

**EFFECTIVE DATE:** 03|01|2024

**POLICY LAST REVIEWED:** 06|05|2024

## OVERVIEW

Epidural steroid injections (ESIs) are a treatment for neck or back pain that has not responded to conservative measures. Local steroid injections may improve pain by reducing inflammation, thus relieving pressure on nerve roots or other structures that may be the origin of pain.

**Note: This policy is applicable for Commercial Products only. For Medicare Advantage Plans, see the applicable policy in the related policy section.**

## MEDICAL CRITERIA

### Commercial Products

#### Non-specific Low Back Pain

There is limited evidence that epidural injections for the treatment of non-specific low back pain are effective. The following indications are considered when making coverage determinations:

- Back pain interferes with activities of daily living
- There are no neurologic deficits
- History and physical examination and imaging are non-diagnostic for etiology of pain **AND**

Patient has attempted relief with all of the following:

- NSAIDs or acetaminophen  $\geq$  3 weeks
- Activity modifications  $\geq$  6 weeks
- Physical therapy  $\geq$  6 weeks **AND**

There is continued pain after treatment **AND** none of the following indications are present:

- Local infection at injection site
- Increased intracranial pressure
- Epidural metastases

#### Cervical, Thoracic or Lumbar Radiculopathy (unilateral symptoms)

Epidural injections for cervical, thoracic or lumbar radiculopathy are medically necessary when all of the following criteria are met:

On the Visual Analog Scale, pain is classified as either A or B:

- A. Greater than or equal to 7 out of 10 **AND**

All of the following are present:

- Unilateral pain in nerve root distribution
- Pain unrelieved by change in body position
- Pain interferes with activities of daily living
- Nerve root compression by imaging or testing **AND**

None of the following indications are present:

- Local infection at injection site
- Increased intracranial pressure
- Epidural metastases

- B. Greater than or equal to 3 and less than 7 out of 10 **AND**

All of the following are present:

- Unilateral pain in nerve root distribution
- Nerve root compression by imaging or testing **AND**

The pain can be classified by one of the following:

1. Worsening pain despite all of the following conservative treatment:
  - NSAIDs or acetaminophen  $\geq$  1 week
  - Activity modification  $\geq$  1 week
  - Physical Therapy  $\geq$  1 week **OR**
2. Continued pain after all of the following conservative treatment:
  - NSAIDs or acetaminophen  $\geq$  3 weeks
  - Activity modification  $\geq$  6 weeks
  - Physical Therapy  $\geq$  6 weeks

**AND** None of the following indications are present:

- Local infection at injection site
- Increased intracranial pressure
- Epidural metastases

## **PRIOR AUTHORIZATION**

### **Commercial Products**

Prior authorization is recommended for Commercial Products and is obtained via the online tool for participating providers. See Related Policies section.

## **POLICY STATEMENT**

### **Commercial Products**

Epidural injections are considered medically necessary when the medical criteria in this policy has been met. It is recommended that a period of no less than 90 days occurs between injections or no more than 4 injections in a 12-month period.

An approved authorization request will be valid for 4 epidural injections in one 12-month period from the requested date of service. An additional authorization request will be required if a member is to exceed epidural injections in the initially approved 12-month period.

## **COVERAGE**

Benefits may vary between groups/contracts. Please refer to the appropriate Evidence of Coverage, Subscriber Agreement for the applicable surgery services benefits/coverage.

## **BACKGROUND**

Back pain is an extremely common condition. Most episodes are self-limited and will resolve within 1 month, but a small percentage will persist and become chronic. Patients with chronic back pain may suffer from serious disability and may use a high volume of medical services. Despite high utilization, many patients with chronic back pain do not improve with available treatments, including surgical interventions. Therefore, there is a high unmet need to determine the efficacy of different treatments for chronic back pain and to determine which patient populations may benefit from specific interventions. In addition, in recent years there has been a proliferation of new technologies, combined with large increases in the number of patients treated and in the intensity of treatment. Therefore, there is a concern for overtreatment of patients who may not benefit from interventions for back pain.

