Epidural Steroid Injections (ESI) - Single Service

Clinical Guidelines for Medical Necessity Review

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Important Notices

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Guideline Information:

Specialty Area: Diseases & Disorders of the Musculoskeletal System (M00-M99)
Guideline Name: Epidural Steroid Injection (ESI) (Single Service)

Literature review current through: 12/29/2023
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Type: [**X**] Adult (18+ yo) | [**X**] Pediatric (0-17yo)

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Medical Necessity Criteria

Service: Epidural Steroid Injections (ESI)

General Guidelines

- **Units, Frequency, & Duration:** When medical necessity criteria is met, a total of four (4) epidural steroid injections per episode of pain (a defined period and specific location of pain, generally moderate to severe, based on an injury or degenerative cause), per region may be performed in 12 months.
- **Criteria for Subsequent Requests:** Additional injections may be appropriate if pain returns at a moderate to severe level or loss of function occurs, and the patient had 50% or more relief from previous injections for at least two (2) months after prior therapeutic injections.[1-13]
- **Recommended Clinical Approach:** An epidural steroid injection should be performed using radiographic image guidance. One interlaminar injection is recommended at a time. Transforaminal epidural steroid injections (TFESIs) involving a maximum of two (2) nerve root levels in one spinal region are considered medically reasonable and necessary. If performed bilaterally, this refers to one nerve root on each side. If performed unilaterally, this would mean two nerve root levels on one side.
- **Exclusions:** None.

Medical Necessity Criteria

Indications

➔ **Epidural steroid injections (ESI)** are considered appropriate if **ANY** of the following is **TRUE**[1-13]:

- ◆ Epidural steroid injection (ESI) is considered appropriate for pain when **ALL** of the following are **TRUE**:
  - The patient has **ANY** of the following:
    - Cancer with spinal involvement; **OR**
    - Acute herpes zoster or neuralgia; **AND**
  - Frequency limitation indicated by no more than 6 injections in a rolling 12-month period; **OR**
- ◆ The injection is a diagnostic, transforaminal epidural steroid injection to identify the pain generator for surgical planning, and **ALL** of the following are met:

- Pain causing functional disability or average pain levels of greater than or equal to 6 on a scale of 0 to 10; **AND**
- Documentation of a pre-operative evaluation and plan for surgery; **OR**

◆ The patient has radicular pain or neurogenic claudication and **ALL** of the following are **TRUE**:
- Physical examination findings consistent with radicular symptoms or neurogenic claudication; **AND**
- The patient has undergone advanced imaging consistent with radicular symptoms or neurogenic claudication that correlate to the side requested; **AND**
- Other sources of pain have been ruled out with clinical assessment and/or radiologic imaging; **AND**
- The pain is causing a functional disability or average pain levels of greater than or equal to 6 on a scale of 0 to 10; **AND**
- The injections must be performed under fluoroscopic or computed tomography imaging guidance. If the patient is pregnant, ultrasound guidance may also be considered; **AND**
- No more than 2 levels of transforaminal injections or 1 level interlaminar epidural steroid injection should be administered during a single session; **AND**
- **ANY** of the following:
  - The injection is an initial, diagnostic ESI injection and **ANY** of the following is **TRUE**:
    - ◆ Failure of conservative management for greater than six weeks, including **ALL** of the following:
      - Oral steroids or anti-inflammatory medication; **AND**
      - Physical therapy; **AND**
      - Activity and lifestyle modifications; **OR**
    - ◆ For acute radicular pain secondary to acute disc herniation, failure of conservative management for greater than two weeks, including **ALL** of the following:
      - Oral steroids or anti-inflammatory medication; **AND**
      - Activity and lifestyle modifications; **OR**
  - The injection is a second diagnostic ESI injection and **ANY** of the following are **TRUE:**
    - ◆ The initial diagnostic ESI injection failed and **ALL** of the following are **TRUE**:
      - The initial injection was greater than or equal to 2 weeks prior; **AND**

