



CLINICAL GUIDELINES

CMM-202: Trigger Point Injections

Version 1.0.2022
Effective August 1, 2022



eviCore healthcare Clinical Decision Support Tool Diagnostic Strategies: This tool addresses common symptoms and symptom complexes. Requests for individuals with atypical symptoms or clinical presentations that are not specifically addressed will require physician review. Consultation with the referring physician, specialist and/or individual's Primary Care Physician (PCP) may provide additional insight.

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Clinical guidelines for medical necessity review of Comprehensive Musculoskeletal Management Services.

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Definitions

- **Myofascial trigger point** is defined as a discrete, focal, hyperirritable spot found within a taught band of skeletal muscle or its fascia which when provocatively compressed causes local pain or tenderness as well as characteristic referred pain, tenderness and/or autonomic phenomena. Digital palpation, as well as needle insertion into the trigger point, can often lead to a local twitch response. A local twitch response is a transient visible or palpable contraction of the muscle. The presence of characteristic referred pain, tenderness, muscle shortening and/or autonomic phenomena (e.g., vasomotor changes, pilomotor changes, muscle twitches, etc.) is necessary to render the diagnosis of a myofascial trigger point. Tender points within a muscle or its fascia, which do not refer pain, tenderness and/or autonomic phenomena and lack a local twitch response, cannot be considered a myofascial trigger point.
- **Trigger point injections** are defined as an injection of a local anesthetic with or without the addition of a corticosteroid into clinically identified myofascial trigger points.

General Guidelines

- Trigger point injections are not without risk, and can expose patients to potential complications.
- The determination of medical necessity for the use of trigger point injections is always made on a case-by-case basis.
- Only one invasive modality or procedure will be performed on the same date of service.

Indications

- Trigger point injections are considered **medically necessary** when **BOTH** of the following criteria are met:
 - ◆ A myofascial trigger point has been identified by the presence of **ONE or MORE** of the following on physical examination:
 - Characteristic referred pain
 - Tenderness
 - Muscle shortening
 - Autonomic phenomena (e.g., vasomotor changes, pilomotor changes, muscle twitches, etc.)
 - ◆ Performed using a local anesthetic with or without steroid
- Repeat trigger point injections are considered **medically necessary** when **BOTH** of the following are documented:
 - ◆ At least 50% pain relief with evidence of functional improvement for a minimum of six (6) weeks following the prior injection(s)
 - ◆ Adequate instruction or supervision in self-management strategies (i.e., therapeutic exercise, ergonomic advice, ADL training, etc.)

Non-indications

- Trigger point injections are considered **not medically necessary** for any of the following:
 - ◆ When performed with any substance other than local anesthetic with or without steroid (e.g., saline or glucose)
 - ◆ When performed on the same day of service as other treatments
 - ◆ When requested for any of the following:
 - Acupuncture
 - Electro-Acupuncture
 - Acupoint injections, aka Biopuncture (saline, sugar, herbals, homeopathic substances)
 - Dry needling
 - Image-guided injection over spinal hardware
- Repeat trigger point injections are considered **not medically necessary** for any of the following:
 - ◆ An isolated treatment modality
 - ◆ An interval of less than two (2) months
 - ◆ More than four (4) trigger point injection sessions per body region per year

Procedure (CPT®) Codes

This guideline relates to the CPT® code set below. Codes are displayed for informational purposes only. Any given code's inclusion on this list does not necessarily indicate prior authorization is required. Pre- authorization requirements vary by individual payor.

CPT®	Code Description/Definition
20552	Injection(s); single or multiple trigger point(s), 1 or 2 muscle(s)
20553	Injection(s); single or multiple trigger point(s), 3 or more muscle(s)

This list may not be all inclusive and is not intended to be used for coding/billing purposes. The final determination of reimbursement for services is the decision of the individual payor (health insurance company, etc.) and is based on the member/patient/client/beneficiary's policy or benefit entitlement structure as well as any third party payor guidelines and/or claims processing rules. Providers are strongly urged to contact each payor for individual requirements if they have not already done so.

