

Keeping Your Body Aches Under Control

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When you tense your upper body muscles to scrub the outdoor grill or work at the computer, it's understandable that your neck and shoulders will ache. But why would your leg muscles start to hurt if they didn't even get a workout? A new study by Hong-You Ge, M.D., Ph.D., of Denmark explains why a two-minute contraction of the shoulder muscles can increase pain in the legs for people with fibromyalgia.*

Sustained muscle contractions are known to trigger the release of pain-relievers into the spinal cord to reduce feelings of achiness in those muscles that are getting the workout. It's a natural process that soothes pain, at least in healthy subjects. Yet, this system that provides analgesia after exercise appears to be working the wrong way in fibromyalgia patients.

Study participants were asked to contract the large shoulder muscles in the upper back until the muscles gave away to fatigue. Twenty-two fibro patients were compared to the same number of healthy control subjects. Everyone in the study was middle-aged.

Sensitivity to pressure pain in the upper shoulder muscle was measured before and immediately after contracting it, as well as 20-minutes later. Pain sensitivity was also checked in a lower leg muscle that was relaxed the entire time. The research team predicted that the spinal cord was misinterpreting the messages from the contracting muscles and making pain worse throughout the body in people with fibromyalgia.

The brief muscle contraction in the healthy group led to less pain in the shoulder area right after the exercise and 20 minutes later. This is what should happen when taxing one's muscles so that waste products like lactic acid don't leave people hurting. After all, if this did not happen, people would learn to avoid exercise whenever possible and that wouldn't be healthy. Pain sensitivity in the lower leg was unaffected, but the results were quite the opposite for those with fibro.

Pain levels started out much higher in the group of fibromyalgia patients (as expected). In addition, the spinal cord did not kick in to relieve post-exercise soreness in the shoulders. Worse yet, pain sensitivity increased significantly in the leg muscles that were relaxed throughout the study.

What does this mean? The system in the spinal cord that people rely upon to ease post-exercise discomfort seems to be responding to workouts by increasing the pain in fibro. So if you are on your feet all day long, this activity may not only make them sore, but it will also cause other muscles to hurt, such as those in your arms.

Exercise is an essential part of staying fit and healthy, but it is hard to do if it increases your pain. The trick is to not overwork any of your muscles. This explains why fibromyalgia patients state that keeping their pain under some control requires frequent rest breaks and changing positions so as to avoid straining any muscle group.

Increasing physical function has to be done extraordinarily slowly in fibromyalgia patients just to keep the pain levels stable. As your muscles get bigger and stronger, the fibro body will be able to sustain more activity before the spinal cord decides to amplify your pain. Improving fitness has to be done very carefully and gradually, or increased muscle aches will constantly trip you up (unlike those healthy folks who feel great after a heavy workout).