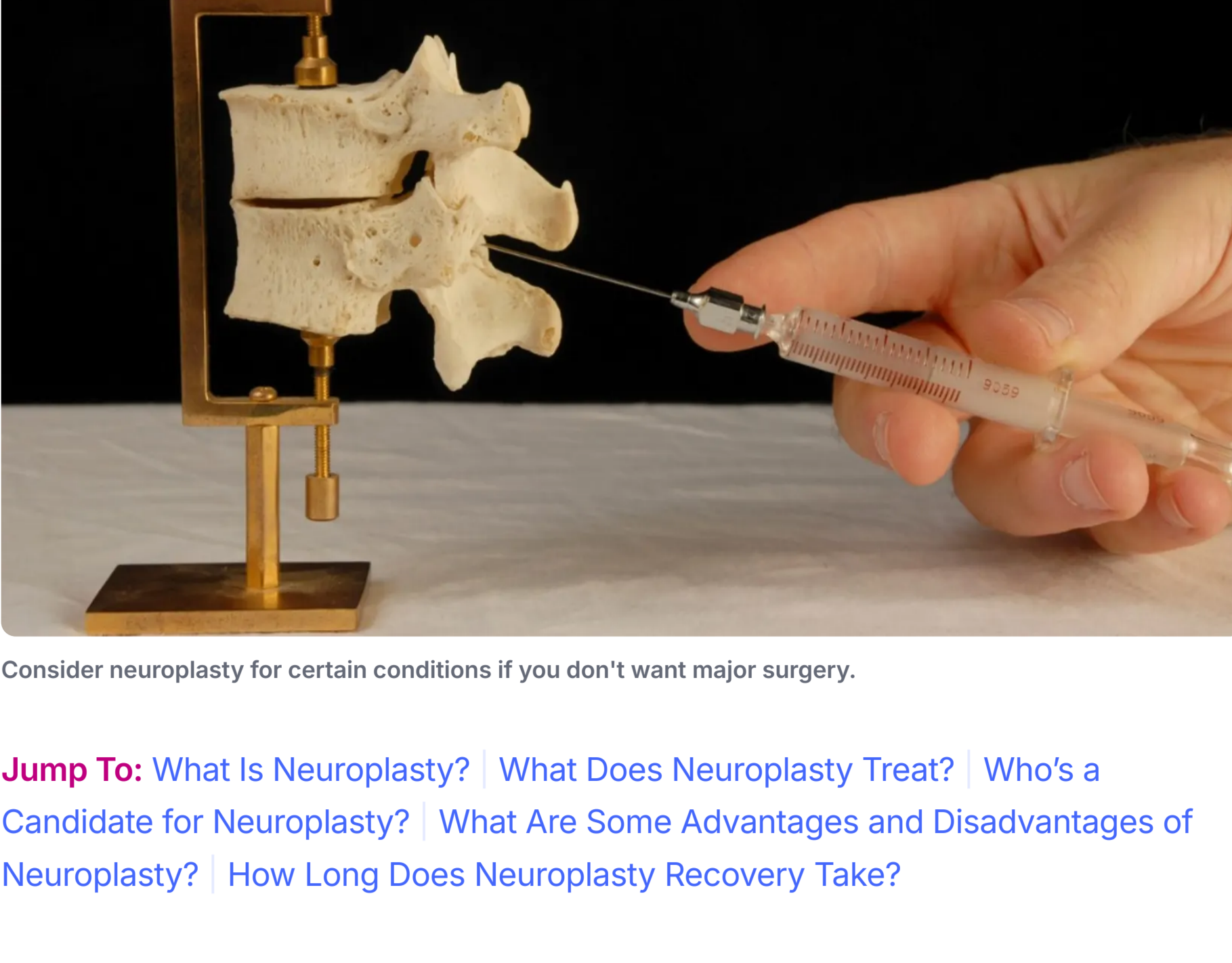


Medically Reviewed

Neuroplasty: Your Questions, Answered

Neuroplasty is an intimidating-sounding name for a minimally invasive procedure that can bring back pain relief for two years or more.

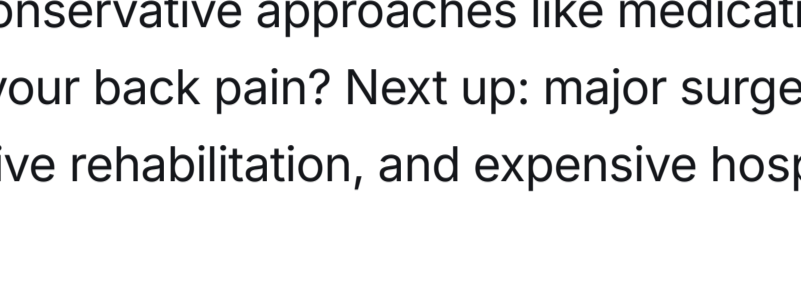
Oct 20, 2020 | By: Michelle Beauclair
 Medical Reviewer: Standiford Helm, M.D.



