

MEDICAL POLICY

MEDICAL POLICY DETAILS	
Medical Policy Title	Spinal Injections (Epidural and Facet Injections) for Pain Management
Policy Number	7.01.87
Category	Technology Assessment
Original Effective Date	08/15/13
Committee Approval Date	07/17/14, 06/18/15, 05/25/16, 05/18/17, 06/21/18, 12/20/18, 06/20/19, 12/19/19, 12/17/20, 04/15/21, 12/16/21, 12/22/22, 05/18/23
Current Effective Date	09/15/23
Archived Date	N/A
Archive Review Date	N/A
Product Disclaimer	<ul style="list-style-type: none"> If a product excludes coverage for a service, it is not covered, and medical policy criteria do not apply. If a commercial product (including an Essential Plan or Child Health Plus product), medical policy criteria apply to the benefit. If a Medicaid product covers a specific service, and there are no New York State Medicaid guidelines (eMedNY) criteria, medical policy criteria apply to the benefit. If a Medicare product (including Medicare HMO-Dual Special Needs Program (DSNP) product) covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit. If a Medicare HMO-Dual Special Needs Program (DSNP) product DOES NOT cover a specific service, please refer to the Medicaid Product coverage line.

POLICY STATEMENT

Facet Joint Injection or Medial Branch Block

- I. Based upon our criteria and assessment of the peer-reviewed literature, an initial diagnostic facet joint injection or medial branch block has been medically proven to be effective and, therefore, is considered **medically appropriate** to determine whether chronic cervical, thoracic, or lumbar pain is of facet joint origin, when **ALL** the following criteria are met:
 - A. Pain has persisted for at least three months;
 - B. In the past three months pain has persisted despite at least four weeks of appropriate conservative treatment (e.g., physical therapy, chiropractic care, exercise, medications such as nonsteroidal anti-inflammatory drugs (NSAIDs) or analgesics). If conservative treatment is contraindicated, the reason(s) for contraindication(s) is/are required to be documented in the medical record;
 - C. Clinical findings and imaging studies suggest no other obvious cause of the axial neck or back pain (e.g., central spinal stenosis with neurogenic claudication/myelopathy, foraminal stenosis or disc herniation with concordant radicular pain/radiculopathy, infection, tumor, fracture, pseudoarthrosis, or pain related to spinal instrumentation);
 - D. The spinal motion segment is not posteriorly fused;
 - E. A radiofrequency joint denervation/ablation procedure is being considered; and
 - F. Presence of predominantly axial cervical, thoracic, or lumbar pain.
- II. Based upon our criteria and assessment of the peer-reviewed literature, a second diagnostic facet joint injection or medial branch block, performed to confirm the validity of the positive clinical response to the initial facet joint injection or medial branch block, has been medically proven to be effective and, therefore, is considered **medically appropriate** when **ALL** the following criteria are met:

