Dynamic Chiropractic

ACUPUNCTURE TECHNIQUES

When Acupuncture Becomes "Dry Needling"

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In 1970, upon my return to civilian duty after serving in the U.S. Army as a combat medic, I became one of the first newly formed paramedics in the nation while trying to earn enough money to afford to enter into practice. As a result of my interest in emergency medicine, I would read the medical journals lying around the station on a regular basis. To this day, I recall one particular article that caught my attention, and I have thought about often.

The article focused on the administration of saline or magnesium sulfate for acute (or chronic) hip pain via hypodermic needle injection into a precise location on the hip. The article went into great detail, describing exactly where the injection spot was to be made. This was done with the use of explicit drawings of the musculature and skeletal relationship of the pelvis. The article further elaborated that it was essential to hit precisely the exact spot to avoid injecting into any other location, which would not yield the same outstanding clinical response experienced by other practitioners. The precise location described is what is known in acupuncture as "GB30" (*huan tiao*).

When a medical physician injects local anesthetic, saline, corticosteroids or other agents into a trigger point or known acupuncture point, it is medically referred to as trigger-point injection. However, when the same practitioner utilizes a needle into the same precise point without the administration of a substance, it is globally referred to as "dry needling." The term *wet needling* does not exist - it is simply known as trigger-point injection therapy.

Trigger points (TrPs), described by Drs. Travell and Simons in the mid-1960s, are hyperirritable spots in skeletal muscle that are painful on deep palpation and give rise to referred pain and motor dysfunction. They are found in palpable, taut bands of skeletal muscle. They are extremely sensitive to palpation and will produce referred pain for the associated muscle, and are often remote from the TrP itself. The most frequently affected sites are the trapezius, supraspinatus, infraspinatus, teres major, lumbar paraspinals, and gluteal and pectoralis muscles. Myofascial pain syndromes are regional, painful muscle conditions with a direct relationship between specific trigger points and their associated pain region. They are commonly seen in both acute and chronic pain conditions. It has been said that myofascial trigger points are the most commonly missed diagnosis in chronic pain patients.

Medically, injection of trigger points with a variety of substances including saline, magnesium sulfate, corticosteroids, local anesthetic, glucose, etc., has been used to deactivate TrPs. It appears that each of the injected substances works to treat trigger points; however, research has shown that the pain relief obtained apparently is not dependent on the specific properties of the substance, but the precise location of the point to be injected and the stimulation of the needle itself. This particular action is apparently the same identical mechanism classically known as acupuncture.

In 1979, Dr. Karel Lewit reported his stunning success with a large number of patients with musculoskeletal pain by employing nothing more than what is described as "dry needling." Dry needling refers to the therapeutic effect of applying needle stimulation directly to trigger points

without the use of injection. Dry needling utilizes a solid filament needle, as is used in the practice of acupuncture, but its gauge varies depending on the area of treatment. It mechanically disrupts the integrity of the dysfunctional endplates within the trigger area, resulting in mechanical and physiological resolution of the TrPs. It also shows a strong pain-inhibitory role by opioids released through needle stimulation of A-delta receptors. The approach of dry needling is based on Western anatomical and neurophysiological principles. This is not to be confused with the traditional Chinese medicine (TCM) rationale for the stimulation of acupuncture points.

There are similarities, but also very significant differences between the TCM style of acupuncture and dry needling. Acupuncture follows rules and beliefs that have been established since ancient times, whereas dry needling ignores ancient acupuncture philosophy. Most, if not all of TCM, is based on pre-scientific ideas, whereas dry needling is totally based on modern scientific neurophysiology and anatomy. Dry needling is purely for pain relief and based on recent understandings in pain science. There is much less mystique surrounding dry needling for pain abatement. TCM acupuncture can treat a vast range of somatoviscero illnesses, as well as being effective in pain relief. In contrast, dry needling is specifically used for pain control of the musculoskeletal system. Therefore, acupuncture will always be a viable treatment option for both internal disorders as well as musculoskeletal involvements.

In the evaluation of pain, there are two primary types: neuropathic pain from a damaged or dysfunctional nerve, and nociceptive pain, which is very common, caused by osteoarthritis, headaches, sprains/strains, myofascial pain, etc. Both of these pain types have shown extremely good response to dry needling of associated trigger points.

Dry needling is quickly becoming a very popular modality in medical and chiropractic offices nationally, as musculoskeletal complaints are one of the most reported conditions for which people seek professional attention. By deactivating TrPs using needle stimulation directly into the trigger point, the reported pain relief is noteworthy. It does not require background on the theoretical foundations of Chinese medicine, nor does it deal with the myriad of ancient laws surrounding the practice of acupuncture. It is quick, easy and very effective. In acupuncture, it may sometimes be referred to as "surrounding the dragon," which simply implies stimulating painful points in and around the area of the involvement. My personal evaluation of this approach of needling for musculoskeletal pain is that it is directly related to the musculo-tendino meridian, as opposed to the primary meridians of the body.

Dry needling is based entirely on the neurophysiologically modern understanding of pain as it surrounds hyperactive trigger points in a specific area. The diagnosis is totally based upon palpation, as trigger points are invisible to X-ray, CT scan or MRI. Contracted muscle fibers provide resistance to the needle and may cause a "needle grasp." This phenomenon causes a deep ache, which in acupuncture is described as *de qi*.

In essence, both acupuncture and dry needling make use of the needle as their primary modality. Trigger points likewise can be influenced by high-impact percussion over the area, which is noninvasive but may have less response than needle stimulation.

Around the world, physicians of all disciplines are utilizing dry needling over trigger points, with outstanding clinical success. Its growth as a medically accepted therapy is preceded only by the growth of acupuncture in North America. Even though there are similarities between acupuncture and

dry needling, the primary difference is the rationale on how the condition is approached. It is an internationally accepted, scientific, neurophysiologic treatment approach that is gaining wide popularity as its use by the health care professions accelerates.

As dry needling becomes more mainstream, you undoubtedly will begin to hear much more about this procedure. Just this morning, a prospective patient phoned my office and inquired if I did dry needling. This is a new trend in healing and, even though the procedure has been around for a number of years, it is now beginning to attract a great deal of attention. I feel it is imperative that the practitioners of acupuncture and TCM styles of acupuncture absorb the philosophy and procedure of dry needling as an adjunct for musculoskeletal pain control in their practice. It is a viable, explainable and scientifically accepted pain-control procedure. It is much easier to swim with the current than against it. Personally, I dislike the term *dry needling*; it offends me. However, like it or not, it is here.

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