

## Clinical Policy: Facet Joint Interventions

Reference Number: PA.CP.MP.171

Plan Effective Date: 09/2018

Date of Last Revision: 06/2024

[Coding Implications](#)

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### Description

Chronic low back pain is frequently attributed to disorders of the facet joint. Neck pain related to whiplash injury is also thought to be related to the cervical zygapophyseal facet joint. However, the diagnosis of facet joint pain is difficult and often is based on pain relief following a diagnostic pain block of the medial branch of the posterior rami of the spinal nerve supplying the facet joint.

### Policy/Criteria

- I. It is the policy of PA Health & Wellness<sup>®</sup> (PHW) that invasive pain management procedures performed by a physician are **medically necessary** when the relevant criteria are met, and the patient receives only one procedure per visit, with or without radiographic guidance.
  - A. *Diagnostic Facet Joint Injections*, performed under fluoroscopy or computed tomographic (CT) guidance, are considered **medically necessary** for the following indications:
    1. *Up to two\* controlled medial branch blocks/facet joint injections in the lumbar and cervical regions* when all the following criteria are met:
      - a. Intermittent or continuous back or neck pain that interferes with activities of daily living (ADLs) has lasted for  $\geq$  three months;
      - b. The member/enrollee has failed to respond to conservative therapy within the past year, including all of the following:
        - i.  $\geq$  four weeks physical therapy or prescribed home exercise program;
        - ii.  $\geq$  four weeks activity modification;
        - iii. Nonsteroidal anti-inflammatory drugs (NSAIDs)  $\geq$  three weeks, or NSAIDs contraindicated or not tolerated;
      - c. Clinical findings suggest facet joint syndrome, and imaging studies suggest no other obvious cause of the pain (e.g., fracture, tumor, infection, extraspinal lesion), and pain is not associated with radiculopathy or myelopathy. Physical findings of spinal facet joint syndrome can include low back pain exacerbated on extension and rotation or positive response to facet loading maneuvers;
      - d. No more than three spinal levels (unilateral or bilateral) are to be treated at the same session;
      - e. If a second injection is required, it is performed at the same level(s) to confirm the validity of a positive clinical response (i.e.,  $\geq$  80% pain relief) to the initial injection, and the injections should be given at least two weeks apart;
      - f. A radiofrequency joint denervation/ablation procedure is being considered.

Note: If the first controlled medial branch block/facet joint injection has  $<$  80% pain relief, a second block at the same level is **not medically necessary**.

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- B. *Facet joint medial branch conventional radiofrequency neurotomy* performed under fluoroscopy or computed tomographic (CT) guidance is considered **medically necessary** for the following indications:
1. *Initial facet joint medial branch conventional radiofrequency neurotomy in the lumbar or cervical region* is medically necessary when all of the following criteria are met:
    - a. Neck or back pain present for  $\geq$  three months;
    - b. There was a positive response to two diagnostic controlled facet joint injections/medial branch blocks (at each region to be treated), as indicated by  $\geq$  80% pain relief;
    - c. No more than three spinal levels (unilateral or bilateral) are to be treated at the same session.
  2. *Repeat facet joint medial branch conventional radiofrequency neurotomy* performed under fluoroscopy or computed tomographic (CT) guidance in the lumbar or cervical regions is medically necessary when all the following criteria are met:
    - a. At least six months have elapsed since the previous treatment;
    - b.  $\geq$  50% pain relief was obtained for at least six months, with associated functional improvement, following the previous treatment;
    - c. No more than three spinal levels (unilateral or bilateral) are to be treated at the same session.
- C. *Facet joint injections of the thoracic region* are considered **not medically necessary** because effectiveness has not been established.
- D. *Therapeutic facet joint injections*, performed under fluoroscopy or computed tomographic (CT) guidance, is considered **medically necessary** when meeting all of the following:
1. There was a positive response to two diagnostic controlled facet joint injections/medial branch blocks (at each region to be treated), as indicated by  $\geq$  80% pain relief;
  2. Subsequent therapeutic facet joint procedures at the same anatomic site result in  $\geq$  50% pain relief for at least three months from the prior therapeutic procedure or at least 50% consistent improvement in the ability to perform previously painful movements and ADLs as compared to baseline measurement using the same scale;
  3. Documentation explains why member/enrollee is not a candidate for radiofrequency neurotomy (such as established spinal pseudarthrosis or implanted electrical device);
  4. No more than three spinal levels (unilateral or bilateral) are to be treated at the same session.
- E. *Conventional radiofrequency neurotomy of the facet joints of the thoracic region* is considered **not medically necessary** because effectiveness has not been established. There is a need for further well-designed, randomized controlled trials to evaluate effectiveness.