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- A. The facet joint injection or medial branch block is administered at the same level as the initial injection;
 - B. The initial diagnostic facet joint injection or medial branch block 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);
 - C. A radiofrequency joint denervation/ablation procedure is being considered.
- III. Based upon our criteria and assessment of the peer-reviewed literature, initial therapeutic facet joint injections/medial branch blocks performed as an alternative treatment to a radiofrequency ablation/neurotomy are considered **medically necessary** when **ALL** the following criteria are met:
- A. There has been a documented positive response with two sequential diagnostic facet joint injections/medial branch blocks at the same level(s)
 - 1. Positive response is evidenced by at least 80% relief of facet mediated pain for at least the expected minimum duration of the effect of the local anesthetic used; and
 - B. The individual is not a candidate for a radiofrequency joint denervation/ablation procedure due to **ONE** of the following:
 - 1. Established spinal pseudoarthrosis at the spinal level intended for treatment, or
 - 2. Implanted electrical device (i.e. cardiac pacemaker, cardiac defibrillator, dorsal column stimulator, dorsal root ganglion stimulator, peripheral neurostimulator, cranial neurostimulator, implantable programmable drug pump).
- IV. Based upon our criteria and assessment of the peer-reviewed literature, subsequent therapeutic facet joint injections/medial branch blocks as an alternative treatment to a radiofrequency ablation/neurotomy have been medically proven to be effective and, therefore, are considered **medically appropriate** when **ALL** the following criteria are met:
- A. Previous therapeutic facet joint injections/medial branch blocks done at the same anatomic site resulted in significant pain relief (i.e., greater than 50%) for at least 12 weeks following the facet joint injection/medial branch block;
 - B. The prior therapeutic facet joint injection/medial branch block at the same anatomic site was performed at least six months ago; and
 - C. The individual is not a candidate for a radiofrequency joint denervation/ablation procedure due to **ONE** of the following:
 - 1. established spinal pseudoarthrosis at the spinal level intended for treatment; or
 - 2. implanted electrical device (e.g., cardiac pacemaker, cardiac defibrillator, dorsal column stimulator, dorsal root ganglion stimulator, peripheral neurostimulator, cranial neurostimulator, implantable programmable drug pump).
- V. Based upon our criteria and assessment of the peer-reviewed literature, an intra-articular facet joint injection performed with synovial cyst aspiration, in addition to a transforaminal epidural steroid injection (TFESI), is considered **medically appropriate**, when **ALL** the following criteria are met:
- A. Advanced diagnostic imaging studies (i.e., magnetic resonance imaging [MRI], computed tomography [CT] scan, CT myelogram) within the past 24 months confirm compression or displacement of the corresponding nerve root by a facet joint synovial cyst.
 - B. There is a clinical correlation with the individual's signs and symptoms of radicular pain or radiculopathy, based on history and physical examination.
 - C. The individual is participating in a comprehensive pain management program that includes **ALL** the following: physical therapy, patient education, psychosocial support, and oral medications.
- VI. If a repeat intra-articular facet joint injection with synovial cyst aspiration is needed the following is required:
- A. The previous facet joint injections/medial ranch blocks resulted in at least 50% pain relief for at least 12 weeks following the facet joint injection/medial branch block.
- VII. Based upon our criteria and assessment of the peer-reviewed literature, performance of a facet joint injection or medial branch block is considered **not medically necessary** for **ANY** of the following indications:
- A. The injection/block is performed without the use of fluoroscopic or CT guidance.

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- B. The individual has untreated radiculopathy (other than radiculopathy caused by a facet joint synovial cyst).
 - C. A radiofrequency joint denervation/ablation procedure (i.e., facet neurotomy, facet rhizotomy) is not being considered.
 - D. The facet joint injection is performed at a fused posterior spinal motion segment.
 - E. The injection/block is performed on the same day of service as other injections (e.g., epidural steroid, sacroiliac).
 - F. Injections/blocks are being performed on more than three contiguous spinal joint levels (with the exception of an intervening fused segment).
 - G. For repeat therapeutic facet joint injections/medial branch blocks in the absence of at least 50% pain relief for at least twelve (12) weeks.
 - H. An additional diagnostic injection/block is being performed at the same level(s) as a prior successful radiofrequency denervation/ablation procedure.
 - I. The injection/block is of the atlanto-occipital articulation and/or atlanto-axial articulation.
 - J. The injection is subsequent to the initial injection (i.e., therapeutic injection), unless performed as a second confirmatory block (*see Policy Guideline III*) or as an alternative to radiofrequency ablation/neurotomy treatment (*see Policy Statement III-IV*), or
 - K. Clinical findings and imaging studies suggest 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; or pain related to spinal instrumentation).
- VIII. Based upon our criteria and assessment of the peer-reviewed literature, a facet joint injection or medial branch block has not been medically proven to be effective and, therefore, is considered **investigational**, when **ANY** of the following applies:
- A. Injectates other than anesthetic, corticosteroid, and/or contrast agent (e.g., biologics [platelet rich plasma, stem cells, amniotic fluid]) are administered alone or in combination.
 - B. The injection is administered under ultrasound guidance.
 - C. The treatment of the L5 - S1 facet joint is used for the diagnosis and/or treatment of sacroiliac joint (SIJ) mediated pain.

