Needling

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How does dry needling work?

The exact mechanisms of dry needling are not known, however, it does produce both mechanical and biochemical effects. Based on the pioneering studies by Dr. Jay Shah and colleagues at the National Institutes of Health, we know that inserting a needle into trigger points can cause favorable biochemical changes, which assists in reducing pain. It is also essential to elicit so-called local twitch responses, which are spinal cord reflexes. Attaining these local twitch responses with dry needling is essential in breaking the pain cycle.

Is it similar to acupuncture?

There are some similarities between dry needling and acupuncture, most notably the insertion of sterile needles to evoke a cellular response. However, the practice of dry needling only addresses specific trigger points within ailing muscles. In contrast to most schools of acupuncture, dry needling is strictly based on Western medicine principles and research. (Ryan Lynch, MPT is not a licensed acupuncturist and does not practice acupuncture.)
What can be treated with dry needling?

Dry needling can be used for a variety of musculoskeletal problems, as muscles are thought to be primary contributing factors in pain symptoms. These conditions include, but are not limited to neck, back and shoulder pain, arm pain (tennis elbow, carpal tunnel, golfer’s elbow), headache (to include migraines and tension-type headaches), jaw pain, buttock pain and leg pain (sciatica, hamstrings strains, calf tightness/spasms). The treatment of muscles often has the greatest effect on reducing pain mechanisms in the nervous system.

Is the procedure painful?

Most patients do not feel the insertion of the needle; however, the local twitch response elicits a very brief (less than a second) painful response. Some patients describe this as a little electrical shock; others feel it more like a cramping sensation. Again, the therapeutic response occurs with the elicitation of local twitch responses and that is a good and desirable reaction.

How long does it take for the procedure to work?

Typically, it takes several visits for a positive reaction to take place. Again, we are trying to cause mechanical and biochemical changes without any pharmacological means. Therefore, we are looking for a cumulative response to achieve a certain threshold after which the pain cycle is disturbed.

Where does it fit in the rehabilitation program?

Generally speaking, dry needling can be beneficial for most patients experiencing pain. As it is an invasive procedure, it is typically initiated after less aggressive physical therapy treatment has failed. Most often, it is used in conjunction with a variety of physical therapy modalities, stretching, and exercise.