



BodyWork
A s s o c i a t e s

A Wrong Turn on the Pain Highway

by Douglas Nelson

In previous articles, we looked at how trigger points and chronic pain can give us misleading signals about the origin and value of the pain message. In this article, let's look at one example of how pain can get rerouted in ways that are affected by the past.

The message of pain sent from the periphery to the brain travels up an elaborate neural network, which looks like a river system with many tributaries. We assume that any signal will move accurately up and down the system, but there are many ways in which the signal can be rerouted. Like water running down a hillside, the tracks of previous rains predetermine where the new water will run.

Researchers designed a very clever experiment to show how the body does that with pain. In this experiment, subjects were given fairly strong electric shocks into a muscle in the upper shoulder / neck area. (Where do they find volunteers for studies like that?) As you might expect, it was significantly unpleasant for the subjects, who reported pain exactly at the site of the electric shock. No surprise there!

The next group to be given the shocks was a group of people who had a long history of back pain. When shocked in the upper shoulder / neck area, they experienced pain in the low back, not at the site of the shock. This is astounding. If you get a shock, you should feel it at the site of the offending action, not your old back pain area. The signal took a wrong turn on the pain highway.

When people have a history of pain, the brain reroutes any stimuli down familiar pathways, tracks that were laid down by past experience. To prevent these facilitated pathways of pain, it is critical to:

1. Not let pain linger. The longer it stays, the deeper the tracks and the harder it is to get out of the rut.
2. Move and explore. If your back hurts doing yard work, don't assume it will hurt while doing ballroom dance. The more varied your activities, the less likely you are to create deep ruts.
3. Be careful about assumptions. Just because something bothered your back once, does not mean it will always be an issue. Try it again, but in a slightly different way. If you love to play golf, work on your short game and let the driver sit in the bag for a spell. If salsa dancing bothers you, try a different style. Keep exploring!