Back pain can result from a variety of underlying causes. Radiculopathy is a subset of back pain that is associated with irritation of 1 or more spinal nerve roots. Symptoms of lumbar radiculopathy, which is sometimes known as sciatica, include pain that radiates down the leg to below the knee, numbness, muscle weakness, and lack of reflexes in a dermatomal distribution. Most patients with radiculopathy respond to conservative care with a resolution of their symptoms within several weeks to months following onset. In a subset of patients, symptoms, and signs of progressive muscle weakness prompt a more aggressive

intervention to prevent permanent dysfunction. In other patients, symptoms persist despite conservative management, without progression of neurologic signs, and further treatment options are sought for pain relief.

Spinal stenosis is another common source of back pain. Spinal stenosis is caused by the narrowing of the spinal canal due to degenerative changes, leading to impingement of the spinal cord and the spinal nerve roots. Symptoms of spinal stenosis can include back pain, leg pain with exertion (neurogenic claudication), muscle weakness, and sensory deficits. The definitive treatment for spinal stenosis is surgery, which includes decompression of the spinal canal with or without spinal fusion. Epidural steroids may reduce inflammation from pressure on the spinal cord, and thus reduce symptoms of compression.

Nonspecific low back pain, sometimes called mechanical low back pain, is diagnosed when no specific etiology of pain can be identified. Although the etiology of nonspecific low back pain is uncertain, many experts feel that the pain is of discogenic origin or due to the painful movement of the vertebrae. In these instances, epidural steroid injections (ESIs) may reduce swelling of the vertebral disc and/or surrounding structures, leading to pain relief.

Regardless of specific etiology, conservative management is the first-line treatment for most patients with back pain. Nonsteroidal anti-inflammatory drugs or other analgesics are used for symptom relief. These agents should be used for at least several weeks at a dose sufficient to induce a therapeutic response. Duloxetine or tramadol are recommended second-line pharmacologic therapies by the American College of Physicians. Additionally, modification of activity in conjunction with some form of exercise therapy is frequently prescribed early in the course of symptoms and typically involves a physical therapist. For patients with persistent nonradicular back pain, guidelines recommend interdisciplinary rehabilitation, which is defined as an integrated approach using physical rehabilitation in conjunction with a psychological or psychosocial intervention.

For patients who fail conservative therapy, there are a number of interventional therapies available, which range from minimally invasive procedures, such as injections, to major surgeries, such as spinal decompression with fusion. Injections can be given in different locations (eg, soft tissues, intraspinal, sacroiliac joints) and can use different therapeutic agents (eg, botulinum toxin, steroids, proteolytic enzymes). Other interventional techniques include radiofrequency ablation, prolotherapy, and chemonucleolysis. Most of these nonsurgical interventions do not have high-quality evidence demonstrating their efficacy. A number of surgical interventions are available, such as discectomy and spinal fusion, each of which can be performed by a variety of different techniques. The decision to undertake surgery is best made in the setting of shared decision making between the patient and surgeon, with thorough consideration given to the risks and benefits of surgery.

Epidural injection therapy is one of several therapies available for patients who fail conservative treatment and is one of the most common modalities used in this group of patients. Epidural steroid injections are performed by inserting a needle into the space between the dura and ligamentum flavum and injecting a steroid preparation. There is considerable variability in the technical aspects of epidural injections. Several different approaches may be used for entering the epidural space (translaminar, transforaminal, caudal). In addition, epidural steroid injections may be administered with or without fluoroscopic guidance. Some investigators have estimated that lack of correct needle position in the epidural space may occur in 25% or more of injections administered. Variability of the technique may also involve factors such as the depth of injection into the epidural space, the volume of injectate, and the filling patterns of the injectate.

For individuals who have lumbar or cervical radiculopathy who receive ESIs, the evidence includes randomized controlled trials (RCTs) and a number of systematic reviews and meta-analyses of these RCTs. Relevant outcomes are symptoms, functional outcomes, health status measures, quality of life, medication use, and treatment-related morbidity. The evidence base lacks large-scale, high-quality trials and has a high

degree of variability among the available trials in terms of patient populations, epidural injection techniques, and comparison treatments. The results of individual trials are mixed, with some reporting significant benefits for the ESI group and others reporting no benefit. Meta-analyses have found reduced pain in the short- and intermediate-term (up to 6 months) with ESI compared with conventional therapy. None of the analyses reported long-term benefits for treatment with ESIs. Adverse events were generally mild but not well reported in these trials. Serious adverse events can occur, but their rate is unknown. For thoracic disc herniation, based on one relevant, high-quality RCT of thoracic epidural with fluoroscopic guidance, with or without steroids, the evidence is Level II with moderate to strong recommendation for long-term effectiveness. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have nonspecific low back pain who receive ESIs, the evidence includes systematic reviews of RCTs and nonrandomized studies. Relevant outcomes include symptoms, functional outcomes, health status measures, quality of life, medication use, and treatment-related morbidity. Most trials were of low quality and did not report a benefit for ESIs. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

## **CODING**

### **Commercial Products**

The following CPT code(s) are medically necessary when medical criteria are met:

- 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)
- 64479** Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); cervical or thoracic, single level
- 64483** Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); lumbar or sacral, single level

Note: The above CPT Codes would not be used for maternity delivery or as an anesthetic for surgical procedures.