Consider neuroplasty for certain conditions if you don't want major surgery.

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If you or a loved one has suffered from chronic back pain, you know how it can make your life miserable. So many aspects of normal daily functioning—working, eating, sleeping, exercising—become a struggle.



What happens when conservative approaches like medication and exercise no longer work to relieve your back pain? Next up: major surgery, with its long recovery times, extensive rehabilitation, and expensive hospital stays, right?

Don't be so sure. You might be a candidate for neuroplasty, an outpatient surgery procedure that may be able to provide pain relief instantly (or nearly so) and get you back to normal activities—fast.

So what exactly is neuroplasty? What does it treat and, perhaps most important, are you a candidate?

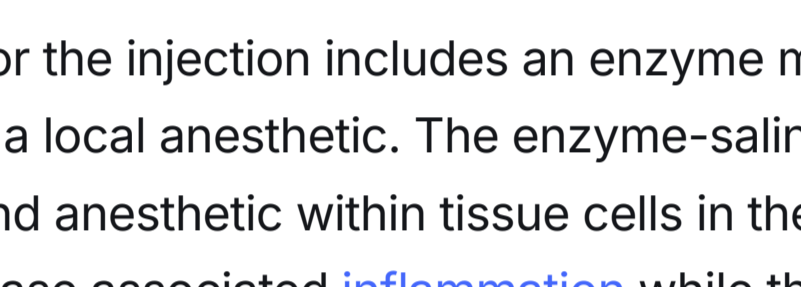
What Is Neuroplasty?

Neuroplasty can relieve chronic back pain caused by scar tissue accumulation that directly compresses and irritates spinal nerves, says [Standiford Helm, M.D., MBA](#), an expert in the procedure who practices at The Helm Center in Laguna Woods, CA.

Scar tissue can develop around nerves in the spinal canal, especially if you've had:

- Trauma to the spine or back
- Failed back surgeries
- Repetitive motion-related injuries

You might feel pain—somewhere between “mild” and “searing”—tingling, or numbness along a nerve if it's being compressed by that scar tissue.



During a neuroplasty, typically done as a same-day procedure, an fluoroscopically guided catheter is placed into the spinal scar tissue. This is followed by injecting medication via the catheter to open up the scarring, which takes pressure off the nerve.

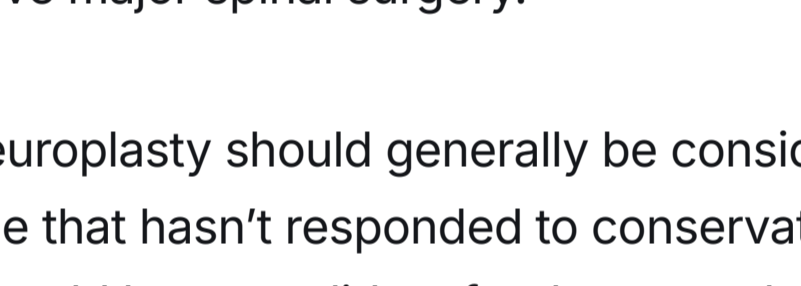
The medication used for the injection includes an enzyme mixed with saline solution, a steroid, and a local anesthetic. The enzyme-saline mixture helps distribute the steroid and anesthetic within tissue cells in the affected area. The steroid serves to decrease associated [inflammation](#) while the local anesthetic aids in acute pain relief.

Research suggests that using the enzyme hyaluronidase in neuroplasty results in improved pain ratings at 12 months versus other techniques.

What Does Neuroplasty Treat?

Neuroplasty was originally developed to treat back pain after spinal surgery. Its uses now include:

- Spinal stenosis
- Spinal compression fractures
- Inflamed or pinched nerves
- Degenerated, bulging, or herniated discs
- Facet joint syndrome caused by degenerative changes in the spine
- Epidural inflammation or fibrosis
- Chronic pain following neck or back surgery
- Refractory back pain



Who's a Candidate for Neuroplasty?

You may want to consider neuroplasty if you're unable to have surgery or you simply don't want to have major spinal surgery.

