



CLINICAL GUIDELINES

CMM-201: Facet Joint Injections/Medial Branch Blocks

Version 1.0.2019

Effective February 15, 2019



CMM-201: Facet Joint Injections/Medial Branch Blocks

CMM-201.1: Definitions	3
CMM-201.2: General Guidelines	3
CMM-201.3: Indications	4
CMM-201.4: Non-Indications	4
CMM-201.5: Procedure (CPT®) Codes	6
CMM-201.6: References	7

CMM-201.1: Definitions

- **Facet Joint Injections/medial branch blocks** refer to the injection of local anesthetic and possibly a corticosteroid in the facet joint capsule or along the nerves supplying the facet joints from C2-3 to L5-S1. The injection/block applies directly to the facet joint(s) blocked and not to the number of nerves blocked that innervate the facet joint(s). Even though either procedure can be used to diagnose facet joint pain, a medial branch block is generally considered more appropriate. A diagnostic facet joint injection/medial branch block is considered positive when there is at least 80% relief of facet mediated pain for at least the expected minimum duration of the effect of the local anesthetic used.

CMM-201.2: General Guidelines

- The determination of medical necessity for the performance of facet joint injections/medial branch blocks is always made on a case-by-case basis.
- Facet joint injections/medial branch blocks should only be performed for neck pain or low back pain in the absence of an untreated radiculopathy (with the exception of radiculopathy caused by a facet joint synovial cyst).
- A diagnostic facet joint injection/medial branch block may be performed to determine whether spinal pain originates in the facet joint or nerves innervating the facet joint. A second facet joint injection/medial branch block must be performed to confirm the validity of the clinical response of the initial injection and should only be performed with the intent that if successful, a radiofrequency joint denervation/ablation procedure (facet neurotomy, facet rhizotomy) would be considered as an option at the diagnosed level(s).
- More than two facet injections/medial branch blocks at the same level are considered to be therapeutic rather than diagnostic. Following a spinal fusion, a diagnostic facet joint injection/medial branch block may be performed immediately above or below the fused level if a prior injection/block was negative. There is a paucity of published scientific evidence supporting the use of therapeutic facet joint injections/medial branch blocks. Although limited, some anecdotal evidence supports a facet joint injection/medial branch block as an alternative treatment to a radiofrequency ablation/neurotomy for a subset of individuals when the initial facet joint injection/medial branch blocks has resulted in significant pain relief (i.e., > 50%) for at least 12 weeks following the facet joint injection/medial branch block and the individual is not a candidate for a radiofrequency joint denervation/ablation procedure. For this specific subset of individuals a repeat facet joint injection may be considered appropriate, although no sooner than six months from when the prior diagnostic injection was performed.
- It may be necessary to perform the facet joint injection/medial branch block at the same facet joint level(s) bilaterally, however, no more than three (3) facet joint levels should be injected during the same session/procedure.
- Facet joint injections/medial branch blocks are not without risk and can expose patients to potential complications that may be increased when a patient is sedated. As a result, when performing facet joint injections/medial branch blocks, the use of

supplemental sedation in addition to local anesthesia is not required and not recommended.