- The second diagnostic ESI injection must be a different approach, level, or medication; **AND**
- The medical necessity for the second injection must be documented; **OR**

◆ The initial diagnostic ESI injection had a good response and **ALL** of the following are **TRUE**:
- There must be 50% or greater pain or symptom relief after the initial injection for a minimum of two (2) months; **OR**

○ The injection is a therapeutic injection and **ALL** of the following are **TRUE**:
◆ The patient is participating in ongoing rehabilitative approaches (e.g., physical therapy, chiropractic care or physician guided home exercise program); **AND**
◆ The patient has pain that has been confirmed by two diagnostic ESI injections that result in **ALL** of the following:
◆ Greater than or equal to 50% pain or symptom relief from either of the two diagnostic injections; **AND**
◆ The pain relief must be greater than or equal to 2 months duration; **AND**
◆ Frequency limitation indicated by **ALL** of the following:
◆ The frequency of therapeutic injections must be at least 2 months apart; **AND**
◆ No more than 4 therapeutic injections per rolling 12-month period per spinal level.

Non-Indications

➔ **Epidural steroid injections** are not considered appropriate if **ANY** of the following is **TRUE**[14]:
◆ When other types of injections (facet, SI joint injections, etc.) are performed on the same date of service; **OR**
◆ Epidural steroid injections performed at multiple nerve root levels or bilaterally or at multiple anatomical regions during the same date of service; **OR**
◆ Hypersensitivity (or allergy) to steroids; **OR**
◆ Local or systemic infection.

Site of Service Criteria

Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS Code	Code Description/Definition
62320	Insertion of needle and injection of substance into cervical interlaminar subarachnoid space; Insertion of needle and injection of substance into thoracic interlaminar epidural space; Insertion of needle and injection of substance into thoracic interlaminar subarachnoid space; Insertion of needle and injection of substance into thoracic spinal canal; Injection of substance into cervical spine canal; Injection of substance into thoracic spine canal; Insertion of catheter and injection of substance into cervical interlaminar epidural space; Insertion of catheter and injection of substance into cervical spinal canal; Insertion of catheter and injection of substance into thoracic interlaminar epidural space; Insertion of catheter and injection of substance into thoracic interlaminar spinal canal; Insertion of catheter and injection of substance into thoracic interlaminar subarachnoid space; Insertion of needle and injection of substance into cervical interlaminar epidural space.
62321	Insertion of catheter and injection of substance into cervical interlaminar epidural space using imaging guidance; Insertion of catheter and injection of substance into cervical interlaminar subarachnoid space using imaging guidance; Insertion of catheter and injection of substance into thoracic interlaminar epidural space using imaging guidance; Insertion of catheter and injection of substance into thoracic interlaminar subarachnoid space using imaging guidance; Insertion of needle and injection of substance into cervical interlaminar epidural space using imaging guidance;

	Insertion of needle and injection of substance into cervical interlaminar subarachnoid space using imaging guidance; Insertion of needle and injection of substance into thoracic interlaminar epidural space using imaging guidance; Insertion of needle and injection of substance into thoracic interlaminar subarachnoid space using imaging guidance; Injection of substance into cervical spinal canal using imaging guidance; Injection of substance into thoracic spinal canal using imaging guidance.
62322	Injection of substance into lumbar spinal canal; Insertion of catheter and injection of substance into lumbar interlaminar epidural space;
62323	Injection of substance into lumbar spinal canal using imaging guidance; Insertion of catheter and injection of substance into lumbar interlaminar epidural space using imaging guidance; Insertion of catheter and injection of substance into lumbar interlaminar subarachnoid space using imaging guidance; Insertion of needle and injection of substance into lumbar interlaminar epidural space using imaging guidance; Insertion of needle and injection of substance into lumbar interlaminar subarachnoid space using imaging guidance
64479	Transforaminal injection of anesthetic agent and steroid into single epidural space of cervical spine using computed tomography (CT) guidance; Transforaminal injection of anesthetic agent and steroid into single epidural space of cervical spine using fluoroscopic guidance; Transforaminal injection of anesthetic agent and steroid into single epidural space of cervical spine using imaging guidance; Transforaminal injection of anesthetic agent and steroid into single epidural space of thoracic spine using computed tomography (CT) guidance; Transforaminal injection of anesthetic agent and steroid into single epidural space of thoracic spine using fluoroscopic guidance;

