



## FEP Medical Policy Manual

### FEP 2.01.100 Dry Needling of Trigger Points for Myofascial Pain

**Annual Effective Policy Date: July 1, 2024**

**Original Policy Date: December 2019**

**Related Policies:**

None

## Dry Needling of Trigger Points for Myofascial Pain

### Description

#### Description

Trigger points are discrete, focal, hyperirritable spots within a taut band of skeletal muscle fibers that produce local and/or referred pain when stimulated. Dry needling refers to a procedure whereby a fine needle is inserted into the trigger point to induce a twitch response and relieve the pain.

#### OBJECTIVE

The objective of this review is to evaluate whether dry needling of myofascial trigger points improves the net health outcome in individuals with myofascial pain.

#### POLICY STATEMENT

Dry needling of trigger points for the treatment of myofascial pain is considered **investigational**.

#### POLICY GUIDELINES

None

## BENEFIT APPLICATION

Experimental or investigational procedures, treatments, drugs, or devices are not covered (See General Exclusion Section of brochure).

## FDA REGULATORY STATUS

Dry needling is considered a procedure and, as such, is not subject to regulation by the U.S. Food and Drug Administration.

## RATIONALE

### Summary of Evidence

For individuals who have myofascial trigger points associated with neck and/or shoulder pain who receive dry needling of trigger points, the evidence includes randomized controlled trials (RCTs) and systematic reviews. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. A systematic review of techniques to treat myofascial pain included 15 studies of dry needling for neck or shoulder pain published through 2017. Studies had multiple methodological limitations, and the reviewers concluded that the evidence for dry needling was not greater than placebo. In more recent systematic reviews and meta-analyses, dry needling was not associated with clinically important reductions in shoulder or neck pain when compared to other physical therapy modalities. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have myofascial trigger points associated with plantar heel pain who receive dry needling of trigger points, the evidence includes a systematic review of randomized trials. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. The systematic review included 6 randomized trials enrolling 395 patients and found no overall difference in pain intensity in those treated with dry needling compared with active control, placebo, or no intervention. However, pain intensity after at least 3 sessions, long-term pain intensity, and pain-related disability were improved. The systematic review rated the evidence as low to moderate. The evidence for dry needling in patients with plantar heel pain is limited by small patient populations and lack of blinding; therefore, additional, good methodological quality RCTs are needed to strengthen the evidence base. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have myofascial trigger points associated with temporomandibular myofascial pain who receive dry needling of trigger points, the evidence includes 2 RCTs. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. One double-blind, sham-controlled randomized trial was identified; it found that 1 week after completing the intervention, there were no statistically significant differences between groups in pain scores or function (unassisted jaw opening without pain). There was a significantly higher pain pressure threshold in the treatment group. The second RCT (N=50) compared dry needling to manual therapy. Both groups experienced improvements from baseline to the end of the study but there was no difference between groups in pain intensity, maximal mouth opening, or disability (using the Neck Disability Index). Methodological quality was limited by a lack of blinding and no reporting of power/sample size calculation. Additional RCTs, especially those with a sham-control group, are needed. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

## SUPPLEMENTAL INFORMATION

### Practice Guidelines and Position Statements

Guidelines or position statements will be considered for inclusion in 'Supplemental Information' if they were issued by, or jointly by, a US professional society, an international society with US representation, or National Institute for Health and Care Excellence (NICE). Priority will be given to guidelines that are informed by a systematic review, include strength of evidence ratings, and include a description of management of conflict of interest.

#### American Academy of Orthopaedic Manual Physical Therapists

In 2009, the American Academy of Orthopaedic Manual Physical Therapists issued a statement that dry needling fell within the scope of physical therapist practice.<sup>17</sup> In support of this position, the Academy stated that "dry needling is a neurophysiological evidence-based treatment technique that requires effective manual assessment of the neuromuscular system.... Research supports that dry needling improves pain control, reduces muscle tension, normalizes biochemical and electrical dysfunction of motor endplates, and facilitates an accelerated return to active rehabilitation."

## American Physical Therapy Association

In 2023, the American Physical Therapy Association published an updated guideline on nonarthritic heel pain (plantar fasciitis).<sup>18</sup> The guideline stated that dry needling of myofascial trigger points in the following areas should be used: gastrocnemius, soles, and plantar muscles of the foot. The evidence supports the efficacy of this technique for pain and long-term function and improved disability, especially in patients with chronic heel pain (defined as lasting more than 1 month). The recommendation was based in part on the systematic review conducted by Llurda-Almuzara discussed above, and more recent studies with methodological limitations including lack of a sham control comparison group.

## U.S. Preventive Services Task Force Recommendations

Not applicable.

## Medicare National Coverage

There is no national coverage determination. In the absence of a national coverage determination, coverage decisions are left to the discretion of local Medicare carriers.

## REFERENCES

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**POLICY HISTORY - THIS POLICY WAS APPROVED BY THE FEP® PHARMACY AND MEDICAL POLICY COMMITTEE ACCORDING TO THE HISTORY BELOW:**

<b>Date</b>	<b>Action</b>	<b>Description</b>
December 2019	New policy	Policy created with literature review through February 5, 2019. Dry needling of trigger points for the treatment of myofascial pain is considered investigational.
June 2020	Replace policy	Policy updated with literature review through February 24, 2020; reference added. Policy statement unchanged. Title changed to "Dry Needling of Trigger Points for Myofascial Pain."
June 2021	Replace policy	Policy updated with literature review through February 18, 2021; references added; some references removed. Policy statement unchanged.
June 2022	Replace policy	Policy updated with literature review through February 11, 2022; references added. Policy statement unchanged.
January 2023	Replace policy	Policy updated with literature review through February 10, 2023; references added. Policy statement unchanged.
June 2024	Replace policy	Policy updated with literature review through February 8, 2024; references added. Policy statement unchanged.

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