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- F. *Pulsed radiofrequency neurotomy of the facet joints* is considered **not medically necessary**. The available evidence on the effectiveness of pulsed radiofrequency in the treatment of patients with various chronic pain syndromes is largely based on retrospective, case series studies. Its clinical value needs to be examined in well-designed, randomized controlled trials with large sample size and long-term follow-up. Studies on pulsed radiofrequency ablation continue to be done.<sup>23</sup>

### Background

#### *Facet Joint Injection*

Nearly 80% of people experience low back pain in their lifetime, with lumbar facet pain, also known as lumbar facet syndrome, accounting for 15% to 45% of low back pain cases.<sup>23</sup> Neck pain is the sixth leading cause of years lived with disability in the United States. The reported annual prevalence rates of neck pain range from 15% to 50% with a higher prevalence and peak impact in middle age for all genders.<sup>24</sup> Patients referred for facet injections most often have degenerative disease of the facet joints. However, even if the facet joint appears radiologically normal, facet injections still may be of use as radiologically occult synovitis can cause facet pain, particularly in younger patients. Post laminectomy syndrome, or nonradicular pain occurring after laminectomy, is also an acceptable reason to perform facet injections.<sup>1</sup>

The body of evidence for facet joint injection equivocally supports the use of corticosteroids or local anesthetic for low back pain of facet joint origin, but questions remain regarding long-term safety, patient selection criteria, and comparative effectiveness versus standard therapies. It is unclear whether improvements from facet joint injections last beyond two to six months.<sup>1</sup>

Evidence is insufficient to support the use of facet joint injections for thoracic pain of facet joint origin, as only one randomized controlled trial has been conducted.<sup>17</sup>

It is recommended that facet joint interventions be performed under fluoroscopy or computed tomographic (CT) guidance. The evidence evaluating ultrasound guidance for facet joint interventions is limited and inconclusive at this time.<sup>17,20</sup>

#### *Facet Joint Radiofrequency Neurotomy*

Based on the outcome of a facet joint nerve block, if the patient gets sufficient relief of pain, but the pain recurs, one of the options is to denervate the facet joint. Radiofrequency neurotomy, also known as radiofrequency ablation, has been shown to temporarily reduce cervical and lumbar pain. Radiofrequency neurotomy involves delivering radio waves to targeted nerves via needles inserted through the skin. The heat created by the radio waves interferes with the nerves' ability to transmit pain signals.<sup>18</sup>

Studies comparing pulsed radiofrequency neurotomy with conventional radiofrequency neurotomy have had low sample size and poor inclusion criteria.<sup>18</sup> A recent search of published peer-reviewed literature identified five abstracts evaluating pulsed radiofrequency in adults for treatment of lumbar facet joint pain, including one randomized controlled trial (RCT), three comparative studies, and one systematic review/meta-analysis.<sup>23</sup> Although this procedure is considered to be a less destructive and safer alternative to conventional radiofrequency

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neurotomy, further research is needed to determine the long term outcomes and clinical efficacy of pulsed radiofrequency neurotomy for low back pain.<sup>8,23</sup>

According to the American Society of Interventional Pain Physicians (ASIPP) and the American Society of Pain and Neuroscience (ASPN) guidelines, further studies are needed to assess pulsed radiofrequency for lumbar facet joint pain; however, conventional radiofrequency is recommended.<sup>23</sup> Furthermore, a study of patients who experienced complete pain relief following diagnostic medial branch blocks, and were subsequently treated with radiofrequency neurotomy, noted the patients experienced 80-100% pain relief for at least six months with complete return to work and activities of daily living following treatment.<sup>18</sup>