CMM-201.3: Indications

- An initial diagnostic facet joint injection/medial branch block is considered **medically necessary** to determine whether chronic neck or back pain is of facet joint origin when **ALL** of the following criteria are met:
 - ◆ Pain is exacerbated by facet loading maneuvers on physical examination
 - ◆ Pain has persisted despite at least four weeks of appropriate conservative treatment (e.g., physical methods including physical therapy, chiropractic care and exercise, nonsteroidal anti-inflammatory drugs (NSAIDs), and/or analgesics) unless contraindicated and the reason(s) for contraindication(s) is/are documented in the medical record
 - ◆ Clinical findings and imaging studies suggest no other obvious cause of the pain (e.g., central spinal stenosis with neurogenic claudication/myelopathy, foraminal stenosis or disc herniation with concordant radicular pain/radiculopathy, infection, tumor, fracture, pseudoarthrosis, pain related to spinal instrumentation).
 - ◆ The spinal motion segment is not posteriorly fused.
- A second diagnostic facet joint injection/medial branch block, performed to confirm the validity of the clinical response to the initial facet joint injection, is considered **medically necessary** when **ALL** of the following criteria are met:
 - ◆ Administered at the same level as the initial block
 - ◆ The initial diagnostic facet joint injection produced a positive response (i.e., at least 80% relief of facet mediated pain for at least the expected minimum duration of the effect of the local anesthetic)
 - ◆ A radiofrequency joint denervation/ablation procedure is being considered
- An intra-articular facet joint injection performed with synovial cyst aspiration, in addition to a transforaminal epidural steroid injection, is considered **medically necessary** when the following criteria are met:
 - ◆ Advanced diagnostic imaging studies (e.g., MRI, CT, CT myelogram) confirm compression or displacement of the corresponding nerve root by a facet joint synovial cyst
 - ◆ Clinical correlation with the individual's signs and symptoms of radicular pain or radiculopathy, based on history and physical examination.

CMM-201.4: Non-Indications

- Performance of a facet joint injection/medial branch block is considered **not medically necessary** when performed for **ANY** of the following indications:
 - ◆ Without the use of fluoroscopic or CT guidance
 - ◆ In the presence of an untreated radiculopathy (with the exception of radiculopathy caused by a facet joint synovial cyst)
 - ◆ When a radiofrequency joint denervation/ablation procedure (i.e., facet neurotomy, facet rhizotomy) is not being considered
 - ◆ The facet joint injection is performed at a fused posterior spinal motion segment (with the exception of patients with clinically suspected pseudoarthrosis)

- ◆ On the same day of service when performing other injections (e.g., epidural steroid, sacroiliac) in the same region
 - ◆ Performance of injections/blocks on more than three (3) contiguous spinal joint levels (with the exception of an intervening fused segment)
 - ◆ Additional diagnostic facet joint injection/medial branch blocks at the same level(s) as a prior successful radiofrequency denervation/ablation procedure
- Performance of a facet joint injection/medial branch block is considered **experimental, investigational, or unproven** when performed for **ANY** of the following indications:
- ◆ Unless performed as a second confirmatory block, all injections subsequent to the initial injection (i.e., therapeutic injections)
 - ◆ When performed under ultrasound guidance

CMM-201.5: 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.

CPT®	Code Description/Definition
64490	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), cervical or thoracic, single level
+64491	Injection(s), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, includes contrast for localization when performed, epidural or subarachnoid; lumbar or sacral (caudal), second level (List separately)
+64492	Injection(s), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, includes contrast for localization when performed, epidural or subarachnoid; lumbar or sacral (caudal), third and any additional level(s) (List separately)
64493	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), lumbar or sacral, single level
+64494	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), lumbar or sacral, second level (List separately)
64495	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), lumbar or sacral, third and any additional level(s) (List separately)

CPT®	Codes Considered Experimental, Investigational or Unproven
0213T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, cervical or thoracic; single level
0214T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, cervical or thoracic; second level (List separately in addition to code for primary procedure)
0215T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, cervical or thoracic; third and any additional level(s) (List separately in addition to code for primary procedure)
0216T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, lumbar or sacral; single level
0217T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, lumbar or sacral; second level (List separately in addition to code for primary procedure)
0218T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, lumbar or sacral; third and any additional level(s) (List separately in addition to code for primary procedure)
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 health plan and is based on the individual's policy or benefit entitlement structure as well as claims processing rules.	