Selective Nerve Root Block

- IX. Based upon our criteria and assessment of the peer-reviewed literature, an initial level diagnostic selective nerve root block (SNRB), is considered medically appropriate when **ALL** the following criteria are met:
- A. Performed at a single nerve root; and
 - B. Involves the introduction of anesthetic only; and
 - C. Performed when attempting to establish the diagnosis of radicular pain (including radiculitis) or radiculopathy, and the diagnosis remains uncertain after standard evaluation consisting of neurologic examination and either radiological studies and/or electrodiagnostic studies, in **ANY** of the following clinical situations:
 - 1. When the physical signs and symptoms differ from that found on imaging studies;
 - 2. When there is clinical evidence of multi-level nerve root pathology;
 - 3. When the clinical presentation is suggestive, but not typical of, both nerve root and peripheral nerve or joint disease involvement;
 - 4. When the clinical findings are consistent with radiculopathy in a level-specific referral pattern of one or more involved named spinal root(s), but the imaging studies do not corroborate the findings (positive straight leg raise test);
 - 5. When the individual has had previous spinal surgery; or
 - 6. For the purposes of surgical planning.
- X. Based upon our criteria and assessment of the peer-reviewed literature, a diagnostic SNRB at a spinal level other than the initial level is considered **medically appropriate** when **ALL** the following criteria are met:
- A. The response to the prior block was less than 80% relief from the injectate utilized.
 - B. There is evidence of multilevel pathology.
 - C. It has been at least seven days since the prior block.

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- XI. Based upon our criteria and assessment of the peer-reviewed literature, a diagnostic SNRB is considered **not medically necessary** for any other indication (e.g., post-herpetic neuralgia).
- XII. Based upon our criteria and assessment of the peer-reviewed literature, a therapeutic SNRB (i.e., a repeat SNRB at the same level) has not been medically proven to be effective and, therefore, is considered **investigational**.
- XIII. Based upon our criteria and assessment of the peer-reviewed literature, a diagnostic SNRB using injectates other than anesthetic, corticosteroid, and/or contrast agent (e.g., biologics [platelet rich plasma, stem cells, amniotic fluid]), administered alone or in combination has not been medically proven to be effective and, therefore, is considered **investigational**.
- XIV. Based upon our criteria and assessment of the peer-reviewed literature, a SNRB performed with ultrasound guidance has not been medically proven to be effective and, therefore, is considered **investigational**.

