

Dry Needling by Chiropractic Physicians in Alaska: A Position Statement from the Current Alaska State Board of Chiropractic Examiners

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Introduction to Dry Needling

Dry needling, also called intramuscular stimulation (IMS) is a specific physiotherapeutic technique focused on the relief of pain and spasm in myofascial trigger points and immediately surrounding tissues wherein a filiform or hypodermic needle is inserted into the tissue without injecting any substance.

A number of practitioners are credited with the development and promotion of dry needling. The origin of the term "dry needling" is attributed to [Janet G. Travell](#). In her book, *Myofascial Pain and Dysfunction: Trigger Point Manual*, Travell uses the term "dry needling" to differentiate between two hypodermic needle techniques when performing [trigger point](#) therapy. However, Travell did not elaborate on the details on the techniques of dry needling. The two techniques Travell described are the injection of a local anesthetic and the mechanical use of a hypodermic needle without injecting a solution (Travell, Simons, & Simons, 1999, pp. 154–155).

Travell had access to acupuncture needles but reasoned that they were far too thin for [trigger point](#) therapy. She preferred hypodermic needles because of their strength and tactile feedback: "A 22-gauge, 3.8-cm (1.5-in) needle is usually suitable for most superficial muscles. In hyperalgesic patients, a 25-gauge, 3.8-cm (1.5-in) needle may cause less discomfort, but will not provide the clear "feel" of the structures being penetrated by the needle and is more likely to be deflected by the dense contraction knots that are the target... A 27-gauge, 3.8-cm (1.5-in) needle, is even more flexible; the tip is more likely to be deflected by the contraction knots and it provides less tactile feedback for precision injection" (Travell, Simons, & Simons, 1999, p. 156).

The "solid filiform needle" used in dry needling is regulated by the FDA as a Class II medical device described in the code titled "Sec. 880.5580 Acupuncture needle" as "a device intended to pierce the skin in the practice of acupuncture".^[5] Per the Food and Drug Act of 1906 and the subsequent Amendments to said act, the FDA definition applies to how the needles can be marketed and does not mean that acupuncture is the only medical procedure where these needles can be used.^{[6][7][8][9][10]} Dry needling, using such a needle, contrasts with the use of a hollow [hypodermic needle](#) to inject substances such as [saline solution](#), botox or corticosteroids to the same point. In a small number of studies, the use of a solid needle has been found to be as effective as injection of substances in such cases as relief of pain in muscles and [connective tissue](#).

The American Academy of Orthopedic Manual Physical Therapists (AAOMPT) states:

Dry needling is a neurophysiological evidence-based treatment technique that requires effective manual assessment of the neuromuscular system. Physical therapists are well trained to utilize dry needling in conjunction with manual physical therapy interventions. Research supports that dry needling improves pain control, reduces muscle tension, normalizes biochemical and electrical dysfunction of motor end plates, and facilitates an accelerated return to active rehabilitation.

Dry needling for the treatment of myofascial (muscular) [trigger points](#) is based on theories similar, but not exclusive, to traditional acupuncture; both acupuncture and dry needling target the [trigger points](#), which is a direct and palpable source of patient pain. However, dry needling theory is only beginning to describe the complex sensation referral patterns that have been documented as "channels" or "meridians" in Chinese Medicine. Dry needling, and its treatment techniques and desired effects, would be most directly comparable to the use of 'a-shi' points in acupuncture.^[14] What further distinguishes dry needling from traditional acupuncture is that it does not use the full range of traditional theories of Chinese Medicine which is used to treat not only pain but

other non-musculoskeletal issues which often are the cause of pain. The distinction between trigger points and acupuncture points for the relief of pain is blurred. As reported by Melzack, et al., there is a high degree of correspondence (71% based on their analysis) between published locations of trigger points and classical acupuncture points for the relief of pain.^[15] The debated distinction between dry needling and acupuncture has become a [controversy](#) because it relates to an issue of scope of practice of various professions.

5. ["\[Code of Federal Regulations\]". FDA.](#)
6. <http://www.gpo.gov/fdsys/pkg/USCODE-2010-title21/pdf/USCODE-2010-title21-chap9-subchapV-partA-sec360j.pdf>
7. <http://www.gpo.gov/fdsys/pkg/USCODE-2010-title21/pdf/USCODE-2010-title21-chap9-subchapV-partA-sec360c.pdf>
8. <http://www.gpo.gov/fdsys/pkg/USCODE-2010-title21/pdf/USCODE-2010-title21-chap9-subchapV-partA-sec353.pdf>
9. <http://www.gpo.gov/fdsys/pkg/USCODE-2010-title21/pdf/USCODE-2010-title21-chap9-subchapV-partE-sec360bbb.pdf>
10. <http://www.gpo.gov/fdsys/pkg/USCODE-2010-title21/pdf/USCODE-2010-title21-chap9-subchapV-partE-sec360bbb-2.pdf>
11. [Ma, Yun-Tao. "Integrative Systemic Dry Needling/ A New Modality for Athletes." Biomedical Acupuncture for Sports and Trauma Rehabilitation: Dry Needling Techniques. St. Louis: Churchill Livingstone Elsevier, 2011. 4. Print.](#)
12. [Ma, Yun-Tao. "What Is Dry Needling?" \(n.d.\): 1. Web. 02 Aug. 2010.](#)
13. [Ma, Yun-Tao. "Meet Your Teacher." Dry Needling Course RSS. Dr. Yun-Tao Ma, Ph.D., LAc. n.d. Web.](#)
14. [a _____ b _____ Aung _____ & _____ Chen, _____ 2007, _____ p. _____ 101.](#)
15. [Travell; Simons. *Myofascial Pain and Dysfunction, The Trigger Point Manual, Volume 1. Upper Half of Body, Second Edition.* North Atlantic Books](#)