CMM-201.6: References

1. Airaksinen O, Brox J, Cedraschi C, et al. On behalf of the COST B13 Working Group on Guidelines for Chronic Low Back Pain. Chapter 4 European guidelines for the management of chronic nonspecific low back pain. *Eur Spine J.* 2006;15(Supplement 2):s192-s300.
2. Allen TL, Tatli Y, Lutz, GE. Fluoroscopic percutaneous lumbar zygoapophyseal joint cysts rupture: a clinical outcome study. *Spine.* 2009 May;9(5): 387-95.
3. American Medical Association. *Current Procedural Terminology: CPT 2008, Professional Edition.* AMA Press, 2007.
4. American College of Occupational and Environmental Medicine. *Occupational Medicine Practice Guideline, 2nd Ed.* 2008.
5. Bogduk N. A narrative review of intra-articular corticosteroid injections for low back pain. *Pain Med.* 2005;6(4):287-296.
6. Boswell M, Colson J, Sehgal N, et al. A systematic review of therapeutic facet joint interventions in chronic spinal pain. *Pain Physician.* 2007;10:229-253.
7. Boswell M, Colson J, Spillane W. Therapeutic Facet Joint Interventions in Chronic Spinal Pain: A Systematic Review of Effectiveness and Complications. *Pain Physician.* 2005;8:101-114.
8. Boswell MV, Manchikanti L, Kaye AD, et al. A best-evidence systematic appraisal of the diagnostic accuracy and utility of facet (zygapophysial) joint injections in chronic spinal pain. *Pain Physician* 2015;18:E497-E533.
9. Boswell M, Shah R, Everett C, et al. Interventional techniques in the management of chronic spinal pain: evidence-based practice guidelines. *Pain Physician.* 2005;8(1):1-47.
10. Boswell M, Trescot A, Datta S, et al. American Society of Interventional Pain Physicians. Interventional techniques: evidence-based practice guidelines in the management of chronic spinal pain. *Pain Physician.* 2007;10(1):7-111.
11. Civelek E, Cansever T, Kabatas S, et al. Comparison of effectiveness of facet joint injection and radiofrequency denervation in chronic low back pain. *Turk Neurosurg.* 2012;22:200-206.
12. Cohen S, Raja S. Pathogenesis, diagnosis, and treatment of lumbar zygapophysial (facet) joint pain. *Anesthesiology.* 2007;106:591-614.
13. Dreyfuss P, Dreyer S. NASS. Lumbar zygapophysial (facet) joint injections. *Spine J.* 2003;3(3 Suppl):50S-59S.

