

Clinical Policy: Caudal or Interlaminar Epidural Steroid Injections

Reference Number: PA.CP.MP.164

Plan Effective Date: 09/2018

Date of Last Revision: 06/2024

[Coding Implications](#)

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Description

Epidural steroid injections have been used for pain control in patients with radiculopathy, spinal stenosis, and nonspecific low back pain, despite inconsistent results as well as heterogeneous populations and interventions in randomized trials. Epidural injections are performed utilizing three approaches in the lumbar spine: caudal, interlaminar, and transforaminal. Generally, candidates for epidural steroid injection are individuals who have acute radicular symptoms or neurogenic claudication unresponsive to traditional analgesics and rest, with significant impairment in activities of daily living.

Note: For guidelines for transforaminal ESIs, reference *PA.CP.MP.165 Selective Nerve Root Blocks and Transforaminal Epidural Steroid Injections*.

Policy/Criteria

It is the policy of PA Health and Wellness® (PHW) that invasive pain management procedures performed by a physician are **medically necessary** when *the relevant criteria are met, only one procedure is performed per visit, with imaging guidance (except in rare instances, with documented justification), and the member/enrollee is not currently being treated with full anticoagulation therapy. If on warfarin, international normalized ratio (INR) should be ≤ 1.4 prior to the procedure.* Discontinuing anti-platelet therapy is a clinical decision balancing risks and benefits of the procedure on therapy, versus the underlying medical condition if not treated appropriately.²³

- I. It is the policy of PHW that caudal or interlaminar epidural steroid injections (ESIs) are **medically necessary** for the following indications:
 - A. *One caudal or interlaminar ESI for acute pain* management (pain lasting < three months) when all of the following are met:
 1. There is severe radicular pain that interferes substantially with activities of daily living (ADLs);
 2. Severe pain persists after treatment with nonsteroidal anti-inflammatory drugs (NSAID) and/or opiates (both \geq three days or contraindicated/not tolerated);
 3. The member/enrollee cannot tolerate chiropractic or physical therapy and the injection is intended as a bridge to therapy.
 - B. *Initial ESI for chronic pain*, all of the following:
 1. Request is for one caudal or interlaminar ESI at one level in the cervical, thoracic or lumbar region;
 2. Persistent radicular pain has been caused by spinal stenosis, disc herniation or degenerative changes in the vertebrae, as confirmed by physical exam and imaging;
 3. Pain interferes with ADLs and has lasted for at least three months;

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4. The member/enrollee has failed to respond to conservative therapy including all of the following:
 - a. \geq ix weeks chiropractic, physical therapy or prescribed home exercise program;
 - b. NSAID \geq six weeks or NSAID contraindicated or not tolerated;
 - c. \geq six weeks activity modification.

C. *Second caudal or interlaminar ESI for chronic pain that **did not** improve from the first ESI, all of the following:*

1. Request is for an ESI at one level in the cervical, thoracic or lumbar region;
2. At least two weeks have passed since the first ESI.

D. *Subsequent caudal or interlaminar ESI for recurrence of chronic pain that **had improved** from the first or second ESI, all of the following:*

1. Initial injection(s) led to \geq 50% relief and functional improvement for at least two months;
2. At least two months have passed since the last ESI;
3. Less than four injections have been administered within 12 months;
4. Less than 12 months have elapsed since the initial injection at the level requested.

II. It is the policy of PHW that *A third or subsequent caudal or interlaminar ESI for chronic pain that **did not** improve from the first two ESIs is considered **not medically necessary** because effectiveness has not been established.*

III. It is the policy of PHW that *continuation of injections beyond 12 months or more than four therapeutic injections is considered **not medically necessary** because effectiveness and safety have not been established. When more definitive therapies cannot be tolerated or provided, consideration will be made on a case by case basis.*

IV. It is the policy of PHW that *caudal or interlaminar ESI for any other indication or location is considered **not medically necessary** because effectiveness has not been established.*