Epidural Steroid Injections

- XV. Based upon our criteria and assessment of the peer-reviewed literature, initial epidural steroid injections (transforaminal, interlaminar, or caudal) have been medically proven to be effective and, therefore, are considered **medically appropriate** for **ANY** of the following conditions when **ALL** the associated criteria are met:
 - A. Treatment of presumed radiculopathy, when **ALL** the following criteria are met:
 - 1. There has been failure of at least four weeks of conservative treatment (e.g., exercise, physical therapy, chiropractic care, or medications such as nonsteroidal anti-inflammatory drugs (NSAIDs) or analgesics
 - 2. The individual is participating in a comprehensive pain management program that includes **ALL** the following: physical therapy, patient education, psychosocial support, and oral medications
 - 3. Presence of pain, dysesthesia(s), or paresthesia(s) reported by the individual in a level-specific referral pattern of an involved named spinal root(s) causing significant functional limitations, (i.e., diminished quality of life and impaired age-appropriate activities of daily living), and **EITHER** of the following:
 - a. Documentation of **ONE or MORE** of the following, concordant with nerve root compression of the involved named spinal root(s) demonstrated on a detailed neurologic examination within the prior three months:
 - i. Loss of strength of specific named muscle(s) or myotomal distribution(s)
 - ii. Altered sensation to light touch, pressure, pin prick, or temperature in the sensory distribution
 - iii. Diminished, absent, or asymmetric reflex(es)
 - b. Documentation of **EITHER** of the following studies performed within the prior 24 months:
 - i. A concordant radiologist's interpretation of an advanced diagnostic imaging study (MRI or CT) of the spine demonstrating compression of the involved named spinal nerve root(s)
 - ii. Electrodiagnostic studies (EMG/NCVs) diagnostic of nerve root compression of the involved named spinal nerve root(s).
 - 4. Advanced diagnostic imaging within 24 months is required for cervical/thoracic interlaminar and transforaminal epidural steroid injections.
 - B. Treatment of presumed radiculitis or radicular pain, when **ALL** the following criteria are met:
 - 1. Failure of at least four weeks of conservative treatment (e.g., exercise, physical therapy, chiropractic care, or medications such as NSAIDs or analgesics;
 - 2. The individual is participating in a comprehensive pain management program that includes **ALL** the following: physical therapy, patient education, psychosocial support, and oral medications; and
 - 3. Advanced diagnostic imaging within 24 months is required for cervical/thoracic interlaminar and transforaminal ESI.
 - C. As an initial trial for treatment for those with evidence of neurogenic claudication (e.g, leg pain, paraesthesia, heaviness, or cramping brought on when walking and relieved when leaning forward or sitting down) when **ALL** the following criteria are met:
 - 1. Diagnostic evaluation has ruled out other potential causes of pain;

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2. MRI or CT scan, with or without myelography, within the past 24 months demonstrates moderate-to-severe spinal stenosis at the level to be treated;
3. Significant functional limitations have resulted in diminished quality of life and impaired, age-appropriate activities of daily living;
4. Patient has failed at least four weeks of conservative treatment (e.g., exercise, physical therapy, chiropractic care, or medications such as NSAIDs analgesics); and
5. The individual is participating in a comprehensive pain management program that includes **ALL** the following: physical therapy, patient education, psychosocial support, **and** oral medications.

XVI. Based upon our criteria and assessment of the peer-reviewed literature, repeat epidural steroid injections (ESIs) are considered **medically appropriate** when there has been 50% or greater relief of radicular pain for two or more weeks' duration and one of the following criteria are met:

- A. Increase in the level of function (e.g., return to work); or
- B. Reduction in the use of pain medication and/or additional medical services, such as physical therapy/chiropractic care; or
- C. Advanced diagnostic imaging within 24 months is required for cervical/thoracic interlaminar and transforaminal ESI.

XVII. Based upon our criteria and assessment of the peer-reviewed literature, ESIs are considered **not medically necessary** for **ANY** of the following:

- A. ESI is performed without imaging guidance (i.e., CT, fluoroscopy), except for an emergent situation or when fluoroscopic/CT guidance or the injection of contrast is contraindicated (e.g., pregnancy).
- B. TFESI is performed at more than two contiguous foraminal levels (unilateral or bilateral) during the same session.
- C. Interlaminar epidural steroid injection (ILESI) is performed at more than a single level during the same session.
- D. ESI is performed on the same day of service as other spinal interventional procedures, with the exception of an ESI performed with an intra-articular facet joint injection with synovial cyst aspiration.
- E. ESI is performed in isolation (without the individual participating in a comprehensive pain management program) that includes all of the following: physical therapy, patient education, psychosocial support and oral medications.
- F. ESIs are being repeated more frequently than every 14 days.
- G. There are more than three sessions of epidural steroid injections per episode of pain, per region, in six months.
- H. There are more than four sessions of epidural steroid injections per region, in 12 months.
- I. Spinal pain is axial (i.e., there is an absence of radiculopathy, myelopathy, myeloradiculopathy).
- J. Caudal epidural steroid injection (CESI) is performed for symptomatic levels above L4-L5.
- K. ESI is performed for post-herpetic neuralgia.