14. Dreyfus P, Kaplan M, Dreyer S, ed Lennard T. Zygapophyseal Joint Injection Techniques in the Spinal Axis. Procedures in Clinical Practice. Second Edition. Hanley and Belfus Inc. Philadelphia. 2000, page 276.
15. Friedly J, Chan L, Deyo R. Increases in lumbosacral injections in the Medicare population: 1994 to 2001. *Spine*. 2007;32(16):1754-1760.
16. Friedrich K, Nemec S, Peloschek P, et al. The prevalence of lumbar facet joint edema in patients with low back pain. *Skeletal Radiol*. 2007;36(8):755-760.
17. Fritz J, Niemeyer T, Clasen S, et al. Management of chronic low back pain: rationales, principles, and targets of imaging-guided spinal injections. *Radiographics*.2007;27(6):1751-1771.
18. Fuchs S, Erbe T, Fischer H, Tibesku C. Intraarticular hyaluronic acid versus glucocorticoid injections for nonradicular pain in the lumbar spine. *J Vasc Interv Radiol*. 2005;16:1493-1498.
19. Fuchs S, Erbe T, Fischer HL, Tibesku CO. Intraarticular hyaluronic acid versus glucocorticoidinjections for nonradicular pain in the lumbar spine. *J Vasc Interv Radiol*. 2005; 16:1493-1498.
20. Geilhorn A, Katz J, Suri P. Osteoarthritis of the spine; the facet joints. *Nat Rev Rheum* 2013; 9(4): 216 – 224.
21. Hancock M, Maher C, Latimer J, et al. Systematic review of tests to identify the disc, SIJ or facet joint as the source of low back pain. *Eur Spine J*. 2007;16(10):1539-1550.
22. IPM Guidelines. An Update of Comprehensive Evidenced - Based Guidelines For Interventional Techniques in Chronic Spinal Pain. Part 2: Guidance and Recommendations. *Pain Physician* 2013: 16:S49 – S283.
23. Kirpalani D, Mitra R. Cervical facet joint dysfunction: a review. *Arch Phys Med Rehabil*. 2008;89(4):770-774.
24. Lakemeier S, Lind M, Schultz W, Fuchs-Winkelmann S, Timmesfeld N, Foelsch C, Peterlein CD. A comparison of intraarticular lumbar facet joint steroid injections and lumbar facet joint radiofrequency denervation in the treatment of low back pain: A randomized, controlled, double-blind trial. *Anesth Analg*. 2013;117:228-235.
25. Laslett M, McDonald B, Aprill C, et al. Clinical predictors of screening lumbar zygapophyseal joint blocks: development of clinical prediction rules. *Spine J*. 2006;6(4):370-379.
26. Laslett M, Oberg B, April C, McDonald B. Zygapophysial joint blocks in chronic low back pain: a test of Revel's model as a screening test. *BMC Musculoskelet Disord*. 2004;16:5:43.
27. Lord SM, Barnsley L, Bogduk N. Percutaneous radiofrequency neurotomy in the treatment of cervical zygapophysial joint pain: a caution. *Neurosurgery*. 1995;36:732–9.
28. Manchikanti L, Abdi S, Atluri S, et al. An update of comprehensive evidence-based guidelines for interventional techniques of chronic spinal pain: Part II: Guidance and recommendations. *Pain Physician*. 2013;16:S49-S283.
29. Manchikanti L, Cash K, Pampati V, Fellows B. Influence of psychological variables on the diagnosis of facet joint involvement in chronic spinal pain. *Pain Physician*. 2008;11(2):145-160.
30. Manchikanti L, Damron K, Cash K, et al. Therapeutic cervical medial branch blocks in managing chronic neck pain: a preliminary report of a randomized, double-blind, controlled trial. *Pain Physician*.2006;9(4):333-346.
31. Manchikanti L, Kaye AD, Boswell MV, et al. A systematic review and best evidence synthesis of the effectiveness of therapeutic facet joint interventions in managing chronic spinal pain. *Pain Physician*. 2015; 18:E535-E582.
32. Manchikanti L, Manchikanti K, Cash K, et al. Age-related prevalence of facet-joint involvement in chronic neck and low back pain. *Pain Physician*. 2008;11(1):67-75.
33. Manchikanti L, Manchikanti K, Manchukonda R, et al. Evaluation of lumbar facet joint nerve blocks in the management of chronic low back pain: preliminary report of a randomized, double-blind controlled trial. *Pain Physician*. 2007;10(3):425-40.
34. Manchikanti L, Manchukonda R, Pampati V, et al. Prevalence of facet joint pain in chronic low back pain in postsurgical patients by controlled comparative local anesthetic blocks. *Arch Phys Med Rehabil*. 2007;88(4):449-55.
35. Manchikanti L, Singh V, Falco F, et al. Lumbar facet joint nerve blocks in managing chronic facet joint pain: one-year follow-up of a randomized, double-blind controlled trial. *Pain Physician*. 2008;11(2):121-132.