Background

There is much debate on the efficacy and medical necessity of multiple interventions for managing spinal pain. Epidural glucocorticoid injections have been used for pain control in patients with radiculopathy, spinal stenosis, and nonspecific low back pain despite inconsistent results as well as heterogeneous populations and interventions in randomized controlled trials (RCTs). Epidural injections are performed utilizing three approaches in the lumbar spine: caudal, interlaminar, and transforaminal.² Generally, candidates for epidural steroid injection are individuals who have acute radicular symptoms or neurogenic claudication unresponsive to traditional analgesics and rest, with significant impairment in activities of daily living. Epidural steroid injections have been used in the treatment of spinal stenosis for many years, and no validated long-term outcomes have been reported to substantiate their use. However, significant improvement in pain scores have been reported at three months after injection.

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Zhai et al conducted a meta-analysis to assess the effects of various surgical and nonsurgical modalities, including epidural injections, used to treat lumbar disc herniation (LDH) or radiculitis. A systemic literature review identified RCTs that compared the use of local anesthetic with and without steroids. The outcomes included pain relief, functional improvement, opioid intake, and therapeutic procedural characteristics. The reviewers concluded the meta-analysis confirms that epidural injections of local anesthetic with or without steroids have beneficial but similar effects in the treatment of patients with chronic low back and lower extremity pain.¹

Results of a two year follow-up of three randomized, double-blind, controlled trials, with a total of 360 patients with chronic persistent pain of disc herniation receiving either caudal, lumbar interlaminar or transforaminal epidural injections, showed similar efficacy of the three techniques with local anesthetic alone or local anesthetic with steroid.² Caudal and interlaminar trials used in the assessment showed some superiority of steroids over local anesthetic at three and six month follow-up. Interlaminar with steroids were superior to transforaminal at 12 months.²

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	Description
62320	Injection(s), of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, cervical or thoracic; without imaging guidance
62321	Injection(s), of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, cervical or thoracic; with imaging guidance (ie, fluoroscopy or CT)
62322	Injection(s), of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); without imaging guidance
62323	Injection(s), of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); with imaging guidance (ie, fluoroscopy or CT)
62324	Injection(s), including indwelling catheter placement, continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (eg, anesthetic,

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CPT® Codes	Description
	antispasmodic, opioid, steroid, other solution), not including neurolytic substances, interlaminar epidural or subarachnoid, cervical or thoracic; without imaging guidance
62325	Injection(s), including indwelling catheter placement, continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, interlaminar epidural or subarachnoid, cervical or thoracic; with imaging guidance (ie, fluoroscopy or CT)
62326	Injection(s), including indwelling catheter placement, continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); without imaging guidance
62327	Injection(s), including indwelling catheter placement, continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); with imaging guidance (ie, fluoroscopy or CT)

Reviews, Revisions, and Approvals	Revision Date	Approval Date
New policy developed. Split from retired CP.MP.118 Injections for Pain Management. No criteria changes.	09/18	10/18
In section D regarding second or subsequent ESI for chronic pain that improved from the diagnostic injections, changed requirement for 3 months having passed from the previous injection to 2 months. Anticoagulation indication moved to policy/criteria section as it is applicable to all injections in this policy.	10/19	
References reviewed and updated	6/2021	
In policy statement, changed “with or without radiographic guidance” to “with imaging, (except in rare instances, with documented justification).” Changed “review date” in the header to “date of last revision” and “date” in the revision log header to “revision date.” References reviewed and updated. Replaced “member” with “member/enrollee” in all instances. Specialist review.	7/28/2022	
Annual review. Note added regarding guidelines for transforaminal ESIs. Background updated with no impact on criteria. References reviewed and updated. ICD-10 diagnosis code table removed. References reviewed and updated. Reviewed by external specialist.	07/2023	
Annual review. Coding reviewed. References reviewed and updated.	06/2024	

