MP 7.01.114    Spinal Injections (Epidural and Facet Injections) For Pain Management

Medical Policy

Section  
Surgical

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7/2014

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Policy

Based upon our criteria and assessment of peer-reviewed literature, epidural injections (at a maximum of 3 injections per episode of acute spinal pain) have been medically proven to be effective and therefore, are considered medically appropriate when ALL the following criteria have been met:

A. Patient has acute cervical, thoracic or lumbar radicular pain generally defined as pain lasting less than 3 months

B. Patient’s pain has failed to improve despite at least four weeks of conservative treatment (e.g., rest, pharmacotherapy, spinal manipulation/chiropractic, physical therapy, exercise); and

C. Patient is receiving injection therapy as part of a comprehensive rehabilitation management program.

D. Exceptions to waiting four weeks from the onset of the pain before receiving an ESI may exist, but should be documented. These would include:

- Severe pain unresponsive to outpatient medical management
- Inability to tolerate non-surgical, non-injection care due to co-existing medical conditions
- At least moderate pain with significant functional loss at work

It is the intent of these policy exceptions to provide the member with sufficient relief to continue all aspects of conservative management as defined above. Non participation in
a conservative back pain management program following this ESI exception will prevent consideration of any additional ESI therapy throughout the acute episode.

II. Based upon our criteria and assessment of peer-reviewed literature, all other uses of epidural injections are considered **investigational**, including but not limited to, the treatment of axial back pain or pain of a **chronic nature that has not been treated with conservative therapy following a recrudescence of the radicular pain** (i.e. acute-on-chronic pain).

III. Based upon our criteria and assessment of peer-reviewed literature, no more than three epidural steroid injections will be authorized in the three month period of the acute spinal pain episode.

IV. In the setting of a history of chronic back pain, adequate documentation must be supplied to confirm the presence of an **acute-on-chronic** exacerbation of pain. Any acute-on-chronic pain condition will still require participation of at least four weeks of a conservative pain management program prior to consideration of ESI approval.

V. Any reconsideration submitted following a denial of a requested ESI will not be considered in the absence of any additional clinical information provided by the treating physician.

VI. Based upon our criteria and assessment of peer-reviewed literature, diagnostic facet injections or medial branch blocks have been proven to be **medically appropriate** to determine the **origin of neck or back pain lasting greater than six weeks despite conservative treatment** (e.g., rest, pharmacotherapy, physical therapy, and exercise). Pain should be exacerbated by extension or associated with rigidity.

VII. Based upon our criteria and assessment of peer-reviewed literature, **therapeutic facet injections** have not been medically proven to be effective and therefore, are considered **investigational**.

VIII. Based upon our criteria and assessment of peer-reviewed literature, the use of **ultrasonic guidance** for facet joint injections or epidural injections does not improve patient outcomes and is considered **not medically necessary**, unless the request for US is due to a contraindication to radiation exposure.

**Policy Guidelines**

I. A second epidural steroid injection is not recommended if following the first injection there has been resolution of the symptoms of the acute radicular pain syndrome, particularly resolution of leg symptoms, or a decrease in symptoms to a tolerable level.

**Description**

Low back pain is a common concern, affecting up to 90% of Americans at some point in their lifetime. Back pain is not a specific disease, but rather it 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 is usually 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 conservative treatment is challenging. Epidural injections and facet joint injections using local an 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 transformational approaches. Transforaminal epidural injections, also referred to as selective nerve root blocks, are performed using fluoroscopy guidance in order 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, and provide stability and allow the spine to bend and twist. Facet joints are well innervated by the medial branches of the dorsal rami, and can be subjected to significant strain during spine loading. Degenerative changes in the posterior lumber facet joints have been established as a source of LBP 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.

For determining a precise location for injection therapy and to avoid complications, spinal injections have been performed primarily by fluoroscopic or computed tomographic (CT) guidance. Recently, ultrasound –guided injections have been explored.

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 transforaminal epidural injections in managing chronic radicular pain. Of the 4 randomized controlled trials evaluating transforaminal epidural steroid injections, all showed positive results for short-term relief; 2 studies were positive for long-term relief; the results for long-term relief were not available in 1 and one study had negative long-term relief results.

Abdi et al. (2007) conducted a systemic review of published trials and abstracts of scientific meetings, published between January 1966 and October 2006, to determine the efficacy and safety of epidural steroid injections (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, 8 had favorable results for short-term (less than 6 weeks) relief and 1 was positive for long-term (6 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 7 randomized trials of lumbar transforaminal ESI (TFESI), 5 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 8 randomized trials of caudal ESIs, 5 had favorable results for short-term pain relief and 4 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.

The 2007 American College of Occupational and Environmental Medicine evidence-based practice guidelines on low back disorders state that epidural glucocorticosteroid injections are an option for acute or subacute radicular pain syndromes. The injection may provide short-term improvement to allow time to determine whether conservative care will succeed. Epidural steroid injections may be appropriate for radicular pain syndromes lasting at least three weeks, when there is no evidence of trending towards spontaneous resolution following treatment with NSAIDs. The guideline also states that epidural steroid injections may be considered as a second-line treatment for acute flare-ups of spinal stenosis, when symptoms have persisted for one to two months despite treatment with NSAIDs and exercise. Epidural steroid injections are not recommended for acute, subacute, or chronic low back pain in the absence of significant radicular symptoms.

Novak, et al. (2008) conducted a systematic review to evaluate the evidence in support of guidelines on frequency and timing of epidural steroid injections in order 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 a lack of understanding of 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 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) noted the following: It is 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, facet joint corticosteroid injection, prolotherapy, and intradiscal corticosteroid injection are not recommended, and there is insufficient evidence to reliably guide recommendations on use of other interventional therapies. A shared decision-making process including a detailed discussion of risks, moderate average benefits, and treatment alternatives is recommended to guide decisions regarding surgery. For radicular low back pain, a shared decision-making process including a detailed discussion of risks and inconsistent evidence regarding short-term benefits is recommended to guide decisions regarding epidural steroid injection. A shared decision-making process is also recommended to guide decisions regarding surgery for spinal stenosis and prolapsed lumbar disc, though supporting evidence is stronger than for surgery for non-radicular low back pain.

The results of a systematic review by AT 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 has shown 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 show 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 2011) concluded that evidence of the safety and efficacy of therapeutic facet joint injections for low back pain was lacking and of low quality. They also noted conflicting evidence related to the efficacy of diagnostic facet joint injections.

Use of ultrasonic guidance

There is no evidence in the 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.

CODES:

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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: 62310 Injection(s), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, includes contrast for localization when performed; epidural or subarachnoid; cervical or thoracic

62311 Injection(s), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, includes contrast for localization when performed; epidural or subarachnoid; lumbar or sacral

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)

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

Medicare National Coverage

There may be a Local Coverage Determination (LCD) and related article for pain management. Please refer to the following LCD websites for Medicare Members:

42 Memorial Drive • Suite 1 • Pinehurst, N.C. 28374• Phone (910) 715-8100 • Fax (910) 715-8101

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References:


* key article

KEY WORDS:

Epidural injection, Facet injection, Injection therapy, Medical branch block, Spinal injection, Ultrasound-guidance