	Transforaminal injection of anesthetic agent and steroid into single epidural space of thoracic spine using imaging guidance; Transforaminal injection of anesthetic agent into single epidural space of cervical spine using computed tomography (CT) guidance; Transforaminal injection of anesthetic agent into single epidural space of cervical spine using fluoroscopic guidance; Transforaminal injection of anesthetic agent into single epidural space of cervical spine using imaging guidance; Transforaminal injection of anesthetic agent into single epidural space of thoracic spine using computed tomography (CT) guidance; Transforaminal injection of anesthetic agent into single epidural space of thoracic spine using fluoroscopic guidance; Transforaminal injection of anesthetic agent into single epidural space of thoracic spine using imaging guidance; Transforaminal injection of steroid into single epidural space of cervical spine using computed tomography (CT) guidance; Transforaminal injection of steroid into single epidural space of cervical spine using fluoroscopic guidance; Transforaminal injection of steroid into single epidural space of cervical spine using imaging guidance; Transforaminal injection of steroid into single epidural space of thoracic spine using computed tomography (CT) guidance; Transforaminal injection of steroid into single epidural space of thoracic spine using fluoroscopic guidance; Transforaminal injection of steroid into single epidural space of thoracic spine using imaging guidance.
64480	Transforaminal injection of anesthetic agent and steroid into each additional epidural space of cervical spine using computed tomography (CT) guidance; Transforaminal injection of anesthetic agent and steroid into each additional epidural space of cervical spine using fluoroscopic guidance; Transforaminal injection of anesthetic agent and steroid into each additional epidural space of cervical spine using imaging guidance; Transforaminal injection of anesthetic agent and steroid

	into each additional epidural space of thoracic spine using computed tomography (CT) guidance; Transforaminal injection of anesthetic agent and steroid into each additional epidural space of thoracic spine using fluoroscopic guidance; Transforaminal injection of anesthetic agent and steroid into each additional epidural space of thoracic spine using imaging guidance; Transforaminal injection of anesthetic agent into each additional epidural space of cervical spine using computed tomography (CT) guidance; Transforaminal injection of anesthetic agent into each additional epidural space of cervical spine using fluoroscopic guidance; Transforaminal injection of anesthetic agent into each additional epidural space of cervical spine using imaging guidance; Transforaminal injection of anesthetic agent into each additional epidural space of thoracic spine using computed tomography (CT) guidance; Transforaminal injection of anesthetic agent into each additional epidural space of thoracic spine using fluoroscopic guidance; Transforaminal injection of anesthetic agent into each additional epidural space of thoracic spine using imaging guidance; Transforaminal injection of steroid into each additional epidural space of cervical spine using computed tomography (CT) guidance; Transforaminal injection of steroid into each additional epidural space of cervical spine using fluoroscopic guidance; Transforaminal injection of steroid into each additional epidural space of cervical spine using imaging guidance; Transforaminal injection of steroid into each additional epidural space of thoracic spine using computed tomography (CT) guidance; Transforaminal injection of steroid into each additional epidural space of thoracic spine using fluoroscopic guidance; Transforaminal injection of steroid into each additional epidural space of thoracic spine using imaging guidance.
64483	Transforaminal injection of anesthetic agent and steroid