36. Manchikanti L, Singh V, Falco FJE, Cash KA, Pampati V. Evaluation of lumbar facet joint nerve blocks in managing chronic low back pain: A randomized, double-blind, controlled trial with a 2-year follow-up. *Int J Med Sci.* 2010;7:124-135.
37. Manchikanti L, Singh V, Falco FJE, Cash KA, Fellows B. Comparative outcomes of a 2-year follow-up of cervical medial branch blocks in management of chronic neck pain: A randomized, double-blind controlled trial. *Pain Physician.* 2010;13:437-450.
38. Manchikanti L, Pampati V, Bakhit C, et al. Effectiveness of lumbar facet joint nerve blocks in chronic low back pain: A randomized clinical trial. *Pain Physician.* 2001;4:101-117.
39. Manchikanti L, Singh V, Falco FJE, Cash KA, Pampati V, Fellows B. The role of thoracic medial branch locks in managing chronic mid and upper back pain: A randomized, double-blind, active control trial with a 2-year follow-up. *Anesthesiol Res Pract.* 2012;2012:585806.
40. Manchukonda R, Manchikanti K, Cash K, et al. Facet joint pain in chronic spinal pain: an evaluation of prevalence and false-positive rate of diagnostic blocks. *J Spinal Disord Tech.* 2007;20(7):539-545.
41. Nordin M, Carragee E, Hurwitz L, et al; Bone and Joint Decade 2000-2010 Task Force on Neck Pain and Its Associated Disorders. Treatment of neck pain: injections and surgical interventions: results of the Bone and Joint Decade 2000-2010 Task Force on Neck Pain and Its Associated Disorders. *Spine.* 2008;15;33(4 Suppl):S153-S169.
42. North American Spine Society (NASS). NASS Coverage Policy Recommendation. Facet Joint Intervention. Copyright © 2016 North American Spine Society.
43. Park KD, Jee H, Nam HS, Cho SK, Kim HS, Park Y, Lim OK. Effect of medial branch block in chronic facet joint pain for osteoporotic compression fracture: one year retrospective study. *Ann Rehabil Med.* 2013 Apr;37(2):191-201. doi: 10.5535/arm.2013.37.2.191. Epub 2013 Apr30.
44. Park SC, Kim KH. Effect of adding cervical facet joint injections in a multimodal treatment program for long-standing cervical myofascial pain syndrome with referral pain patterns of cervical facet joint syndrome. *J Anesth.* 2012;26:738-745.
45. Patel J, Schneider B, Smith C on behalf of SIS Patient Safety Committee. Intraarticular Corticosteroid Injections and hyperglycemia. 10/4/17.
46. Resnick D, Choudhri T, Dailey A, et al. American Association of Neurological Surgeons/Congress of Neurological Surgeons. Guidelines for the performance of fusion procedures for degenerative disease of the lumbar spine. Part 13: injection therapies, low-back pain, and lumbar fusion. *J Neurosurg Spine.* 2005;2(6):707-715.
47. Ribeiro LH, Furtado RN, Konai MS, et al. Effect of facet joint injection versus systemic steroids in low back pain: A randomized controlled trial. *Spine (Phila Pa 1976).* 2013;38:1995-2002.
48. Schneider G, Jull G, Smith A, Emery C, Faris P, Cook C, Frizzell B, Salo P. Derivation of a clinical decision guide in the diagnosis of cervical facet joint pain. *Arch Phys Med Rehabil.* 2014; 95(9): 1695-701.
49. Sehgal N, Dunbar E, Shah R, Colson J. Systematic review of diagnostic utility of facet (zygapophysial) joint injections in chronic spinal pain: an update. *Pain Physician.* 2007;10(1):213-228.
50. Shah RD, Cappiello D, Suresh S. Interventional procedures for chronic pain in children and adolescents: a review of the current evidence. *World Institute of Pain.* 2016: 359-369.
51. van Tulder M, Koes B, Seitsalo S, Malmivaara A. Outcome of invasive treatment modalities on back pain and sciatica: an evidence-based review. *Eur Spine J.* 2006; Suppl 1:S82-92.
52. Workloss Data Institute. Official Disability Guidelines. 2015.
53. Yun DH, Kim HS, Yoo SD, Kim DH, Chon JM, Choi SH, Hwang DG, Jung PK. Efficacy of ultrasonography-guided injections in patients with facet syndrome of the low lumbar spine. *Ann Rehabil Med.* 2012;36:66-71.