### Coding Implications

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2023, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

### CPT codes that support coverage criteria

| CPT® Codes | Description  |
|------------|--|
| 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), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), cervical or thoracic; second level (List separately in addition to code for primary procedure)                      |
| 64492      | Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), cervical or thoracic; third and any additional level(s) (List separately in addition to code for primary procedure) |
| 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 in addition to code for primary procedure)                          |
| 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 in addition to code for primary procedure)     |
| 64633      | Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); cervical or thoracic, single facet joint   |

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| CPT® Codes | Description   |
|------------|---|
| 64634      | Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); cervical or thoracic, each additional facet joint (List separately in addition to code for primary procedure) |
| 64635      | Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); lumbar or sacral, single facet joint  |
| 64636      | Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); lumbar or sacral, each additional facet joint (List separately in addition to code for primary procedure)     |

#### CPT codes that do not support coverage criteria

| CPT® Codes | Description  |
|------------|--|
| 0213T      | Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, cervical or thoracic; single level |
| 0216T      | Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, lumbar or sacral; single level     |

| Reviews, Revisions, and Approvals   | Revision Date | Approval Date |
|---|---------------|---------------|
| Policy split from CP.MP.118 Injections for Pain Management. Minor rewording for clarity.  | 09/18         | 10/18         |
| Moved A.1 to A.5 and clarified that injections must be 2 weeks apart if a second injection is required due to a lack of positive response. Clarified that facet joint injections of the thoracic region are not medically necessary in III, and reordered not medically necessary statements III-VI. References reviewed and updated. Coding reviewed. Specialty review completed.  | 10/2020       | 12/7/2021     |
| Added to policy statements that interventions should be performed under fluoroscopy or computed tomographic (CT) guidance. Revised language in I.A. 5 for clarity. Added criteria I.A.6 requiring that radiofrequency joint denervation/ablation procedure is being considered. Added the following CPT codes as investigational: 0213T, 0214T, 0215T, 0216T, 0217T, and 0218T and noted in background that there is insufficient evidence to support US guided interventions. References reviewed and reformatted for AMA style. Changed “review date” in the header to “date of last revision” and “date” in the revision log header to “revision date.” Annual review performed, references reviewed and updated. Coding and Specialty review completed. | 9/29/2021     |               |
| Annual review. Background updated with no impact on criteria. References reviewed and updated.  | 9/22/2022     |               |

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| Reviews, Revisions, and Approvals   | Revision Date | Approval Date |
|---|---------------|---------------|
| <p>Annual review. Description updated to single spacing. Grammatical updates added to Description, first paragraph in Policy/Criteria and in Criteria I., II., V., and VI. Background updated with no impact on criteria. References reviewed and updated.</p> <p>Minor rewording with no clinical significance. Background updated with no impact to criteria. ICD-10-CM Diagnosis Code table removed. References reviewed and updated. External specialist reviewed.</p>  | 07/2023       |               |
| <p>Annual review. Clarifying language added to Criteria I.A. to specify diagnostic facet joint injections. Minor rewording in Criteria I.A.1.a. Updated to include <math>\geq</math> four weeks of physical therapy or prescribed home exercise program and <math>\geq</math> four weeks activity modification. Removed Criteria I.A.1.c. regarding <math>\geq</math> six weeks chiropractic, physical therapy, or prescribed home exercise program. Removed Criteria I.A.1.d. and added to Criteria I.A.1.b. Removed Criteria I.A.1.e. regarding <math>\geq</math> six weeks activity modification. Criteria I.A.1.c. updated to replace disc herniation, radiculitis, discogenic or sacroiliac pain with fracture, tumor, infection, and extraspinal lesion and updated to include pain not associated with radiculopathy or myelopathy and removed pain worse at night. Pain relief updated from <math>&gt; 75\%</math> to <math>\geq 80\%</math> in Criteria I.A.1.e. Note at end of Criteria I. updated to pain relief of <math>&lt; 80\%</math> instead of <math>&lt; 75\%</math> and updated to specify a second block at the same level is not medically necessary. Criteria I.B. updated to specify neck or back pain present for <math>\geq</math> three months. Pain relief updated from <math>&gt; 75\%</math> to <math>\geq 80\%</math> in Criteria I.B.1.b. and removed ability to perform prior painful movements without significant pain. Criteria I.B.2.b. updated from at least four months to at least six months. Criteria I.D. updated to include medical necessity for therapeutic facet joint injections when meeting criteria I.D.1 through I.D.4. Removed CPT codes 0214T, 0215T, 0217T, and 0218T from coding table. References reviewed and updated. Reviewed by internal specialist.</p> | 06/2024       |               |

