem(s) you have and the amount of treatment you're willing to participate in.

So first we will discuss the different types of eye problems that can occur after stroke. Then we will discuss the solutions. The *permanent* solutions.

4 General Types of Eye Problems After Stroke

After stroke, there are four main types of eye problems that can occur: **central vision loss, visual field loss, eye movement problems, and visual processing problems.**

All of these problems affect your ability to see your full **visual field**, which is the total area in which objects can be seen in your peripheral (side) and central vision as you focus on an object.

- **Central vision loss** impairs your ability to see the middle of your visual field
- **Visual field loss** impairs your ability to see sections of your visual field, like the affected side
- **Eye movement problems** impair your ability to control your ocular (eye) muscles that control your eye
- **Visual processing problems** impair your brain's ability to interpret your visual input

This is just a brief overview because instead of digging into the details of the *symptoms*, we'd like to dig into the *root cause* of these vision problems.

Because once we dig into the root problem, we can address the most effective treatments.

2 Root Causes of Vision Problems

Your eyesight is controlled by two variables: your eyes, which receive visual information, and your brain, which includes your visual cortex that interprets visual information.

Vision is a two-man act. This means that there are two root causes to vision problems after stroke.

Cause 1: Neuromuscular Impairment (your eyes)

When stroke damages the *nerves* that control the muscles in your eyes – while leaving your visual cortex unaffected – then your vision problems are caused by impaired eye coordination.

Specifically, this impairment is known as a *neuromuscular impairment*.

This means that you have trouble controlling the muscles that move your eye, but your brain's visual processing is fine.

In this case, treatment will revolve around restoring your ocular (eye) muscle coordination. More on that later.

Cause 2: Visual Processing Impairment (your brain)

Second, if stroke did not affect the nerves in your eyes, then your eyes are still functioning properly. They are still receiving visual information correctly.

In this case, vision problems are caused by damage to the vision center of the brain. This impairs the brain's ability to process visual information, which leads to vision problems.

In this case, treatment will revolve around restoring your brain's visual processing abilities. More on that later, too.

All visual problems can be broken down into *neuromuscular impairment* (eye problems) or *visual processing impairment* (brain problems).

If you do not know which one you suffer from, then consult with your [rehab team](#). They will put you through a visual field test to determine which part of your vision was affected by stroke.

Now that we have boiled it all down into two root problems, let's discuss the solutions.

Treatments for Neuromuscular Impairment: Eye Exercises

If your brain is correctly processing visual input but you still suffer from poor vision after stroke, then the muscles that control your eyes are most likely the culprit behind your vision loss, and neuromuscular treatment can help.

And to help simplify things, neuromuscular treatment is really just a fancy word for [eye exercises](#).

Eye exercises workout the 6 muscles that control your eye and make them stronger. This helps improve your eye coordination and control.

Refer to this guide for [eye exercises after stroke](#).

Treatments for Visual Processing Impairment: Therapy

There are 3 types of treatment for visual processing impairment:

1. Eye movement therapy
2. Optical therapy
3. Visual restoration therapy

The first two treat the symptoms of vision loss, and the third treats the root cause.

Eye movement and optical therapy:

During eye movement therapy, you learn how to move your eyes within your visual field to make it easier to scan objects. This helps you adapt to what you can see without trying to expand your visual field.

During optical therapy, mirrors and prisms are used to manipulate your current visual field so that you can see more. This expands your visual field using tools.

Both optical and eye movement therapy help you adapt to your new visual field without improving your brain's visual processing ability. They are **compensation techniques** that help you safely live with your vision loss.

This is NOT to say that these treatments are bad. In fact, if you can participate in them and learn how to comfortably live with your new visual field, then please do participate!

However, there's a way to treat the root problem and regain some or all of your visual field without depending on tools or compensation techniques:

Visual restoration therapy:

During visual restoration therapy, lights are used to stimulate the border between “good” and “blind” spots in your field of vision. This stimulates neuroplasticity and encourages your brain to rewire itself and regain its ability to interpret what you see.

This treats the root problem.

Remember that compensation techniques are not always bad, though. But if you can go without compensation techniques and treat the root cause instead (by encouraging your brain to rewire itself), that will lead to better results.

How Much Vision Can Be Restored?

Now that we’ve covered the various treatments for eye problems after stroke, let’s discuss the hard hitting question:

How much vision can be restored after stroke?

Statistically speaking, there’s a chance that you may only achieve partial recovery of your vision field. There’s also a chance that you can fully recover your vision.