XVIII. Based upon our criteria and assessment of the peer-reviewed literature, ESI with ultrasound guidance for any indication, or ESI involving injectates other than anesthetic, corticosteroid, and/or contrast agent (e.g., biologics [platelet rich plasma, stem cells, amniotic fluid]) for the treatment of radicular pain or radiculopathy, has not been medically proven to be effective and, therefore, is considered **investigational**.

Refer to Corporate Medical Policy # 2.01.24 Growth Factors for Wound Healing and Other Conditions which includes platelet rich plasma.

Refer to Corporate Medical Policy# 11.01.03 Experimental and Investigational Services.

Refer to Corporate Medical Policy# 7.01.42 Radiofrequency Facet and Sacroiliac Joint Ablation/Denervation

POLICY GUIDELINES

- I. This policy does not apply to epidural injections administered for obstetrical or surgical epidural anesthesia, for peri-operative pain management, or in the clinical context of an implantable intrathecal drug pump. It only applies to the injection of anesthetic, corticosteroid, and/or contrast agent, and not to other injectates, including, but not limited to, Spinraza, chemotherapy, neurolytic substances, antispasmodics, antibiotics, antivirals, or biologics (e.g., platelet-rich plasma, stem cells, amniotic fluid, etc.).

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- II. A diagnostic facet joint injection or medial branch block is considered positive when there is documentation that the patient reported a response of at least 80% pain relief reported for the duration of the effect of the local anesthetic.
- III. When medical necessity criteria are met, no more than two diagnostic facet joint injections/medial branch blocks may be required to determine whether back pain originates in the facet joint or nerves surrounding the facet joint. The patient's response to the first two injection(s) must be documented. Subsequent facet injections/medial branch blocks are considered therapeutic, rather than diagnostic (*see Policy Statement VII.J.*).
- IV. 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 facet joint levels may be injected during the same session/procedure.
- V. 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.
- VI. Facet joint injections/medial branch blocks can expose individuals to potential complications and 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). Diagnostic facet joint injections/medial branch blocks should, therefore, only be performed when anticipating that, if successful, radiofrequency joint denervation/ablation procedures (facet neurotomy, facet rhizotomy) would be considered as an option at the diagnosed levels.
- VII. An in-dwelling catheter to administer a continuous infusion/intermittent bolus should be used only in a hospital setting. It is inappropriate to code the use of a catheter for single-episode injection(s) that is/are commonly performed in an outpatient setting as an in-dwelling catheter for continuous infusion/intermittent bolus.
- VIII. When medical necessity criteria are met, a total of three ESIs per episode of pain, per region, may be performed in six months, not to exceed four ESIs per region in 12 months.
- IX. An ESI should be performed with the use of fluoroscopic or CT guidance and the injection of a contrast, except for an emergent situation or when fluoroscopic/CT guidance or the injection of contrast is contraindicated (e.g., pregnancy).
- X. There is insufficient scientific evidence to support the scheduling of a "series-of-three" ESIs in either a diagnostic or therapeutic approach. The medical necessity of subsequent injections should be evaluated individually, based on the response of the individual to the previous injection about clinically relevant, sustained reductions in pain, decreased need for medication, and improvement in the individual's functional abilities.
- XI. When performing therapeutic TFESIs, no more than two contiguous nerve root levels (unilateral or bilateral) should be injected during the same session/procedure.
- XII. When performing a diagnostic SNRB, only an injection at a single level/side during the same session/procedure should be performed.

