

The Physiology Behind The Sore Back

So what is actually happening when my back or neck is sore? First off most people are not involved in traumatic events ie. car accident. In this case it is obvious why we hurt, (broken bones, torn tissue). Most [chiropractic](#) patients claim: “nothing happened” or “I didn’t do anything”. The explanation: [repetitive micro-trauma](#), or in other words activities of daily living. That is, all the things we do all day for our entire life that add up and eventually become the straw that “breaks the camels back”.

Try this:

1. Stand with proper posture and have a friend stand behind you with their hands on your shoulder muscles ([trapezius](#)).
2. Then while your friend is feeling how tight your muscles are just pretend to do things that you would normally do throughout your day, (lifting your child, doing dishes, driving your car, working on your computer etc.).
3. You will notice that no matter what you do, those muscles get tight immediately.

Well you can easily imagine that if you do things all day long, and you do, that these muscles would slowly and progressively get tighter.

The physiology: As muscles tighten, blood flow decreases and the muscles become shorter, less flexible and lose their ability to open and close. In 4 days adhesions begin to form in around joints and the surrounding soft tissue, (muscles, ligaments, fascia). The joints are now restricted and can’t move properly. With all this restriction, chemicals buildup, (either normal metabolic waste products and/or [inflammatory chemicals](#)), and the chemicals fire off pain receptors and that is what causes the pain.

The solution: Chiropractic adjustments are an excellent means of resolving joint restriction. With a quick and sudden thrust the muscles instantly relax (stimulation of the [Golgi Tendon Organs](#) inhibit [muscle spindles](#)) adhesions either breakup and/or elongate and chemicals can now begin to efficiently flow out of the muscle cells.

Wellness care: This is why so many Chiropractic patients seek routine care as they want to prevent this mechanism of repetitive micro trauma versus waiting until they hurt so bad that they can’t function. We will cover additional benefits in future blogs.

So if you have recurring aches and pains or just want to prevent it from happening in the first place, talk to your doctor of chiropractic about the benefits of adjustments and repetitive micro-trauma.