Trigger Point Dry Needling

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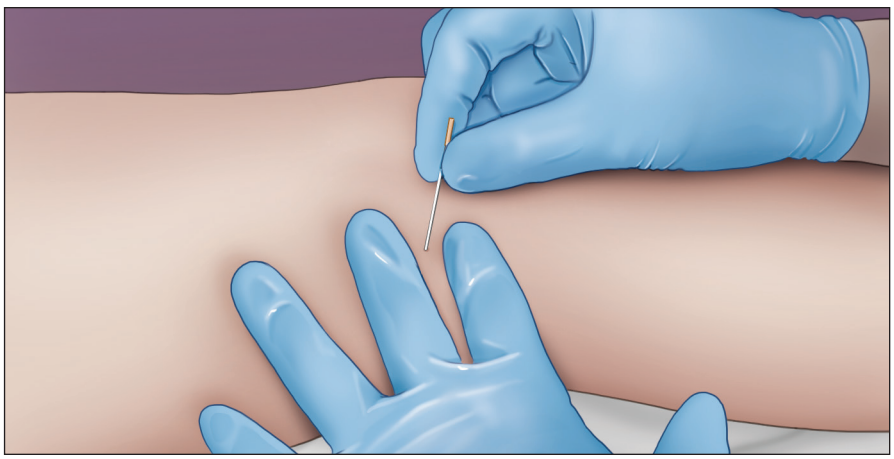
Increasingly, physical therapists in the United States and throughout the world are using dry needling to treat musculoskeletal pain, even though this treatment has been a controversial addition to practice. To better generalize to physical therapy practice the findings about dry needling thus far, the authors of a study published in the March 2017 issue of *JOSPT*[1] identified the need for a systematic review examining the effectiveness of dry needling performed by physical therapists on people with musculoskeletal pain. Their review offers a meta-analysis of data from several included studies and assesses the evidence for risks of bias.



EVIDENCE SHOWS SHORT-TERM EFFECTIVENESS. The available evidence suggests that dry needling helps reduce pain, increases pressure pain threshold, and improves function in the immediate to 12-week treatment period for patients with musculoskeletal pain.

BOTTOM LINE FOR PRACTICE

The results of this systematic review indicate that dry needling may be an effective intervention for appropriate patients with musculoskeletal pain. At the same time, the very low to moderate quality of the evidence limits the strength of conclusions that can be drawn, and optimal treatment techniques and dosing are not known. Dry needling appears to be more effective than sham, control, or other assessed treatments for improving pressure pain threshold, and more effective than sham or control for reducing pain, in the short term. However, dry needling is neither more successful than other assessed treatments beyond 12 weeks nor more helpful for improving functional outcomes.

WHAT WE KNEW

Previous reviews support the effectiveness of dry needling on reducing pain when compared to sham or placebo treatments, but are not specific to dry needling performed by physical therapists.

WHAT WE ASKED

"Is dry needling delivered by a physical therapist an effective treatment for reducing pain, improving pressure pain threshold, and improving functional outcomes for patients with musculoskeletal pain?"

WHAT WE FOUND

The authors scrutinized 13 randomized controlled studies that examined the effectiveness of dry needling on musculoskeletal pain. They found that, to date, most of the evidence is of very low to moderate quality. There are also risks of bias in the available research. Further, very little evidence exists regarding the longer-term benefits of dry needling, or that guides optimal treatment techniques and dosing.

WHAT WE KNOW NOW

At present, only a small number of trials have examined dry needling in physical therapy, and these are of very low to moderate quality. When considering data from physical therapist practice and compared with sham or no treatment, dry needling appears to be effective for reducing pain, increasing pressure pain threshold, and improving function during the immediate to 12-week treatment period in patients with musculoskeletal pain, but not during the longer term. Further, dry needling seems no more helpful than other treatments included in this review for improving function—treatments such as exercise/soft tissue mobilization/joint mobilization, proprioception/strengthening, ischemic compression techniques, orthopaedic manual therapy, active stretching, and percutaneous electrical nerve stimulation. More rigorous research is needed to confirm the efficacy of dry needling overall, and to investigate its longer-term effectiveness.

REFERENCE

1. Gattie E, Cleland JA, Snodgrass S. The effectiveness of trigger point dry needling for musculoskeletal conditions by physical therapists: a systematic review and meta-analysis. *J Orthop Sports Phys Ther*. 2017;47:133-149. https://doi.org/10.2519/jospt.2017.7096

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