DESCRIPTION

Low-back pain is a common concern, affecting up to 90% of Americans at some point in their lifetimes. Back pain is not a specific disease, but, rather, is a symptom that may occur from a variety of different processes. Back pain can be divided into three classifications: axial or mechanical back pain, referred pain, and radicular pain. Axial pain is localized to the back. Usually certain activities aggravate the condition, and rest makes it better. This is the most common type of back pain and usually gets better with conservative treatments. Conservative treatment may include pharmacological therapy (e.g., analgesics, anti-inflammatory drugs, and muscle relaxants), exercise, spinal manipulation, acupuncture, cognitive-behavioral therapy, yoga, acupuncture, massage, and physical therapy. Referred pain is a dull achy pain that extends from the back into the extremities along the nerve path. The pain can move, vary in intensity and be sporadic. As with axial pain, treatment usually consists of simple, non-invasive techniques. Radicular pain is described as a deep, steady pain that radiates from the back into the extremities and is associated with particular activities such as standing, walking or sitting. Numbness, tingling, and muscle weakness may accompany the pain. Sciatica is the most common version of radicular pain. Radicular pain is usually related to a compressed, inflamed nerve in the spine, due to disc herniation, spinal stenosis or nerve root damage. Management of back pain that is persistent and disabling, despite the use of recommended

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conservative treatment, is challenging. Epidural injections and facet joint injections using a local anesthetic and/or steroids have been employed in the treatment of back pain, as an alternative to more invasive interventions.

An epidural injection is an injection into the epidural space, which is the area which surrounds the spinal cord and the nerves coming out of it. The goal of an epidural injection is to relieve pain, improve function, and reduce the need for surgical intervention by reducing inflammation and relieving inflammation-associated pressure. Epidural injections may be performed using caudal, interlaminar or transforaminal approaches. Transforaminal ESIs (TFESIs) are performed using fluoroscopy guidance, to increase the accuracy of needle placement, avoid accidental intravascular injection, and ensure visualization of anatomical anomalies.

Facet joint injections/facet blocks (e.g., medial branch blocks) have been used to treat back pain and/or to help determine whether the facet joint is a source of pain. Facet joints (i.e., zygapophysial joints) are located in the posterior compartment of the spinal column. They provide stability and allow the spine to bend and twist. Facet joints are well-innervated by the medial branches of the dorsal rami; they can be subjected to significant strain during spine-loading. Degenerative changes in the posterior lumbar facet joints have been established as a source of low-back pain that may radiate to the leg. Pain impulses from the medial branches of lumbar dorsal rami can be interrupted by blocking these nerves with anesthetic (facet block) or coagulating them with a radiofrequency wave (radiofrequency facet denervation). Typically, facet joint blocks are performed as a part of a work-up for back or neck pain. Pain relief following a precise injection of local anesthetic confirms the facet joint as the source of pain. Based on the outcome of a facet joint nerve block, if the patient gets sufficient relief of pain, but the pain recurs, denervation of the facet joint may be considered.

SNRB is a diagnostic injection of contrast (absent allergy to contrast) of a single nerve root, to assist with surgical planning, followed by the introduction of a local anesthetic by inserting a needle into the neuroforamen under fluoroscopic or CT guidance. SNRBs are erroneously referred to as TFESI. Technically, SNRBs involve the introduction of anesthetic only and are used for diagnostic purposes, while TFESIs involve a therapeutic injection of contrast followed by the introduction of a corticosteroid and possibly a local anesthetic. SNRBs performed for the purpose of treating pain (i.e., repeat SNRB at the same level) may be termed therapeutic selective nerve root blocks. There is insufficient evidence to support the clinical utility of therapeutic SNRBs.

To determine a precise location for injection therapy and to avoid complications, spinal injections have been performed primarily by fluoroscopic or CT guidance. Recently, ultrasound-guided injections have been explored; however, there is insufficient evidence to support its use.

RATIONALE

Epidural injections

Overall, the evidence for the use of diagnostic and therapeutic injections in the treatment of acute and chronic back pain is limited. Clinical studies have demonstrated that epidural steroid injections have provided short-term improvement and may be considered in the treatment of selected patients with radicular pain as part of an active therapy program. There is insufficient evidence to demonstrate that epidural steroid injections are effective in the treatment of back pain in the absence of radicular symptoms.