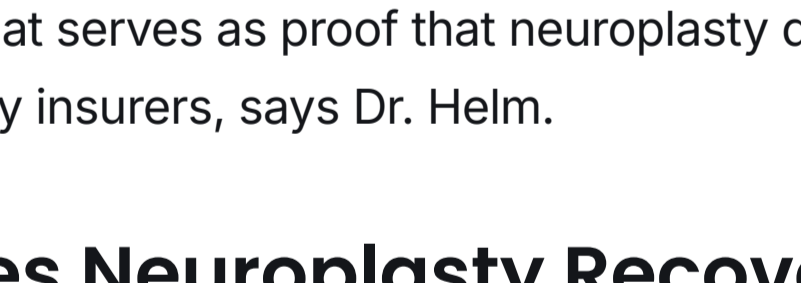
Dr. Helm shares that neuroplasty should generally be considered prior to major surgery and that anyone that hasn't responded to conservative treatment for back and/or extremity pain would be a candidate for the procedure. Conservative treatments can include medications or physical therapy.

Neuroplasty reports suggest It can also be a very effective treatment for patients with nerve function changes caused by inflammation and irritation of a nerve as a result of disc herniation. In addition, it can benefit patients experiencing nerve irritation from epidural adhesions occurring post spine surgery.

Dr. Helm adds that a dural tug test may be helpful in choosing neuroplasty candidates. The dural tug test consists of a patient performing specific movements that help your provider determine if and where there's nerve pain caused by scarring.

What Are Some Advantages and Disadvantages of Neuroplasty?

The advantages of neuroplasty include that, when done by experienced medical professionals, it's a safe and effective approach for you to receive back pain treatment that involves minimal recovery and rehabilitation time. It's also an advantage if you're not a candidate for major surgery due to health reasons or if you don't want to do major surgery.



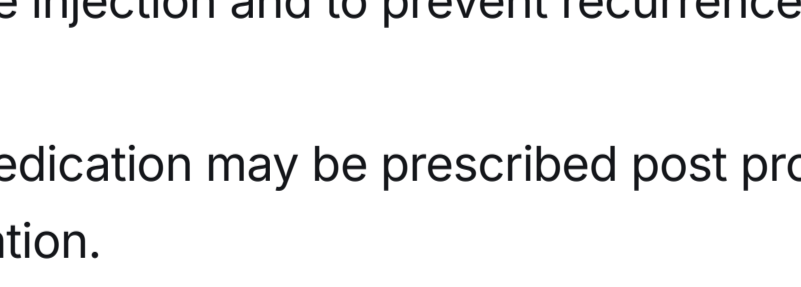
Another attraction of neuroplasty? There are virtually no side effects or risks. The procedure is minimally invasive, unlike open surgery. Because the procedure is fluoroscopically- guided, the medical professional has a precise view of where to safely perform the procedure.

Dr. Helm highlights that not every instance of scarring should be treated with neuroplasty (or at all). He shared the example of the condition of dense scarring, like that which holds other scars in place, should not be “cut” and therefore is not a condition that's appropriate for neuroplasty. Some think that because dense scars shouldn't be treated, that serves as proof that neuroplasty doesn't work and shouldn't be covered by insurers, says Dr. Helm.

How Long Does Neuroplasty Recovery Take?

A big advantage to the neuroplasty, unlike having major spine surgery, is that you'll be able to return home the same day as the procedure and return to work and/or your daily routine the day after.

Typically, after the procedure the back pain relief will either disappear instantly or may resolve over a couple of weeks. You may feel some achiness as the anesthesia dissipates.



Dr. Helm notes that, “In some patients, relief may not occur initially, but can occur later, as the patient performs the neural flossing.”

Neural or [nerve flossing](#) consists of exercises designed to mobilize nerves and help relieve pain created by compressed or irritated nerves. The exercises help to increase range of motion, relieving pain, and minimizing nerve damage. The exercises can also improve overall flexibility and strength.

He recommends that neural flossing exercises to mechanically stretch the nerve root “should be done two to three times a day for several months to enhance the hydrostatic effect of the injection and to prevent recurrence of entrapment.”

After the procedure, medication may be prescribed post procedure to decrease and prevent nerve irritation.

Dr. Helm advises that, “Neuroplasty stands in a continuum, from more conservative to more invasive procedures. Generally, one would want to do neuroplasty prior to more aggressive procedures, such as surgery or spinal cord or peripheral nerve stimulation.”



Pain relief from neuroplasty can last two years or more, according to some research. All in all, neuroplasty is a tool in a spine specialist's toolbox, but it might be the right tool for the job for you.

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