References

1. Al-Shenqiti A, Oldham J. Test-retest reliability of myofascial trigger point detection in patients with rotator cuff tendonitis. *Clin Rehabil*. 2005; 19(5):482-487.
2. Alvarez D, Rockwell P. Trigger points: diagnosis and management. *American Family Physician*. 2002; 65(4):653-660.
3. American College of Occupational and Environmental Medicine. *Occupational Medicine Practice Guideline*, 2nd Ed. 2008..
4. Audette J, Wang F, Smith H. Bilateral activation of motor unit potentials with unilateral needle stimulation of active myofascial trigger points. *Am J Phys Med Rehabil*. 2004; 83(5):368-74, quiz 375-377, 389.
5. Bajaj P, Bajaj P, Graven-Nielsen T, et al: Trigger points in patients with lower limb osteoarthritis. *J Musculoskeletal Pain*. 2001;9:17-33.
6. Baldry P. Management of myofascial trigger point pain. *Acupunct Med*. 2002;20:2-10 25. Chu J: Does EMG (dry needling) reduce myofascial pain symptoms due to cervical nerve root irritation? *Electromyogr Clin Neurophysiol* 1997;37:259-272.
7. Bron C, Wensing M, Franssen JL, Oostendorp R. Treatment of myofascial trigger points in common shoulder disorders by physical therapy: a randomized controlled trial. *BMC Musculoskeletal Disorders*. 8:107, 2007.
8. Carlsson C. Acupuncture mechanisms for clinically relevant long-term effects—reconsideration and a hypothesis. *Acupunct Med* 2002;20:82-99.
9. Casimiro L, Brosseau L, Milne S, et al: Acupuncture and electroacupuncture for the treatment of
10. RA. *Cochrane Database Syst Rev*. 2002;(3):CD003788.
11. Chen J, Chung K, Hou C, et al: Inhibitory effect of dry needling on the spontaneous electrical activity recorded from myofascial trigger spots of rabbit skeletal muscle. *Am J Phys Med Rehabil*. 2001;80:729-735.
12. Chen Q, Bensamoun S, Basford J, et al . Identification and quantification of myofascial taut bands with magnetic resonance elastography. *Arch Phys Med Rehabil* 2007;88(12): 1658-1661.
13. Chen S, Chen J, Wu Y, et al: Myofascial trigger point in intercostal muscles secondary to herpes zoster infection to the intercostal nerve. *Arch Phys Med Rehabil* 1998;79:336-338.
14. Chu J. Twitch-obtaining intramuscular stimulation: observation in the management of radiculopathic chronic low back pain. *J Musculoskeletal Pain* 1999;7:131-146.
15. Cole T, Edgerton V. Musculoskeletal disorders. In: Cole T, Edgerton V, eds. *Report of the Task Force on Medical Rehabilitation Research*: June 28-29, 1990, Hunt Valley Inn, Hunt Valley, Md. Bethesda: National Institutes of Health, 1990:61-70.
16. Coupe C, Torelli P, Fuglsang-Frederiksen A, et al. Myofascial trigger points are very prevalent in patients with chronic tension-type headache: a double-blinded controlled study. *Clin J Pain*. 2007; 23(1):23-27.
17. Cummings T, White A: Needling therapies in the management of myofascial trigger point pain: a systemic review. *Arch Phys Med Rehabil* 2001;82:986-92.
18. Davies C, Davies A. *The Trigger Point Therapy Workbook (2nd Ed.)*. USA: New Harbinger Publication, Inc., 2004;323.
19. Ettlin T, Schuster C, Stoffel R, et al. A distinct pattern of myofascial findings in patients after whiplash injury. *Arch Phys Med Rehabil*. 2008; 89(7):1290-1293.
20. Fernandez-Carnero J, Fernandez-de-Las-Penas C, de la Llave-Rincon AI, et al. Prevalence of and referred pain from myofascial trigger points in the forearm muscles in patients with lateral epicondylalgia. *Clin J Pain*. 2007; 23(4):353-360.
21. Fernandez-de-Las-Penas C, Alonso-Blanco C, Cuadrado ML, et al. Myofascial trigger points and their relationship to headache clinical parameters in chronic tension-type headache. *Headache*. 2006; 46(8):1264-1272.
22. Fernandez-de-Las-Penas C, Cuadrado M, Arendt-Nielsen L, et al. Association of cross-sectional area of the rectus capitis posterior minor muscle with active trigger points in chronic tension-type headache: a pilot study. *American Journal of Physical Medicine & Rehabilitation*. 2008; 87(3):197-203.
23. Fernandez de las Penas C, Cuadrado M, Gerwin R, Pareja J. Referred pain from the trochlear region in tension-type headache: a myofascial trigger point from the superior oblique muscle. *Headache*. 2005; 45(6):731-737.
24. Fernandez-de-Las-Penas C, Cuadrado M, Pareja JA. Myofascial trigger points, neck mobility, and forward head posture in episodic tension-type headache. *Headache*. 2007;47(5):662-672.25.
25. May.Fernandez-de-Las-Penas C, Ge H, Arendt-Nielsen L, et al. Referred pain from trapezius muscle trigger points shares similar characteristics with chronic tension type headache. *Euro J Pain: EJP*. 2007;11(4):475-482.
26. Fernandez-de-Las-Penas C, Simons D, Cuadrado M, Pareja J. The role of myofascial trigger points in musculoskeletal pain syndromes of the head and neck. *Current Pain & Headache Rep*. 2007; 11(5):365-372.
27. Ferrante F, Bearn L, Rothrock R, King L. Evidence against trigger point injection technique for the treatment