Buenaventura and colleagues (2009) conducted a systematic review to evaluate the effectiveness of lumbar TFESIs in managing chronic radicular pain. Of the four randomized, controlled trials evaluating TFESIs, all showed positive results for short-term relief. Two studies were positive for long-term relief; the results for long-term relief were not available for the third study, and the fourth study had negative long-term relief results.

Abdi et al. (2007) conducted a systematic review of published trials and abstracts of scientific meetings published between January 1966 and October 2006, to determine the efficacy and safety of ESIs. The primary outcome measure was pain relief. Other outcome measures were functional improvement, improvement of psychological status, and return to work. They identified 11 randomized trials of lumbar interlaminar ESI. Of these studies, eight had favorable results for short-term (less than six weeks) relief, and one was positive for long-term (six weeks) relief. The level of evidence for interlaminar ESIs was considered strong for short-term pain relief and limited for long-term pain relief. There were seven randomized trials of lumbar TFESI, five of which had favorable results for both short- and long-term pain relief. The level of evidence for TFESI was considered strong for short-term pain relief and moderate for long-term pain relief. Of the

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eight randomized trials of caudal ESIs, five had favorable results for short-term pain relief, and four had favorable results for long-term pain relief. The level of evidence for caudal epidural injections was considered strong for short-term relief and moderate for long-term relief.

Novak et al. (2008) conducted a systematic review to evaluate the evidence in support of guidelines on frequency and timing of epidural steroid injections, to help determine what sort of response should occur to repeat an injection. The review included 11 randomized, controlled trials, one prospective controlled trial, and two prospective cohort studies. The authors stated that many of the problems with this type of research stem from a lack of understanding of the underlying mechanisms of radicular pain and how epidural steroid injections provide an effect. The underlying mechanism of glucocorticoid activity is not clearly understood, and there is no indication for repeat injection based solely on the characteristics of the medication, itself. The authors concluded that there is limited evidence to suggest guidelines for frequency and timing of epidural steroid injections or to help define an appropriate partial response that would trigger a repeat injection. Research suggests that repeat injections may improve outcomes, but conclusions cannot be made due to methodological limitations of the available evidence. The authors further concluded that there does not appear to be any evidence to support the common practice of a series of injections.

The American Pain Society's evidenced-based clinical practice guideline based on the systematic review by R. Chou and colleagues (2009) recommended that interdisciplinary rehabilitation be considered as a treatment option for persistent, disabling low-back pain that does not respond to usual, non-interdisciplinary therapies. For persistent, non-radicular low-back pain, the guideline did not recommend facet joint corticosteroid injection, prolotherapy, or intradiscal corticosteroid injection, and noted that there is insufficient evidence to reliably guide recommendations on use of other interventional therapies. A shared decision-making process was recommended, including a detailed discussion of risks, benefits, and treatment alternatives, to guide decisions regarding surgery. A shared decision-making process was also recommended for radicular low-back pain, including a detailed discussion of risks and inconsistent evidence regarding short-term benefits, to guide decisions regarding epidural steroid injection. Likewise, a shared decision-making process was recommended to guide decisions regarding surgery for spinal stenosis and prolapsed lumbar disc, noting, however, that supporting evidence was stronger than for surgery, to treat non-radicular low back pain.

The results of a systematic review by A.T. Parr and colleagues (2012), evaluating the effect of caudal epidural injections with or without steroids in managing various types of chronic low back and lower extremity pain, produced good evidence for short- and long-term relief of chronic pain secondary to disc herniation or radiculitis with local anesthetic and steroids, and fair relief with local anesthetic only. Further, this systematic review also provided only fair evidence for caudal epidural injections in managing chronic axial or discogenic pain, spinal stenosis, and post-surgery syndrome.