References

1. Zhai J, Zhang L, Li M, et al. Epidural injection with or without steroid in managing chronic low back and lower extremity pain: ameta-analysis of ten randomized controlled trials. *Int J Clin Exp Med*. 2015;8(6):8304-8316. Published 2015 Jun 15.
2. Manchikanti L, Singh V, Pampati V, Falco FJ, Hirsch JA. Comparison of the efficacy of caudal, interlaminar, and transforaminal epidural injections in managing lumbar disc herniation: is one method superior to the other?. *Korean J Pain*. 2015;28(1):11-21. doi:10.3344/kjp.2015.28.1.11
3. Hegmann KT, Travis R, Andersson GBJ, et al. Invasive Treatments for Low Back Disorders. *J Occup Environ Med*. 2021;63(4):e215-e241. doi:10.1097/JOM.0000000000001983
4. 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.
5. Chou R. Subacute and chronic low back pain: Nonsurgical interventional treatment. UpToDate. www.uptodate.com. Published June 10, 2021. Updated May 15, 2024. Accessed May 16, 2024.
6. 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):247-8]. *Ann Intern Med*. 2007;147(7):478-491. doi:10.7326/0003-4819-147-7-200710020-00006
7. 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):1066-1077. doi:10.1097/BRS.0b013e3181a1390d
8. Chou R, Hashimoto R, Friedly J, et al. Epidural Corticosteroid Injections for Radiculopathy and Spinal Stenosis: A Systematic Review and Meta-analysis. *Ann Intern Med*. 2015;163(5):373-381. doi:10.7326/M15-0934
9. 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 16, 2024.
10. 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-E174.
11. 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-E264.
12. 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-S283.
13. Novak S, Nemeth WC. The basis for recommending repeating epidural steroid injections for radicular low back pain: a literature review. *Arch Phys Med Rehabil*. 2008;89(3):543-552. doi:10.1016/j.apmr.2007.11.008
14. Sharma AK, Vorobeychik Y, Wasserman R, et al. The Effectiveness and Risks of Fluoroscopically Guided Lumbar Interlaminar Epidural Steroid Injections: A Systematic

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- Review with Comprehensive Analysis of the Published Data. *Pain Med.* 2017;18(2):239-251. doi:10.1093/pm/pnw131
15. 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
 16. Vorobeychik Y, Sharma A, Smith CC, et al. The Effectiveness and Risks of Non-Image-Guided Lumbar Interlaminar Epidural Steroid Injections: A Systematic Review with Comprehensive Analysis of the Published Data. *Pain Med.* 2016;17(12):2185-2202. doi:10.1093/pm/pnw091
 17. Kreiner DS, Hwang S, Easa JE, et al. An evidence-based clinical guideline for the diagnosis and treatment of lumbar disc herniation with radiculopathy. *Spine J.* 2014;14(1):180-191. doi:10.1016/j.spinee.2013.08.003
 18. Smith CC, Booker T, Schaufele MK, Weiss P. Interlaminar versus transforaminal epidural steroid injections for the treatment of symptomatic lumbar spinal stenosis. *Pain Med.* 2010;11(10):1511-1515. doi:10.1111/j.1526-4637.2010.00932.x
 19. Schaufele MK, Hatch L, Jones W. Interlaminar versus transforaminal epidural injections for the treatment of symptomatic lumbar intervertebral disc herniations. *Pain Physician.* 2006;9(4):361-366.
 20. Chang-Chien GC, Knezevic NN, McCormick Z, Chu SK, Trescot AM, Candido KD. Transforaminal versus interlaminar approaches to epidural steroid injections: a systematic review of comparative studies for lumbosacral radicular pain. *Pain Physician.* 2014;17(4):E509-E524.
 21. Levin K, Hsu PS, Armon C. Acute lumbosacral radiculopathy: Treatment and prognosis. UpToDate. www.uptodate.com. Published November 29, 2022. Updated November 16, 2023. Accessed May 16, 2024.
 22. Kothari MJ, Chuang, K. Treatment and prognosis of cervical radiculopathy. UpToDate. www.uptodate.com. Published February 28, 2023. Accessed May 16, 2024.
 23. North American Spine Society (NASS). Coverage Policy Recommendations: Epidural Steroid Injections and Selective Spinal Nerve Blocks. 2020.