

Pain can show a lot of muscle

New technique unlocks the tension of sore spots

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People suffering from chronic muscle pain and stiffness now can consider a new kind of physical therapy that is based on the theory that a chronically sore or tight muscle cannot be simply massaged or exercised away.

Practitioners of Muscle Activation Techniques, or MAT, believe that these symptoms are just the body's defense mechanisms. The underlying cause, according to MAT developer Greg Roskopf, is that injury can desensitize a muscle's mechanoreceptors, which are designed to receive and process signals from the brain.

"The brain sends the input to tell muscles to contract, but the muscles aren't getting the proper input, so they can't do their job to stabilize joints." And when the brain senses instability, it tenses the surrounding area to discourage use.

Roskopf is a Denver-based exercise physiologist and biomechanical consultant for the Denver Broncos, Denver Nuggets and Utah Jazz. Although he has worked with injured athletes for many years, it was his own injury that led him to develop this technique.

"I had a fractured vertebra when I was 19, and I had a lot of residual problems," he said. "Basically, my back wouldn't heal. Over time, due to compensation, I had knee pain, foot pain, hip pain--it was like my whole body was breaking down." He was treated by a variety of specialists, but nothing helped, and some treatments made him feel worse. That was when he decided to stop treating the pain. It was "a paradigm shift, the complete opposite thought process of almost every technique out there."

MAT is a four-step process, explained Michael Schwartz, a personal trainer at Chicago's Symmetry Center who is certified in MAT. First "is an assessment to find out where the body doesn't want to go. When we move somebody into a position and they are noticeably tight, meaning we find an asymmetry--one side is much more limited than the other--that's a direct indication that the body is protecting itself from that position. We look everywhere from the foot all the way up to the neck."

This range-of-motion assessment is followed by a test of all the muscles that might be responsible for the tightness. Practitioners check each muscle to see if it has trouble contracting, a sign that it isn't getting the proper input from the brain.

Manual palpation is the third step. "Where the muscles grow into the bones is where we push," Schwartz said. "It's just basically pressure. We kind of go back and forth in an X-type motion." This step can be somewhat uncomfortable, but it is an attempt to resensitize the muscle to the brain's signals.

In the last step, muscles are retested to see if symmetry in range of motion and strength has been restored.

Chicago attorney Barbara Peloquin is a client of Schwartz's. She had been seeing a chiropractor for chronic back pain and headaches, without much success, then she hurt her thumb. "I could not bend it," she said. "I went to an orthopedist who said that I had damaged the thumb . . . and that I would need surgery."

A colleague suggested that she see Schwartz. "Mike worked on my neck and my shoulder for maybe five or six sessions and then spent one 10-minute period working on my hand. Everything came back. Haven't had an issue since and never went back to the orthopedist. Never had surgery. I go in now for a [MAT] tuneup about once a month."

MAT sessions typically last an hour and cost \$100 to \$150. There are more than 30 MAT practitioners in the Chicago area, with 25 in the process of certification through a program run by Roskopf. Most are personal trainers, but a few are physical therapists or chiropractors, which means that insurance may help to pay for treatment.

Visit muscleactivation.com to find a practitioner.