Facet injections

Generally, the outcomes from clinical studies reflect that a diagnostic facet joint injection may assist in determining whether specific interventions targeting the facet joint are indicated. There is insufficient evidence to demonstrate that therapeutic facet joint injections are effective in the treatment of back pain, however. Guidelines from the American Pain Society (Chou et al., 2009) note that there is fair-to-good-quality evidence that facet joint injections are not effective. Guidelines from the American Association of Neurological Surgeons state that facet injections are not recommended as long-term treatment for chronic low-back pain. Guidelines from the American College of Occupational and Environmental Medicine state that therapeutic facet joint injections for acute, subacute, chronic low-back pain or radicular pain syndrome are not recommended. An assessment by the Canadian Agency for Drugs and Technologies in Health (updated in 2011) concluded that evidence of the safety and efficacy of therapeutic facet joint injections for low-back pain was lacking and of low quality. That assessment also noted conflicting evidence related to the efficacy of diagnostic facet joint injections.

Use of ultrasonic guidance

There is limited peer-reviewed literature regarding the overall health benefit of the use of ultrasonic guidance during spinal injections over the use of fluoroscopy or CT guidance. Jang et al. (2020) conducted a retrospective comparative review of chart data from 122 patients to compare the mid-term effects and advantages of the US-guided SNRB ($n = 44$), FL-guided IL-CESI ($n = 41$), and TF-CESI ($n = 37$) for radicular pain in the lower cervical spine. Despite the noted advantage of no radiation exposure and direct real-time visualization of vessels, nerves, and other soft tissue structure, the

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authors acknowledged several disadvantages (e.g., technique and the image are quite operator-dependent, and US alone cannot confirm the level that the injectate has reached (dorsal root ganglion or epidural space).

CODES

- *Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract.*
- *CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.*
- *Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.*
- *Code Key: Experimental/Investigational = (E/I), Not medically necessary/ appropriate = (NMN).*

CPT Codes

Code	Description
62320	Injection(s), of diagnostic or therapeutic substance(s) (e.g., 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	with imaging guidance (e.g., CT or fluoroscopy)
62322	Injection(s), of diagnostic or therapeutic substance(s) (e.g., 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	with imaging guidance (e.g., CT or fluoroscopy)
62324	Injection(s), including indwelling catheter placement, continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (e.g., anesthetic, 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) (e.g., anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, interlaminar epidural or subarachnoid, cervical or thoracic; with imaging guidance (i.e., fluoroscopy or CT)
62326	Injection(s), including indwelling catheter placement, continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (e.g., 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) (e.g., anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); with imaging guidance (i.e., fluoroscopy or CT)
64479-64480	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); cervical or thoracic (code range)
64483-64484	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); lumbar or sacral (code range)
64490-64492	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), cervical or thoracic (code range)
64493-64495	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), lumbar or sacral (code range)

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Code	Description
0213T- 0218T (E/I)	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance (code range)

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HCPCS Codes

Code	Description
None	

ICD10 Codes

Code	Description
multiple	

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*Key Article

KEY WORDS

Epidural injection, facet injection, injection therapy, medial branch block, spinal injection, ultrasound-guidance

CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

There are currently Local Coverage Determinations (LCD) for facet injections and lumbar epidural injections. Please refer to the following LCD websites for Medicare Members:

Facet Joint Interventions for Pain Management: [[https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=35936&ver=43&CntrctrSelected=298*1&Cntrctr=298&name=National+Government+Services%2c+Inc.+\(13201%2c+A+and+B+and+HHH+MAC%2c+J++K\)&s=All&DocType=Active&bc=AggAAQOBIAAA&=](https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=35936&ver=43&CntrctrSelected=298*1&Cntrctr=298&name=National+Government+Services%2c+Inc.+(13201%2c+A+and+B+and+HHH+MAC%2c+J++K)&s=All&DocType=Active&bc=AggAAQOBIAAA&=)]

Epidural Steroid Injections for Pain Management: [<https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=39036&ver=8&bc=0>]