- of cervicothoracic myofascial pain with botulinum toxin type A. *Anesthesiology*. 2005;103(2):377-383.
28. Fischer A. Injection techniques in the management of local pain. *J Back Musculoskeletal Rehabil* 1996;7:107-17.
 29. Fischer A. New approaches in treatment of myofascial pain. *Phys Med Rehabil Clin North Am* 1997;8:153-69.
 30. Fischer A. Pressure threshold measurement for diagnosis of myofascial pain and evaluation of treatment results. *Clin J Pain* 1987;2:207-214.
 31. Fischer A. Pressure threshold meter: its use for quantification of tender spots. *Arch Phys Med Rehabil* 1986;67:836-838.
 32. Friction J, Kroening R, Haley D, Siegert R. Myofascial pain syndrome of the head and neck: a review of clinical characteristics of 164 patients. *Oral Surg Oral Med Oral Pathol* 1985;60:615-623.
 33. Ga H, Choi J, Park C, Yoon H. Acupuncture needling versus lidocaine injection of trigger points in myofascial pain syndrome in elderly patients—a randomised trial. *Acupunct Med*. 2007;25(4):130-136.
 34. Ga H, Choi J, Park C, Yoon H. Dry needling of trigger points with and without paraspinal needling in myofascial pain syndromes in elderly patients. *J Altern Complement Med*. 2007;13(6):617-624.
 35. Ga H, Koh H, Choi J, Kim C. Intramuscular and nerve root stimulation vs. lidocaine injection to trigger points in myofascial pain syndrome. *J Rehabil Med*. 2007;39(5):374-378.
 36. Gam A, Warming S, Larsen L, Jet al, Treatment of myofascial trigger-points with ultrasound combined with massage and exercise—a randomised controlled trial. *Pain*. 1998; 77(1):73-79.
 37. Ge H, Zhang Y, Boudreau S, et al. Induction of muscle cramps by nociceptive stimulation of latent myofascial trigger points. *Exp Brain Res*. 2008;187(4):623-629.
 38. Gerwin R, Shannon S, Hong C, et al. Interrater reliability in myofascial trigger point examination. *Pain*. 1997 Jan;69(1-2):65-73.
 39. Giamberardino M, Tafuri E, Savini A, et al. Contribution of myofascial trigger points to migraine symptoms. *Journal of Pain*. 8(11):869-78, 2007 Nov.
 40. Gunn C. Treatment of Chronic Pain. Intramuscular Stimulation for Myofascial Pain of Radiculopathic Origin. London, Churchill Livingstone, 1996.
 41. Han S, Harrison P. Myofascial pain syndrome and trigger-point management. *Reg Anesth* 1997;22: 89-101.
 42. Hanten W, Olson S, Butts N, Nowicki A. Effectiveness of a home program of ischemic pressure followed by sustained stretch for treatment of myofascial trigger points. *Physical Therapy*. 2000; 80(10):997-1003.
 43. Ho K, Tan K. Botulinum toxin A for myofascial trigger point injection: a qualitative systematic review. *European Journal of Pain: EJP*. 2007;11(5):519-527.