Introduction to Acupuncture

Northwestern Health Sciences University states, "Chinese medical philosophy holds that all life is sustained by the constant flow of an energy called "qi" (pronounced "chee"). The qi of the body is connected to the qi of nature - illness occurs when the two are out of harmony. Acupuncture and Oriental medicine restore health by strengthening the body's qi and enhancing its flow.

Chinese medical knowledge has been shaped by the experiences of thousands of practitioners over many centuries. Acupuncture and Chinese medicine continue to evolve as practitioners and faculty members at Traditional Chinese Medicine colleges accumulate new experiences in the modern world."

The Mayo Clinic explains, “Acupuncture involves the insertion of very thin needles through your skin at strategic points on your body. A key component of traditional Chinese medicine, acupuncture is most commonly used to treat pain. Increasingly, it is being used for overall wellness, including stress management.

“Traditional Chinese medicine explains acupuncture as a technique for balancing the flow of energy or life force — known as chi or qi (chee) — believed to flow through pathways (meridians) in your body. By inserting needles into specific points along these meridians, acupuncture practitioners believe that your energy flow will re-balance.

“In contrast, many Western practitioners view the acupuncture points as places to stimulate nerves, muscles and connective tissue. Some believe that this stimulation boosts your body's natural painkillers.” This morphing of how acupuncture works adds to the contention that it is no longer an ancient and pure practice, but is becoming blended with Western Medicine as a whole, and no longer a proprietary science with exclusive rights and practices. It should be noted that over 90% of trigger points identified and treated in dry needling correspond to described acupuncture points in multiple studies. This author finds it very difficult to distinguish between the practices of acupuncture and dry needling for all intents and purposes.

It is not the intent of this author of the board to focus on arguments of authenticity or origin, nor exclusivity of rights to practice a technique system that appears to offer both options for treatment and a viable method of relief of musculoskeletal pain and relief for patients.

Dry Needling and Chiropractic Scope of Practice in Alaska

As a therapy, dry needling produces relief of pain and spasm on par with other physiotherapies available to practitioners. Many comparative studies of dry needling to manual/hand techniques, electrical, sound, and light therapies demonstrate similar outcomes, without any greater benefit being demonstrated by dry needling.

Comparison to acupuncture or wet needling, dry needling shows inferior outcomes. The therapeutic effects of dry needling is most evident from three hours to three days of administration and is similar to other common physiotherapies. While dry needling is the current hot, sexy new treatment being used, it really is a middle of the pack therapy.

Certainly Chiropractic Physicians possess the background and practice skills, with proper training and experience to safely and adequately deliver dry needling services.

Chiropractic Physicians are outstanding in anatomy and palpation skills, with a much greater level of training in diagnosis and neurology than a vast majority of professions currently practicing dry needling.

Risks

By the very nature of the process, dry needling poses risks that are not found in other areas of chiropractic or allied health care systems. By penetrating the skin, risk of infection, bleeding and bruising are inherent. Proper sterile or clean technique and personal protective equipment to prevent blood-borne pathogen transfer is required.

Cases of epidural hematoma of the cervical spine as well as injury to the central and peripheral nervous system have been documented. Perhaps the most common severe side effect of needling techniques is pneumothorax, which is a life threatening condition. Dry needling has been banned by management of the U.S. Olympic Committee training center clinics due to the rate of pneumothorax in athletes (3 cases in 1 week in 2016.) Pneumothorax caused by needling technique constitutes an acute emergency and requires emergent care in the view of this Board.

A minimum of 24 hours of clinical training in dry needling technique is recommended by the Alaska Physical Therapy Association as sufficient to practice dry needling, without provision for continuing education or registration of participants. No specific training in clean technique or emergency procedures is required. No registration of active practitioners is required.

Position of This Board

The primary function of this board is the protection and benefit of the people of Alaska. Dry needling is within the scope of Chiropractic Physicians in the State of Alaska as a commonly performed physiotherapeutic, as outlined in statute.

. This position is tempered with the following recommendations or guidelines:

1. Dry needling training, as currently practiced by allied healthcare groups, is insufficient in scope and duration. Clinical training should consist of a minimum of 24 hours, with significantly more practical training time recommended. Study and practice of clean technique should be included. The Board strongly recommends emergency procedures training should be sought, with specific training in utilizing low-pressure delivery oxygen systems and airways (OPA/NPA.);
2. Continuing education consisting of 8 hours biannually, with 2 hours of supervised technique and 2 hours of practical emergency procedures;

3. A very careful review of the Chiropractic Physician's malpractice insurance policy and a letter of coverage for dry needling;
4. The Chiropractic Physician must be able to obtain the instruments of the procedure (filiform needles) in a legal manner consistent with the restrictions of his/her license.