

COMPARING THE SAFETY RECORD OF “DRY NEEDLING” VS. ACUPUNCTURE

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Regarding the safety and adverse event occurrence in treatments utilizing “dry needling,” little evidence exists to support the safety of “dry needling.” Most “dry needling” cite studies on the safety of acupuncture, who have far more training.

Acupuncture

There is far more robust data for acupuncture safety versus that for “dry needling.” A 2021 review of 21 studies covering 12.9 million treatments concluded that minor AEs* occur in 7.57% of acupuncture treatments. Serious AEs* occur at a rate of 7.98 per one million treatments (.000798%) which is an extremely low rate of incidence. “SAEs can be expected rarely in about every 10,000th patient in the course of an acupuncture series and, overall, in every 125,000th treatment.”¹ In fact, due to our excellent safety record and low complaint rate the Department of Health significantly reduced licensing fees for acupuncturists!

Dry Needling

We were unable to locate any *statistically significant* study specifically surveying AEs from “dry needling” that specifically excluded the work of higher-trained acupuncturists. (The oft-cited 2014 Brady study² failed to meet its own criteria for reliability due to inadequate sample size (only 7629 treatments) and should thus be disregarded on scientific principle. Furthermore, three of the authors failed to disclose their financial interests as owners or instructors in DN courses. Nonetheless, Brady et al found that “mild” adverse events occurred nearly 20% of the time, or nearly triple that of acupuncture.) A 2020 study acknowledges this “paucity of literature about the adverse events associated with Therapeutic Dry Needling (TDN).” It stated that dry needling was found to have a minor AE rate of a whopping 36.7%, and found that “twenty major AE’s** were reported out of the 20,494 treatments for a rate of approximately 0.1% (1 per 1,024 TDN)”³ (i.e. one “major AE” per 1,024 dry needling treatments, compared to one “significant AE” per 125,000 acupuncture treatments, as noted above).

* In this large review covering 12.9 million treatments, “The different types of AEs were assigned to one of the following categories: bleeding, local pain, other local AE, distant pain, central nervous system, peripheral nervous system, vegetative nervous system, motor system, gastrointestinal/gynaecological system, cardiovascular system, respiratory system, generalised skin reactions, headache, emotional interference, sleeping problems, AE related to moxibustion, needling malpractice, aggravation of symptoms, and other or unclassified AE (online supplemental appendix S3).” Being a systematic review, “Causality assessment of SAEs was performed by independent acupuncture therapists who were medical doctors with more than 300 hours of acupuncture training and with more than 10 years of intensive acupuncture practice,” and reported according to ICH criteria which defines a SAE as, “an adverse event that results in a life-threatening condition or death, requires hospitalization or prolongation of existing hospitalization, or results in persistent or significant disability or incapacity, including congenital anomaly/birth defects.” See Appendix 4 of that study for detailed descriptions per individual study.

**“Major adverse events are operationally defined as “medium to long-term, moderate to severe events that may require further treatment and can be serious and distressing lasting days or weeks.”

¹Bäumler P, Zhang W, Stübinger T, Imich D. Acupuncture-related adverse events: systematic review and meta-analyses of prospective clinical studies. *BMJ Open*. 2021 Sep 6;11(9):e045961. doi: 10.1136/bmjopen-2020-045961. PMID: 34489268; PMCID: PMC8422480.

²Brady S., McEvoy J., Dommerholt J., Doody C. “Adverse Events Following Trigger Point Dry Needling: A Prospective Survey of Chartered Physiotherapists.” *The Journal of Manual & Manipulative Therapy* 22.3 (2014): 134–140. PMC.

³Boyce D, Wempe H, Campbell C, Fuehne S, Zylstra E, Smith G, Wingard C, Jones R. ADVERSE EVENTS ASSOCIATED WITH THERAPEUTIC DRY NEEDLING. *Int J Sports Phys Ther*. 2020 Feb;15(1):103-113. PMID: 32089962; PMCID: PMC7015026.

NOTES: From the Sunrise Review, WEAMA's rebuttal:

Dry needling has not been sufficiently proven safe when performed by physical therapists:

- The oft-cited data on the safety of dry needling is drawn from a single prospective survey, the Brady study.⁸ The study has several flaws.
 - It fails to meet its own criteria for reliability by failing to meet the parameters it set for sample size by nearly 25%.^{9 10} An inadequate sample size renders statistical data unreliable, according to EC parameters.
 - It does not disclose possible conflicts of interest, normally expected of quality, peer-reviewed research. (*See "Section 2—Safety" for a closer examination of this study.*)
 - It was specific only to the dry needling of trigger points, but the definition of dry needling set forth in the bill language of SB6374 specifies not only trigger points, but also undefined "muscular and connective tissues," for which there are no safety data available.