 44. Hoheisel U, Mense S, Simons D, et al: Appearance of new receptive fields in rat dorsal horn neurons following noxious stimulation of skeletal muscle: a model for referral of muscle pain? *Neurosci Lett*. 1993;153:9-12.
 45. Hong C. Algometry in evaluation of trigger points and referred pain. *J Musculoskeletal Pain* 1998;6:47-59.
 46. Hong C, Chen J, Chen S, et al: Histological findings of responsive loci in a myofascial trigger spot of rabbit skeletal muscle from where localized twitch responses could be elicited. *Arch Phys Med Rehabil* 1996;77:962.
 47. Hong C, Chen Y, Twehous D, et al: Pressure threshold for referred pain by compression on the trigger point and adjacent areas. *J Musculoskeletal Pain* 1996;4:61-79.
 48. Hong C. Consideration and recommendation of myofascial trigger point injection. *J Musculoskeletal Pain* 1994;2:29-59.
 49. Hong C. Current research on myofascial trigger points—pathophysiological studies. *J Musculoskeletal Pain* 1999;7:121-129.
 50. Hong C, Hsueh T. Difference in pain relief after trigger point injections in myofascial pain patients with and without fibromyalgia. *Arch Phys Med Rehabil* 1996;77:1161-1166.
 51. Hong C, Kuan T, Chen J, Chen S. Referred pain elicited by palpation and by needling of myofascial trigger points: a comparison. *Arch Phys Med Rehabil*. 1997;78(9):957-960.
 52. Hong C. Lidocaine injection versus dry needling to myofascial trigger point. The importance of the local twitch response. *Am J Phys Med Rehabil* 1994;73:256-263.
 53. Hong C. Myofascial trigger points: pathophysiology and correlation with acupuncture points. *Acupunct Med* 2000;18:41-47.
 54. Hong C. New trends in myofascial pain syndrome. *Zhonghua Yi Xue Za Zhi (Taipei)* 2002;65:501-512.
 55. Hong C. Pathophysiology of myofascial trigger point. *J Formos Med Assoc* 1996;95:93-104.
 56. Hong C. Persistence of local twitch response with loss of conduction to and from the spinal cord. *Arch Phys Med Rehabil* 1994;75:12-16.
 57. Hong C, Simons D. Response to treatment for pectoralis minor myofascial pain syndrome after whiplash. *J Musculoskeletal Pain* 1993;1:89-131.
 58. Hong C, Simons D. Pathophysiologic and electrophysiologic mechanisms of myofascial trigger points. *Arch Phys Med Rehabil*. 1998; 79(7):863-872.
 59. Hong C, Torigoe Y. Electrophysiologic characteristics of localized twitch responses in responsive bands of rabbit skeletal muscle fibers. *J Musculoskeletal Pain* 1994;2:17-43.
 60. Hong C, Torigoe Y, Yu J. The localized twitch responses in responsive bands of rabbit skeletal muscle fibers

