

## **What is Dry Needling? What is a Trigger Point?**

Trigger point dry needling is a very effective treatment technique utilized in conjunction with other interventions to deactivate myofascial trigger points and the pain and dysfunction they cause. A myofascial trigger point consists of multiple contraction "knots," which are related to the production and maintenance of the pain cycle. Trigger points can refer pain to other body areas and can even produce nerve-type symptoms of radiating pain, numbness or tingling. They can also cause weakness and shortening of involved muscles, which can limit range of motion. Dry needling is an invasive procedure in which a solid filament (acupuncture) needle is inserted into the skin and muscle directly at a myofascial trigger point. Without withdrawing the needle, repeated strokes of the needle in and out of the trigger point help to deactivate and release it in within seconds.

## **Is Dry Needling the Same Procedure as Acupuncture?**

No. Dry needling is strictly based on Western medicine principles and research, whereas acupuncture is based on Eastern Chinese medicine. The major difference is that dry needling is a treatment directed specifically at a palpable trigger point in a muscle, whereas acupuncture focuses on meridian points to promote energy flow in the body. The main similarity is that both dry needling and acupuncture use the same type of acupuncture needles.

In several states, including Virginia, licensed physical therapists who have specific post-graduate training and/or certification can use dry needling under the scope of their practice. But, dry needling also falls within the scope of acupuncture practice. Dr. Pesavento is not a licensed acupuncturist and does not practice acupuncture, but is one of a handful of physical therapists who has met Virginia's stringent regulations to practice dry needling in the Commonwealth and one of a handful of pelvic physical therapists to practice dry needling to treat pelvic floor dysfunction in the United States.

## **How Does Dry Needling Work?**

The exact mechanisms of dry needling are not known, although positive mechanical and biochemical effects have been proven. Based on the 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 assist in reducing pain. It is essential to elicit so-called local twitch responses, which are spinal cord reflexes. Getting local twitch responses with dry needling is the first step in breaking the pain cycle. It also affects the central nervous system, as well as the modulation and perception of pain.

## **What Kind of Needles are Used? Why Are They Referred to as Dry?**

Only sterile, disposable acupuncture needles are used. These are solid filaments versus hollow filament syringe needles, which are used for injections. Dry needling, therefore, is not the same as trigger point injections as it does not involve the injection of a substance below the skin, leading to the use of the term *dry*. The needle used in dry needling is also much finer since a hollow filament is not necessary.

## **What Kind of Problems Can Be Treated by Dry Needling ?**

Dry needling can be used for a variety of musculoskeletal problems. Muscles are thought to be a primary contributing factor to the symptoms. Such conditions include, but are not limited to neck, back and shoulder pain, extremity pain, headache to include migraines and tension-type headaches, jaw pain, and buttock pain and leg pain. The treatment of muscles has the greatest effect on reducing pain mechanisms in the nervous system.

In the pelvis and pelvic floor, dry needling can be used to help relieve specific sites of pain by dissipating trigger points in the superficial pelvic floor muscles (performed externally), the obturator internus, buttocks (hip rotators & extensors), groin and thighs, lower trunk and abdominal musculature. As trigger points can refer pain to other body parts and can mimic other diagnoses, such as sciatica, sacroiliac joint pain, disc herniations, and visceral (organ) pain, dry needling can often help relieve pain in these areas. Also since trigger point can shorten muscles, they can often cause asymmetries in pelvic and postural alignment and can present as a false leg length inequality, scoliosis or sacral/pelvic obliquity, amongst other problems.

## **Does needling hurt ?**

Most patients do not feel the insertion of the needle. 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.

## **Are There Any Side Affects After the Treatment ?**

Responses to treatment are variable. Most patients report being sore after the procedure and describe it as muscle soreness over the area treated and into the areas of referred symptoms. Typically, the soreness lasts between a few hours and two days.