	into epidural space of lumbar spine using CT guidance; Transforaminal injection of anesthetic agent and steroid into epidural space of lumbar spine using fluoroscopic guidance; Transforaminal injection of anesthetic agent and steroid into epidural space of lumbar spine using imaging guidance; Transforaminal injection of anesthetic agent into epidural space of lumbar spine using CT guidance; Transforaminal injection of anesthetic agent into epidural space of lumbar spine using fluoroscopic guidance; Transforaminal injection of anesthetic agent into epidural space of lumbar spine using imaging guidance; Transforaminal injection of steroid into epidural space of lumbar spine using CT guidance; Transforaminal injection of steroid into epidural space of lumbar spine using fluoroscopic guidance; Transforaminal injection of steroid into epidural space of lumbar spine using imaging guidance
+64484	Transforaminal injection of anesthetic agent and steroid into epidural space of lumbar spine using CT guidance; Transforaminal injection of anesthetic agent and steroid into epidural space of lumbar spine using fluoroscopic guidance; Transforaminal injection of anesthetic agent and steroid into epidural space of lumbar spine using imaging guidance; Transforaminal injection of anesthetic agent into epidural space of lumbar spine using CT guidance; Transforaminal injection of anesthetic agent into epidural space of lumbar spine using fluoroscopic guidance; Transforaminal injection of anesthetic agent into epidural space of lumbar spine using imaging guidance; Transforaminal injection of steroid into epidural space of lumbar spine using CT guidance; Transforaminal injection of steroid into epidural space of lumbar spine using fluoroscopic guidance; Transforaminal injection of steroid into epidural space of lumbar spine using imaging guidance
64999	Unlisted procedure on nervous system
0228T	Injections(s), anesthetic agent and/or steroid, transforaminal epidural, with ultrasound guidance, cervical or thoracic; single level
+0229T	Injections(s), anesthetic agent and/or steroid, transforaminal epidural, with ultrasound guidance,

	cervical or thoracic; each additional level (List separately in addition to code for primary procedure)
0230T	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with ultrasound guidance, lumbar or sacral; single level
+0231T	Injections of anesthetic agent and/or steroid into lower or sacral spinal canal using ultrasound guidance

Medical Evidence

Furman et al. (2010) conducted a prospective, single-arm, pilot, observational study. Inclusion criteria included patients with lumbar radicular pain, and exclusion criteria included the presence of irreversible psychological barriers or anatomical anomalies. The group concluded that subjects having fluoroscopically guided, contrast-enhanced lumbar interlaminar epidural steroids for primarily radicular pain vs axial pain could experience at least a three (3) month improvement on the Numeric Pain Rating Scale (NPRS) for at least three (3) months.[6]

In a systematic review, Kim et al. (2011) tested the hypothesis that dexamethasone phosphate (DP) and methylprednisolone acetate (MPA) would achieve similar outcomes when used in the treatment of lumbar radiculopathy by epidural injection. The study determined that when compared with particulate methylprednisolone, nonparticulate dexamethasone appeared to be close in safety and effectiveness.[7]

Manchikanti and colleagues (2012) conducted a randomized, double-blind, active control trial. The diagnoses of disc herniation, radiculitis, facet joint pain, and sacroiliac joint pain were excluded. The two groups of subjects received local anesthetic only or local anesthetic mixed with non-particulate betamethasone. Success was to be measured by a greater than 50% decrease in pain and disability, and the outcome was 77% in the local anesthetic only group and 67% in the local anesthetic mixed with non-particulate betamethasone.[9]

Kreiner et al. (2014) developed a clinical guideline for the North American Spine Society (NASS) for the diagnosis and treatment of lumbar disc herniation. 29 questions and recommendations resulted from this effort, including a Grade A recommendation for use of contrast-enhanced fluoroscopy in the routine performance of epidural steroid injections (ESI); a Grade A recommendation for ESI in treatment of lumbar disc herniation with radiculopathy; no recommendation given for optimal frequency or quantity of injections; and insufficient evidence found to make a recommendation for or against the 12-month efficacy of transforaminal ESI in lumbar disc herniation with radiculopathy.[15]

Centers for Medicare and Medicaid Services (CMS) (2021) updated the Local Coverage Determination (LCD) (L39036) with a number of recommendations and non-indications for epidural steroid injections for radiculopathy and pain related to the spine.[14]

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Clinical Guideline Revision History/Information

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