- are related to the reflexes at spinal cord level. *J Musculoskeletal Pain* 1995;3:15–33.
61. Hong C. Treatment of myofascial pain syndrome. *Current Pain & Headache Reports*. 10(5):345-349, 2006 Oct.
 62. Hopwood M, Abram S. Factors associated with failure of trigger point injections. *Clin J Pain* 1994;10:227-234.
 63. Hou C, Tsai L, Cheng K, et al. Immediate effects of various physical therapeutic modalities on cervical myofascial pain and trigger-point sensitivity. *Arch Phys Med Rehabil*. 2002; 83(10):1406-1414.
 64. Hsueh T, Cheng P, Kuan T, Hong C. The Immediate Effectiveness of Electrical Nerve Stimulation and Electrical Muscle Stimulation on Myofascial Trigger Points. *Am J Phys Med Rehabil*. 1997;76(6):471-476.
 65. Hsueh T, Yu S, Kuan T, et al: Association of active myofascial trigger points and cervical disc lesion. *J Formos Med Assoc* 1998;97:174–180.
 66. Hubbard D, Berkoff G. Myofascial trigger points show spontaneous needle EMG activity. *Spine* 1993;18:1803–1807.
 67. Imamura S, Fischer A, Imamura M, Teixeira, et al. Pain management using myofascial approach when other treatment failed. *Phys Med Rehabil Clin North Am* 1997;8:179-196.
 68. Kuan T, Chang Y, Hong C. Distribution of active loci in rat skeletal muscle. *J Musculoskeletal Pain* 1999;7:45–54.
 69. Kuan T, Chen J, Chen S, et al. Effect of botulinum toxin on endplate noise in myofascial trigger spots of rabbit skeletal muscle. *Am J Phys Med Rehabil*. 2002;81(7):512- 520; quiz 521-523.
 70. Lavelle E, Lavelle W, Smith H. Myofascial trigger points. *Anesthesiol Clin*. 2007;25(4):841-851, vii- iii.
 71. Lee S, Chen C, Lee C, et al. Effects of needle electrical intramuscular stimulation on shoulder and cervical myofascial pain syndrome and microcirculation. *J Chinese Med Assoc: JCMA*. 2008;71(4):200-206.
 72. Lewis J, Tehan P. A blinded pilot study investigating the use of diagnostic ultrasound for detecting active myofascial trigger points. *Pain*. 1999;79(1):39-44.
 73. Lewit K. The needle effect in relief of myofascial pain. *Pain* 1979;6:83–90.
 74. Ling F, Slocumb J. Use of trigger point injections in chronic pelvic pain. *Obstet Gynecol Clin North Am* 1993;20:809-15.
 75. Majlesi J, Unalan H. High-power pain threshold ultrasound technique in the treatment of active myofascial trigger points: a randomized, double-blind, case-control study. *Arch Phys Med Rehabil*. 2004; 85(5):833-836.
 76. Melzack R. Myofascial trigger points: relation to acupuncture and mechanism of pain. *Arch Phys Med Rehabil* 1981;62:114–117.
 77. Mense S, Schmit R. Muscle pain: which receptors are responsible for the transmission of noxious stimuli? In: Rose F, ed. *Physiological aspects of clinical neurology*. Oxford: Blackwell Scientific Publications, 1977:265-278.
 78. Mense S. Considerations concerning the neurobiological basis of muscle pain. *Can J Physiol Pharmacol* 1991;69:610–616.
 79. Mense S. Nociception from skeletal muscle in relation to clinical muscle pain. *Pain* 1993;54:241–289.
 80. Mense S. Peripheral mechanisms of muscle nociception and local muscle pain. *J Musculoskeletal Pain* 1993;1:133–170.
 81. Mense S. Referral of muscle pain: new aspects. *Am Pain Soc J* 1994;3:1–9.
 82. Meyer H. Myofascial pain syndrome and its suggested role in the pathogenesis and treatment of fibromyalgia syndrome. *Curr Pain Headache R*. 2002;6(4):274-283.
 83. Myburgh C, Larsen AH, Hartvigsen J. A systematic, critical review of manual palpation for identifying myofascial trigger points: evidence and clinical significance. *Arch Phys Med Rehabil*. 2008;89(6):1169-1176.
 84. Ohrbach R, Gale E: Pressure pain thresholds in normal muscles: reliability, measurement effects and topographic differences. *Pain* 1989;37:257–263.
 85. Ohrbach R, Gale E: Pressure pain thresholds, clinical assessment, and differential diagnosis: reliability and validity in patients with myofascial pain. *Pain* 1989;39:157–169.
 86. Rachlin E. History and physical examination for regional myofascial pain syndrome. In: Rachlin ES, ed. *Myofascial pain and fibromyalgia: trigger point management*. St. Louis: Mosby, 1994:159-172.
 87. Rachlin E. Trigger points. In: Rachlin E, ed. *Myofascial pain and fibromyalgia: trigger point management*. St. Louis: Mosby, 1994:145-157.
 88. Reeves J, Jaeger B, Graff-Radford S: Reliability of the pressure algometer as a measure of myofascial trigger point sensitivity. *Pain* 1986;24:313–321.
 89. Ruoff G. Technique of trigger point injection. In: Pfenninger J, Fowler G, eds. *Procedures for primary care physicians*. St. Louis: Mosby, 1994:164-167.
 90. Sciotti V, Mittak V, DiMarco L, Fet al. Clinical precision of myofascial trigger point location in the trapezius muscle. *Pain*. 2001; 93(3):259-266.
 91. Shah J, Danoff J, Desai M, et al. Biochemicals associated with pain and inflammation are elevated in sites near to and remote from active myofascial trigger points. *Archives of Physical Medicine & Rehabilitation*. 89(1):16-23, 2008 Jan.