### References

1. Du R, Xu G, Bai X, Li Z. Facet Joint Syndrome: Pathophysiology, Diagnosis, and Treatment. *J Pain Res.* 2022;15:3689 to 3710. Published 2022 Nov 30. doi:10.2147/JPR.S389602
2. Chou R, Hashimoto R, Friedly J, et al. *Pain Management Injection Therapies for Low Back Pain.* Rockville (MD): Agency for Healthcare Research and Quality (US); 2015.
3. Chou R. Subacute and chronic low back pain: Nonsurgical interventional treatment. UpToDate. [www.uptodate.com](http://www.uptodate.com). Updated May 15, 2024. Accessed May 17, 2024.
4. Chou R, Qaseem A, Snow V, et al. Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society [published correction appears in *Ann Intern Med.* 2008 Feb 5;148(3):247 to 8]. *Ann Intern Med.* 2007;147(7):478 to 491. doi:10.7326/0003-4819-147-7-200710020-00006



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5. Chou R, Qaseem A, Owens DK, Shekelle P; Clinical Guidelines Committee of the American College of Physicians. Diagnostic imaging for low back pain: advice for high-value health care from the American College of Physicians [published correction appears in *Ann Intern Med*. 2012 Jan 3;156(1 Pt 1):71]. *Ann Intern Med*. 2011;154(3):181 to 189. doi:10.7326/0003-4819-154-3-201102010-00008
6. Chou R, Loeser JD, Owens DK, et al. Interventional therapies, surgery, and interdisciplinary rehabilitation for low back pain: an evidence-based clinical practice guideline from the American Pain Society. *Spine (Phila Pa 1976)*. 2009;34(10):1066 to 1077. doi:10.1097/BRS.0b013e3181a1390d
7. Heggeness MH. AAOS endorses back pain guidelines. *AAOS Now*. <https://www.maine-general.org/app/files/public/6460f387-09dc-4968-b162-eee6121a1497/aaosbackpainguidelines.pdf>. Published September 2010. Accessed May 17, 2024.
8. Maas ET, Ostelo RW, Niemisto L, et al. Radiofrequency denervation for chronic low back pain. *Cochrane Database Syst Rev*. 2015;2015(10):CD008572. Published 2015 Oct 23. doi:10.1002/14651858.CD008572.pub2
9. Manchikanti L, Datta S, Derby R, et al. A critical review of the American Pain Society clinical practice guidelines for interventional techniques: part 1. Diagnostic interventions. *Pain Physician*. 2010;13(3):E141 to E174.
10. Manchikanti L, Datta S, Gupta S, et al. A critical review of the American Pain Society clinical practice guidelines for interventional techniques: part 2. Therapeutic interventions. *Pain Physician*. 2010;13(4):E215 to E264.
11. Soloman M, Mekhail MN, Mekhail N. Radiofrequency treatment in chronic pain. *Medscape. Expert Rev Neurother*. 2010;10(3):469 to 474.
12. Staal JB, de Bie R, de Vet HC, Hildebrandt J, Nelemans P. Injection therapy for subacute and chronic low-back pain. *Cochrane Database Syst Rev*. 2008;2008(3):CD001824. Published 2008 Jul 16. doi:10.1002/14651858.CD001824.pub3
13. 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(4):E535 to E582.
14. Manchikanti L, Hirsch JA, Kaye AD, Boswell MV. Cervical zygapophysial (facet) joint pain: effectiveness of interventional management strategies. *Postgrad Med*. 2016;128(1):54 to 68. doi:10.1080/00325481.2016.1105092
15. McCormick ZL, Marshall B, Walker J, McCarthy R, Walega DR. Long-Term Function, Pain and Medication Use Outcomes of Radiofrequency Ablation for Lumbar Facet Syndrome. *Int J Anesth*. 2015;2(2):028. doi:10.23937/2377-4630/2/2/1028
16. Manchikanti L, Abdi S, Atluri S, et al. An update of comprehensive evidence-based guidelines for interventional techniques in chronic spinal pain. Part II: guidance and recommendations. *Pain Physician*. 2013;16(2 Suppl):S49 to S283.
17. Manchikanti L, Kaye AD, Sooin A, et al. Comprehensive Evidence-Based Guidelines for Facet Joint Interventions in the Management of Chronic Spinal Pain: American Society of Interventional Pain Physicians (ASIPP) Guidelines Facet Joint Interventions 2020 Guidelines. *Pain Physician*. 2020;23(3S):S1 to S127
18. North American Spine Society: Evidence-Based Clinical Guidelines for Multidisciplinary Spine Care: Diagnosis and Treatment of Low Back Pain. 2020.

