Medical Coverage Policy |Dry Needling of Trigger Point for Myofascial Pain



EFFECTIVE DATE: 06|21|2016 **POLICY LAST UPDATED:** 04|19|2023

OVERVIEW

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.

This policy is applicable to Commercial Products only. For Medicare Advantage Plans, please refer to the Related Policies section below.

MEDICAL CRITERIA

Not applicable

PRIOR AUTHORIZATION

Not applicable

POLICY STATEMENT

Commercial Products

Dry needling of trigger points for the treatment of myofascial pain is considered not medically necessary as the evidence is insufficient to determine the effects of the technology on health outcomes.

COVERAGE

Benefits may vary between groups and contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage, or Subscriber Agreement for applicable not medically necessary benefits/coverage.

BACKGROUND

Myofascial Trigger Points

Myofascial pain is defined by the presence of trigger points which are discrete, focal, hyperirritable spots within a taut band of skeletal muscle fibers that produce local and/or referred pain when stimulated. Trigger points are likely a result of injury to muscle fibers, but the pathophysiology is not fully defined.

Dry Needling

Dry needling refers to a procedure in which a fine needle is inserted into the skin and muscle at a site of myofascial pain. The needle may be moved in an up-and-down motion, rotated, and/or left in place for as long as 30 minutes. The intent is to stimulate underlying myofascial trigger points, muscles, and connective tissues to manage myofascial pain. Dry needling may be performed with acupuncture needles or standard hypodermic needles but is performed without the injection of medications (eg, anesthetics, corticosteroids). Dry needling is proposed to treat dysfunctions in skeletal muscle, fascia, and connective tissue; diminish persistent peripheral pain; and reduce impairments of body structure and function. Trigger points can be visualized by magnetic resonance imaging and elastography. The reliability of manual identification of trigger points has not been established.

The physiologic basis for dry needling depends on the targeted tissue and treatment objectives. The most studied targets are trigger points.

Deep dry needling is believed to inactivate trigger points by eliciting contraction and subsequent relaxation of the taut band via a spinal cord reflex. This local twitch response is defined as a transient visible or palpable

contraction or dimpling of the muscle, and has been associated with alleviation of spontaneous electrical activity; reduction of numerous nociceptive, inflammatory, and immune system-related chemicals; and relaxation of the taut band. Deep dry needling of trigger points is believed to reduce local and referred pain, improve range of motion, and decrease trigger point irritability.

Superficial dry needling is thought to activate mechanoreceptors and have an indirect effect on pain by inhibiting C-fiber pain impulses. The physiologic basis for dry needling treatment of excessive muscle tension, scar tissue, fascia, and connective tissues is not as well described in the literature.

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 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 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 10ne 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.

CODING

Commercial Products

The following CPT code(s) are not medically necessary for Commercial Products: **20560** Needle insertion(s) without injection(s); 1 or 2 muscle(s)

20561 Needle insertion(s) without injection(s); 3 or more muscles

Dry needling is not acupuncture, therefore CPT codes 97810-97814 are not appropriate to be used for this service.

RELATED POLICIES

Acupuncture and Dry Needling for Medicare Advantage Plans

PUBLISHED Provider Update, June 2023 Provider Update, July 2022 Provider Update, April 2021 Provider Update, June 2020 Provider Update, September 2019

REFERENCES

1. Bernstein CD, Yonter S, Pradeep A, Shah JP, Weiner DK. Fibromyalgia and Myofascial Pain Syndromes. In: Halter JB, Ouslander JG, Studenski S, High KP,Asthana S, Supiano MA, Ritchie CS, Schmader K. eds. Hazzard's Geriatric Medicine and Gerontology, 8e. McGraw Hill; 2022. Accessed February 10, 2023.https://accessmedicine-mhmedical-

com.proxy.cc.uic.edu/content.aspx?bookid=3201§ionid=266882376

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 painand myofascial trigger points. J Bodyw Mov Ther. Jul 2019; 23(3): 539-546. PMID 31563367

4. Navarro-Santana MJ, Sanchez-Infante J, Fernández-de-Las-Peñas C, et al. Effectiveness of Dry Needling for Myofascial Trigger Points Associated with Neck PainSymptoms: An Updated Systematic Review and Meta-Analysis. J Clin Med. Oct 14 2020; 9(10). PMID 33066556

5. Navarro-Santana MJ, Gómez-Chiguano GF, Cleland JA, et al. Effects of Trigger Point Dry Needling for Nontraumatic Shoulder Pain of Musculoskeletal Origin: ASystematic Review and Meta-Analysis. Phys Ther. Feb 04 2021; 101(2). PMID 333404056.

6. Para-García G, García-Muñoz AM, López-Gil JF, et al. Dry Needling Alone or in Combination with Exercise Therapy versus Other Interventions for Reducing Painand Disability in Subacromial Pain Syndrome: A Systematic Review and Meta-Analysis. Int J Environ Res Public Health. Sep 02 2022; 19(17). PMID 36078676

7. Llurda-Almuzara L, Labata-Lezaun N, Meca-Rivera T, et al. Is Dry Needling Effective for the Management of Plantar Heel Pain or Plantar Fasciitis? An UpdatedSystematic Review and Meta-Analysis. Pain Med. Jul 25 2021; 22(7): 1630-1641. PMID 33760098

8. Bagcier F, Yilmaz N. The Impact of Extracorporeal Shock Wave Therapy and Dry Needling Combination on Pain and Functionality in the Patients Diagnosed withPlantar Fasciitis. J Foot Ankle Surg. 2020; 59(4): 689-693. PMID 32340838

9. 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

10. 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

11. Rahbar M, Kargar A, Eslamian F, Dolatkhah N. Comparing the efficacy of dry needling and extracorporeal shock wave therapy in treatment of plantar fasciitis. JMazandaran Univ Med Sci. 2018;28(164):53-62.

12. Rastegar S, Baradaran Mahdavi S, Hoseinzadeh B, et al. Comparison of dry needling and steroid injection in the treatment of plantar fasciitis: a single-blindrandomized clinical trial. Int Orthop. Jan 2018; 42(1): 109-116. PMID 29119296

13. Uygur E, Aktaş B, Eceviz E, et al. Preliminary Report on the Role of Dry Needling Versus Corticosteroid Injection, an Effective Treatment Method for PlantarFasciitis: A Randomized Controlled Trial. J Foot Ankle Surg. Mar 2019; 58(2): 301-305. PMID 30850099

14. Dıraçoğlu D, Vural M, Karan A, et al. Effectiveness of dry needling for the treatment of temporomandibular myofascial pain: a double-blind, randomized, placebocontrolled study. J Back Musculoskelet Rehabil. 2012; 25(4): 285-90. PMID 23220812

15. 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

16. American Academy of Manual 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. AccessedFebruary 10, 2023.

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