## **RELATED POLICIES**

Prior Authorization via Web-Based Tool for Procedures

Centers for Medicare and Medicaid Services (CMS) National and Local Coverage Determinations

## **PUBLISHED**

Provider Update, January 2024, August 2024

Provider Update, July 2023

Provider Update, July 2022

Provider Update, June 2021

Provider Update, January 2021

## REFERENCES

1. 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)*. May 01 2009; 34(10): 1066-77. PMID 19363457
2. Benyamin RM, Manchikanti L, Parr AT, et al. The effectiveness of lumbar interlaminar epidural injections in managing chronic low back and lower extremity pain. *Pain Physician*. Jul-Aug 2012; 15(4): E363-404. PMID 22828691
3. Pinto RZ, Maher CG, Ferreira ML, et al. Epidural corticosteroid injections in the management of sciatica: a systematic review and meta-analysis. *Ann Intern Med*. Dec 18 2012; 157(12): 865-77. PMID 23362516
4. Qaseem A, Wilt TJ, McLean RM, et al. Noninvasive Treatments for Acute, Subacute, and Chronic Low Back Pain: A Clinical Practice Guideline From the American College of Physicians. *Ann Intern Med*. Apr 04 2017; 166(7): 514-530. PMID 28192789
5. Chou R, Atlas SJ, Stanos SP, et al. Nonsurgical interventional therapies for low back pain: a review of the evidence for an American Pain Society clinical practice guideline. *Spine (Phila Pa 1976)*. May 01 2009; 34(10): 1078-93. PMID 19363456
6. Manchikanti L, Buenaventura RM, Manchikanti KN, et al. Effectiveness of therapeutic lumbar transforaminal epidural steroid injections in managing lumbar spinal pain. *Pain Physician*. May-Jun 2012; 15(3): E199-245. PMID 22622912
7. Verheijen EJA, Bonke CA, Amorij EMJ, et al. Epidural steroid compared to placebo injection in sciatica: a systematic review and meta-analysis. *Eur Spine J*. Nov 2021; 30(11): 3255-3264. PMID 33974132
8. Yang S, Kim W, Kong HH, et al. Epidural steroid injection versus conservative treatment for patients with lumbosacral radicular pain: A meta-analysis of randomized controlled trials. *Medicine (Baltimore)*. Jul 24 2020; 99(30): e21283. PMID 32791709
9. Smith CC, McCormick ZL, Mattie R, et al. The Effectiveness of Lumbar Transforaminal Injection of Steroid for the Treatment of Radicular Pain: A Comprehensive Review of the Published Data. *Pain Med*. Mar 01 2020; 21(3): 472-487. PMID 31343693
10. Arirachakaran A, Siripaiboonkij M, Pairuchvej S, et al. Comparative outcomes of epidural steroids versus placebo after lumbar discectomy in lumbar disc herniation: a systematic review and meta-analysis of randomized controlled trials. *Eur J Orthop Surg Traumatol*. Dec 2018; 28(8): 1589-1599. PMID 29845327
11. Bhatia A, Flamer D, Shah PS, et al. Transforaminal Epidural Steroid Injections for Treating Lumbosacral Radicular Pain from Herniated Intervertebral Discs: A Systematic Review and Meta-Analysis. *Anesth Analg*. Mar 2016; 122(3): 857-870. PMID 26891397
12. Diwan S, Manchikanti L, Benyamin RM, et al. Effectiveness of cervical epidural injections in the management of chronic neck and upper extremity pain. *Pain Physician*. Jul-Aug 2012; 15(4): E405-34. PMID 22828692
13. Benyamin RM, Singh V, Parr AT, et al. Systematic review of the effectiveness of cervical epidurals in the management of chronic neck pain. *Pain Physician*. Jan-Feb 2009; 12(1): 137-57. PMID 19165300
14. Cohen SP, Hayek S, Semenov Y, et al. Epidural steroid injections, conservative treatment, or combination treatment for cervical radicular pain: a multicenter, randomized, comparative-effectiveness study. *Anesthesiology*. Nov 2014; 121(5): 1045-55. PMID 25335172
15. Schneider MJ, Ammendolia C, Murphy DR, et al. Comparative Clinical Effectiveness of Nonsurgical Treatment Methods in Patients With Lumbar Spinal Stenosis: A Randomized Clinical Trial. *JAMA Netw Open*. Jan 04 2019; 2(1): e186828. PMID 30646197
16. Friedly JL, Comstock BA, Turner JA, et al. A randomized trial of epidural glucocorticoid injections for spinal stenosis. *N Engl J Med*. Jul 03 2014; 371(1): 11-21. PMID 24988555
17. Friedly JL, Comstock BA, Turner JA, et al. Long-Term Effects of Repeated Injections of Local Anesthetic With or Without Corticosteroid for Lumbar Spinal Stenosis: A Randomized Trial. *Arch Phys Med Rehabil*. Aug 2017; 98(8): 1499-1507.e2. PMID 28396242
18. Staal JB, de Bie R, de Vet HC, et al. Injection therapy for subacute and chronic low-back pain. *Cochrane Database Syst Rev*. Jul 16 2008; (3): CD001824. PMID 18646078
19. Koes BW, Scholten RJPM, Mens JMA, et al. Efficacy of epidural steroid injections for low-back pain and sciatica: a systematic review of randomized clinical trials. *Pain*. Dec 1995; 63(3): 279-288. PMID 8719528