92. Simons D, Hong C, Simons L: Endplate potentials are common to midfiber myofascial trigger points. *Am J Phys Med Rehabil* 2002;81:212–222.
93. Simons D, Hong C, Simons L: Prevalence of spontaneous electrical activity at trigger spots and at control sites in rabbit skeletal muscle. *J Musculoskeletal Pain* 1995;3:35–48.
94. Simons D. Cardiology and Myofascial Trigger Points: Janet G. Travell's Contribution . *Tex Heart Inst J*. 2003; 30(1): 3–7.
95. Simons D: Clinical and etiological update of myofascial pain from trigger points. *J Musculoskeletal Pain* 1996;4:93–121.
96. Simons D. New views of myofascial trigger points: etiology and diagnosis. *Arch Phys Med Rehabil* 2008;89(1): 157–159.
97. Simons D, Travell J, Simons L. Travell & Simons' *Myofascial pain and dysfunction: the trigger point manual*. 2d ed. Baltimore: Williams & Wilkins, 1999.
98. Smith-Fassler M, Lopez-Bushnell K: Acupuncture as complementary therapy for back pain. *Holist Nurs Pract* 2001;15:35–44.
99. Sola A, Bonica J. Myofascial pain syndromes. In: Bonica JJ, ed. *The management of pain*. 2d ed. Philadelphia: Lea & Febiger, 1990:352-367.
100. Srbely J, Dickey J. Randomized controlled study of the antinociceptive effect of ultrasound on trigger point sensitivity: novel applications in myofascial therapy?. *Clinical Rehabilitation*. 2007;21(5):411-417.
101. Trinh K, Phillips S, Ho E, et al: Acupuncture for the alleviation of lateral epicondyle pain: a systematic review. *Rheumatology* (Oxford) 2004;43:1085–1090.
102. Workloss Data Institute. Official Disability Guidelines.
103. Yunus M. Fibromyalgia syndrome and myofascial pain syndrome: clinical features, laboratory tests, diagnosis, and pathophysiologic mechanisms. In: Rachlin E, ed. *Myofascial pain and fibromyalgia: trigger point management*. St. Louis: Mosby, 1994:3-29.
104. Zaralidou A, Amaniti E, Maidatsi P, et al. Comparison between newer local anesthetics for myofascial pain syndrome management. *Methods Find Exp Clin Pharmacol*. 2007;29(5):353-357 .
105. Zohn D, Mennell J. *Musculoskeletal pain: diagnosis and physical treatment*. Boston: Little, Brown, 1976:126-9,190-3.