

Blue Cross Blue Shield of Massachusetts is an Independent Licenses of the Blue Cross and Blue Shield Association

Medical Policy Dry Needling of Trigger Points for Myofascial Pain

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Policy Number: 792

BCBSA Reference Number: 2.01.100 (For Plan internal use only)

Related Policies

None

Policy Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity

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

Prior Authorization Information

Inpatient

 For services described in this policy, precertification/preauthorization <u>IS REQUIRED</u> for all products if the procedure is performed <u>inpatient</u>.

Outpatient

 For services described in this policy, see below for products where prior authorization <u>might be</u> <u>required</u> if the procedure is performed <u>outpatient</u>.

	Outpatient
Commercial Managed Care (HMO and POS)	This is not a covered service.
Commercial PPO and Indemnity	This is not a covered service.

CPT Codes / HCPCS Codes / ICD Codes

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The following CPT codes are considered investigational for <u>Commercial Members: Managed Care</u> (HMO and POS), PPO, and Indemnity:

CPT Codes

CPT codes:	Code Description
20560	Needle insertion(s) without injection(s); 1 or 2 muscle(s)
20561	Needle insertion(s) without injection(s); 3 or more muscles

Description

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.^{1,} Trigger points can be visualized by magnetic resonance imaging and elastography. The reliability of manual identification of trigger points has not been established.

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.

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.

Summary

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.

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 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. 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.

Date	Action
6/2023	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
6/2022	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
5/2021	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
1/2021	Medicare information removed. See MP #132 Medicare Advantage Management for local coverage determination and national coverage determination reference. Clarified coding information.
6/2020	Annual policy review. Description, summary and references updated. Policy statement unchanged. Title changed to "Dry Needling of Trigger Points for Myofascial Pain."
1/2020	Clarified coding information.
5/2019	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
5/2017	Annual policy review. New references added.
9/2016	Policy implementation delayed from 7/1/2016 to 9/1/2016. Coding information clarification. Effective 9/1/2016.
7/2016	New medical policy describing investigational indications. Effective 7/1/2016.

Policy History

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information: <u>Medical Policy Terms of Use</u> <u>Managed Care Guidelines</u> <u>Indemnity/PPO Guidelines</u> <u>Clinical Exception Process</u> <u>Medical Technology Assessment Guidelines</u>

References

- 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-mhmedicalcom.proxy.cc.uic.edu/content.aspx?bookid=3201§ionid=266882376
- 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
- Navarro-Santana MJ, Sanchez-Infante J, Fernández-de-Las-Peñas 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, Gómez-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
- 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 Pain and Disability in Subacromial Pain Syndrome: A Systematic Review and Meta-Analysis. Int J Environ Res Public Health. Sep 02 2022; 19(17). PMID 36078676
- 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 Updated Systematic Review and Meta-Analysis. Pain Med. Jul 25 2021; 22(7): 1630-1641. PMID 33760098
- Bagcier F, Yilmaz N. The Impact of Extracorporeal Shock Wave Therapy and Dry Needling Combination on Pain and Functionality in the Patients Diagnosed with Plantar 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
- 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. J Mazandaran 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-blind randomized clinical trial. Int Orthop. Jan 2018; 42(1): 109-116. PMID 29119296
- Uygur E, Aktaş B, Eceviz E, et al. Preliminary Report on the Role of Dry Needling Versus Corticosteroid Injection, an Effective Treatment Method for Plantar Fasciitis: A Randomized Controlled Trial. J Foot Ankle Surg. Mar 2019; 58(2): 301-305. PMID 30850099
- Dıraçoğlu 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
- 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?hk ey=03f5a33 3-f28d-4715-b355-cb25fa9bac2c. Accessed February 10, 2023.