20. Rathmell JP, Benzon HT, Dreyfuss P, et al. Safeguards to prevent neurologic complications after epidural steroid injections: consensus opinions from a multidisciplinary working group and national organizations. *Anesthesiology*. May 2015; 122(5): 974-84. PMID 25668411
21. US Food and Drug Administration. Epidural Corticosteroid Injection: Drug Safety Communication - Risk of Rare But Serious Neurologic Problems. 2014; <https://www.fda.gov/drugs/drug-safety-and-availability/fda-drug-safetycommunication-fda-requires-label-changes-warn-rare-serious-neurologic-problems-after>.
22. Centers for Disease Control and Prevention (CDC). Multistate outbreak of fungal infection associated with injection of methylprednisolone acetate solution from a single compounding pharmacy - United States, 2012. *MMWR Morb Mortal Wkly Rep*. Oct 19 2012; 61(41): 839-42. PMID 23076093
23. Bise S, Pesquer L, Feldis M, et al. Comparison of three CT-guided epidural steroid injection approaches in 104 patients with cervical radicular pain: transforaminal anterolateral, posterolateral, and transfacet indirect. *Skeletal Radiol*. Dec 2018; 47(12): 1625-1633. PMID 30032466
24. American Academy of Neurology (AAN). AAN Summary of Evidence-Based Guidelines for Clinicians: Use of epidural steroid injections to treat lumbosacral radicular pain. 2007; <https://www.aan.com/Guidelines/Home/GetGuidelineContent/250>.
25. Watters WC, Resnick DK, Eck JC, et al. Guideline update 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*. Jul 2014; 21(1): 79-90. PMID 24980590
26. 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. *Ann Intern Med*. Oct 02 2007; 147(7): 478-91. PMID 17909209
27. Benzon HT, Connis RT, De Leon-Casasola OA, et al. Practice guidelines for chronic pain management: an updated report by the American Society of Anesthesiologists Task Force on Chronic Pain Management and the American Society of Regional Anesthesia and Pain Medicine. *Anesthesiology*. Apr 2010; 112(4): 810-33. PMID 20124882
28. Manchikanti L, Knezevic NN, Navani A, et al. Epidural Interventions in the Management of Chronic Spinal Pain: American Society of Interventional Pain Physicians (ASIPP) Comprehensive Evidence-Based Guidelines. *Pain Physician*. Jan 2021; 24(S1): S27-S208. PMID 33492918
29. North American Spine Society (NASS). Evidence-based clinical guidelines for multidisciplinary spine care: Diagnosis and treatment of low back pain. 2020; <https://www.spine.org/Portals/0/assets/downloads/ResearchClinicalCare/Guidelines/LowBackPain.pdf>.

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