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- <https://www.spine.org/Portals/0/assets/downloads/ResearchClinicalCare/Guidelines/LowBackPain.pdf>. Accessed May 22, 2024.
19. Cohen SP, Bhaskar A, Bhatia A, et al. Consensus practice guidelines on interventions for lumbar facet joint pain from a multispecialty, international working group. *Reg Anesth Pain Med*. 2020;45(6):424 to 467. doi:10.1136/rapm-2019-101243
  20. Local coverage determination: facet joint interventions for pain management. (L38841). Centers for Medicare and Medicaid Services Web site. [www.cms.gov/medicare-coverage-database/search.aspx](http://www.cms.gov/medicare-coverage-database/search.aspx) Published April 25, 2021 (revised March 30, 2023). Accessed May 22, 2024.
  21. National Institute for Health and Care Excellence. Low back pain and sciatica in over 16s: assessment and management. NICE Guideline [NG59]. <https://www.nice.org.uk/guidance/ng59>. Published November 30, 2016 (Updated December 11, 2020). Accessed May 17, 2024.
  22. Kim BR, Lee JW, Lee E, Kang Y, Ahn JM, Kang HS. Intra-articular facet joint steroid injection-related adverse events encountered during 11,980 procedures. *Eur Radiol*. 2020;30(3):1507 to 1516. doi:10.1007/s00330-019-06483-3
  23. Evidence Analysis Research Brief. Pulsed radiofrequency in adults for treatment of lumbar facet joint pain. Hayes. [www.hayesinc.com](http://www.hayesinc.com). Published May 25, 2023. Accessed May 24, 2024.
  24. Health Technology Assessment. Percutaneous pulsed radiofrequency for chronic cervical spinal pain indications. Hayes. [www.hayesinc.com](http://www.hayesinc.com). Published May 05, 2023. Accessed May 23, 2024.
  25. North American Spine Society (NASS). NASS Coverage Policy Recommendations: Facet Joint Interventions. [www.spine.org](http://www.spine.org). Published October 2016. Accessed May 17, 2024.
  26. Nisolle ML, Ghoundiwad D, Engelman E, et al. Comparison of the effectiveness of ultrasound-guided versus fluoroscopy-guided medial lumbar bundle branch block on pain related to lumbar facet joints: a multicenter randomized controlled non-inferiority study [published correction appears in *BMC Anesthesiol*. 2023 May 8;23(1):157]. *BMC Anesthesiol*. 2023;23(1):76. Published 2023 Mar 11. doi:10.1186/s12871-023-02029-9