BlueCross BlueShield Federal Employee Program.

FEP Medical Policy Manual

FEP 2.01.100 Dry Needling of Trigger Points for Myofascial Pain

Effective Policy Date: July 1, 2021

Original Policy Date: December 2019

Related Policies:

None

Dry Needling of Trigger Points for Myofascial Pain

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 evidence review is to evaluate whether dry needling of myofascial trigger points improves the net health outcome in patients 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 RCTs, quasi-experimental studies, and a systematic review. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. The systematic review, which included 3 quasi-experimental studies, rated study quality as poor. One RCT was double-blind and sham-controlled; it found a statistically significant greater reduction in pain in the dry needling group than in the sham group but the difference was not clinically significant (ie, it did not meet the prespecified minimally important difference). The other RCT, a single-blind trial comparing dry needling with usual care, found a significantly greater reduction in pain at the end of active treatment but not at follow-up one month later. Moreover, range of motion outcomes did not differ significantly between groups at either time point. To date, the studies have not demonstrated a statistical or a clinical benefit for dry needling. Additional RCTs, especially those with a sham-control group, would 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 an RCT. 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 one 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. 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 <91>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 Physical Therapists

In 2009, the American Academy of Orthopaedic Physical Therapists issued a statement that dry needling fell within the scope of physical therapist practice.[11,] 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 2012, an educational resource paper by the American Physical Therapy Association defined dry needling as "a skilled intervention used by physical therapists (where allowed by state law) that uses a thin filiform needle to penetrate the skin and stimulate underlying myofascial trigger points, muscular, and connective tissues for the management of neuromusculoskeletal pain and movement impairments."[12,]

In 2013, the Association issued an educational resource paper that included the following indications for dry needling: radiculopathies, joint dysfunction, disc pathology, tendonitis, craniomandibular dysfunction, carpal tunnel syndrome, whiplash-associated disorders, and complex regional pain syndrome.[1,]

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

1. American Physical Therapy Association (APTA). Dry Needling. n.d.; https://www.apta.org/patient-care/interventions/dry-needling. Accessed March 21, 2021.
2. Alvarez DJ, Rockwell PG. Trigger points: diagnosis and management. Am Fam Physician. Feb 15 2002; 65(4): 653-60. PMID 11871683
3. Charles D, Hudgins T, MacNaughton J, et al. A systematic review of manual therapy techniques, dry cupping and dry needling in the reduction of myofascial pain and myofascial trigger points. J Bodyw Mov Ther. Jul 2019; 23(3): 539-546. PMID 31563367
4. Navarro-Santana MJ, Sanchez-Infante J, Fernandez-de-Las-Penas C, et al. Effectiveness of Dry Needling for Myofascial Trigger Points Associated with Neck Pain Symptoms: An Updated Systematic Review and Meta-Analysis. J Clin Med. Oct 14 2020; 9(10). PMID 33066556
5. Navarro-Santana MJ, Gomez-Chiguano GF, Cleland JA, et al. Effects of Trigger Point Dry Needling for Nontraumatic Shoulder Pain of Musculoskeletal Origin: A Systematic Review and Meta-Analysis. Phys Ther. Feb 04 2021; 101(2). PMID 33340405
6. Cotchett MP, Landorf KB, Munteanu SE. Effectiveness of dry needling and injections of myofascial trigger points associated with plantar heel pain: a systematic review. J Foot Ankle Res. Sep 01 2010; 3: 18. PMID 20807448
7. Cotchett MP, Munteanu SE, Landorf KB. Effectiveness of trigger point dry needling for plantar heel pain: a randomized controlled trial. Phys Ther. Aug 2014; 94(8): 1083-94. PMID 24700136
8. Eftekharsadat B, Babaei-Ghazani A, Zeinolabedinzadeh V. Dry needling in patients with chronic heel pain due to plantar fasciitis: A single-blinded randomized clinical trial. Med J Islam Repub Iran. 2016; 30: 401. PMID 27683642
9. Diracoglu D, Vural M, Karan A, et al. Effectiveness of dry needling for the treatment of temporomandibular myofascial pain: a double-blind, randomized, placebo controlled study. J Back Musculoskelet Rehabil. 2012; 25(4): 285-90. PMID 23220812
10. Brady S, McEvoy J, Dommerholt J, et al. Adverse events following trigger point dry needling: a prospective survey of chartered physiotherapists. J Man Manip Ther. Aug 2014; 22(3): 134-40. PMID 25125935
11. American Academy of Orthopaedic Physical Therapists. AAOMPT position statement on dry needling. 2009; http://aaompt.org/Main/About_Us/Position_Statements/Main/About_Us/Position_Statements.aspx?hkey=03f5a33 3-f28d-4715-b355-cb25fa9bac2c. Accessed March 26, 2021.
12. American Physical Therapy Association (APTA). Physical Therapists and the Performance of Dry Needling. 2012; http://www.apta.org/StateIssues/DryNeedling/ResourcePaper/. Accessed March 26, 2021.

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

Date	Action	Description
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.