

MEDICAL POLICY



SUBJECT: SPINAL INJECTIONS (EPIDURAL AND FACET INJECTIONS) FOR PAIN MANAGEMENT	EFFECTIVE DATE: 08/15/13 REVISED DATE: 07/17/14
POLICY NUMBER: 7.01.87 CATEGORY: Technology Assessment	PAGE: 1 OF: 7
<ul style="list-style-type: none">• <i>If the member's subscriber contract excludes coverage for a specific service it is not covered under that contract. In such cases, medical policy criteria are not applied.</i>• <i>Medical policies apply to commercial and Medicaid products only when a contract benefit for the specific service exists.</i>• <i>Medical policies only apply to Medicare products when a contract benefit exists and where there are no National or Local Medicare coverage decisions for the specific service.</i>	

POLICY STATEMENT:

- I. Based upon our criteria and assessment of peer-reviewed literature, *epidural* injections (at a maximum of 3 injections per episode, not to exceed 3 injections in a 6-month time frame) 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;
 - B. Patient's pain has failed to improve despite at least four weeks of conservative treatment (e.g., rest, pharmacotherapy, spinal manipulation, physical therapy, exercise); and
 - C. Patient is receiving injection therapy as part of a comprehensive rehabilitation management program.
- 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 (chronic pain is defined as greater than 3 months duration despite the appropriate conservative treatment).
- III. 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.
- IV. 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**.
- V. 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.

Refer to Corporate Medical Policy #7.01.42, Radiofrequency Facet Denervation.

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.
- II. The Federal Employee Health Benefit Program (FEHBP/FEP) requires that procedures, devices or laboratory tests approved by the U.S. Food and Drug Administration (FDA) may not be considered investigational and thus these procedures, devices or laboratory tests may be assessed only on the basis of their medical necessity.

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

<p>SUBJECT: SPINAL INJECTIONS (EPIDURAL AND FACET INJECTIONS) FOR PAIN MANAGEMENT</p> <p>POLICY NUMBER: 7.01.87</p> <p>CATEGORY: Technology Assessment</p>	<p>EFFECTIVE DATE: 08/15/13</p> <p>REVISED DATE: 07/17/14</p> <p>PAGE: 2 OF: 7</p>
---	---

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 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 lumbar 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

<p>SUBJECT: SPINAL INJECTIONS (EPIDURAL AND FACET INJECTIONS) FOR PAIN MANAGEMENT</p> <p>POLICY NUMBER: 7.01.87</p> <p>CATEGORY: Technology Assessment</p>	<p>EFFECTIVE DATE: 08/15/13</p> <p>REVISED DATE: 07/17/14</p> <p>PAGE: 3 OF: 7</p>
---	---

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.

<p>SUBJECT: SPINAL INJECTIONS (EPIDURAL AND FACET INJECTIONS) FOR PAIN MANAGEMENT</p> <p>POLICY NUMBER: 7.01.87</p> <p>CATEGORY: Technology Assessment</p>	<p>EFFECTIVE DATE: 08/15/13</p> <p>REVISED DATE: 07/17/14</p> <p>PAGE: 4 OF: 7</p>
---	---

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: Number Description

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).

<u>CPT:</u>	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)

<p>SUBJECT: SPINAL INJECTIONS (EPIDURAL AND FACET INJECTIONS) FOR PAIN MANAGEMENT</p> <p>POLICY NUMBER: 7.01.87</p> <p>CATEGORY: Technology Assessment</p>	<p>EFFECTIVE DATE: 08/15/13</p> <p>REVISED DATE: 07/17/14</p> <p>PAGE: 5 OF: 7</p>
---	---

0228T-0231T (NMN) Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with ultrasound guidance (code range)

Copyright © 2014 American Medical Association, Chicago, IL

ICD9: Multiple diagnosis codes

ICD10: Multiple diagnosis codes

REFERENCES:

- *Abdi S, et al. Epidural steroids in the management of chronic spinal pain: a systematic review. Pain Physician 2007 Jan;10(1):185-212.
- *Anderberg L, et al. Transforaminal steroid injections for the treatment of cervical radiculopathy: a prospective and randomized study. Eur Spine J 2007 Mar;16(3):321-8.
- *Alturi S, et al. Systematic review of diagnostic utility and therapeutic effectiveness of thoracic facet joint interventions. Pain Physician 2008 Sep-Oct;11(5):611-29.
- Alturi S, et al. Diagnostic accuracy of thoracic facet joint nerve blocks: an update of the assessment of evidence. Pain Physician 2012 Jul-Aug;15(4):E483-96.
- Benoist M, et al. Epidural steroid injections in the management of low-back pain with radiculopathy: an update of their efficacy and safety. Eur Spine J 2012 Feb;21(2):204-13.
- Benyamin RM, et al. A systematic evaluation of thoracic interlaminar epidural injections. Pain Physician 2012 Jul-Aug;15(4):E497-514.
- Benyamin RM, et al. The effectiveness of lumbar interlaminar epidural injections in managing chronic low back pain and lower extremity pain. Pain Physician 2012 Jul-Aug;15(4):E363-404.
- Bicket MC, et al. Epidural injections for spinal pain: a systematic review and meta-analysis evaluating the “control” injections in randomized controlled trials. Anesthesiology 2013 Oct;119(4):907-31.
- *Boswell M, et al. A systematic review of therapeutic facet interventions in chronic spinal pain. Pain Physician 2007 Jan;10(1):229-53.
- Bresnahan BW, et al. A systematic review to assess comparative effectiveness studies in epidural steroid injections for lumbar spinal stenosis and to estimate reimbursement amounts. PM R 2013 Aug;5(8):705-14.
- Buenaventura RM, et al. Systematic review of therapeutic lumbar transforaminal epidural steroid injections. Pain Physician 2009 Jan-Feb;12(1):233-51.
- Bureau NJ, et al. Transforaminal versus intra-articular facet corticosteroid injections for the treatment of cervical radiculopathy: A randomized, double-blind, controlled study. AJNR Am J Neuroradiol 2014 May 29 [Epub ahead of print].
- Canadian Agency of Drugs and technologies in Health (CADTH). Health Technology Assessment. Facet joint injection as diagnostic and therapeutic tools for pain of the cervical and lumbar spine: a review of clinical and cost-effectiveness. [http://www.cadth.ca/media/pdf/this/jan-2011/L0246_facet_injections.pdf]. accessed 3/20/13.
- Choi HJ, et al. Epidural steroid injection therapy for low back pain: a meta-analysis. Int J Technol Assess Health Care 2013 Jul;29(3):244-53.
- Chou R, et al. Nonsurgical interventional therapies for low back pain: a review of the evidence for an American Pain Society clinical practice guideline. Spine 2009 May 1;34(10):1078-93.
- Cohan SP, et al. Establishing an optimal “cutoff” threshold for diagnostic lumbar facet blocks: a prospective correlational study. Clin J Pain 2012 Aug 6. [Epub ahead of print].

<p>SUBJECT: SPINAL INJECTIONS (EPIDURAL AND FACET INJECTIONS) FOR PAIN MANAGEMENT</p> <p>POLICY NUMBER: 7.01.87</p> <p>CATEGORY: Technology Assessment</p>	<p>EFFECTIVE DATE: 08/15/13</p> <p>REVISED DATE: 07/17/14</p> <p>PAGE: 6 OF: 7</p>
---	---

- Conn A, et al. Systematic review of caudal epidural injections in the management of chronic low back pain. Pain Physician 2009 Jan-Feb;12(1):109-35.
- Datta S, et al. Systematic assessment of diagnostic accuracy and therapeutic utility of lumbar facet joint interventions. Pain Physician 2009 Mar-Apr;12(2):437-60.
- Derby R, et al. Indications for repeat diagnostic medical branch nerve blocks following a failed first medical branch nerve block. Pain Physician 2013 Sep-Oct;16(5):479-88.
- Diwan S, et al. Effectiveness of cervical epidural injections in the management of chronic neck and upper extremity pain. Pain Physician 2012 Jul-Aug;15(4):E405-34.
- Falco FJ, et al. An update of the effectiveness of therapeutic lumbar facet joint interventions. Pain Physician 2012 Nov;15(6):E909-53.
- Falco FJ, et al. An update of the systematic assessment of the diagnostic accuracy of lumbar facet joint nerve blocks. Pain Physician 2012 Nov;15(6):E869-907.
- Fotiadou A, et al. Management of low back pain with facet joint interventions and nerve root blocks under computed tomography guidance. A prospective study. Skeletal Radiol 2012 Sep;41(9):1081-5.
- Grewal H, et al. Nonsurgical interventions for low back pain. Prim Care 2012 Sep;39(3):517-23.
- *Jeong HS, et al. Effectiveness of transforaminal epidural steroid injection by using a preganglionic approach: a prospective randomized controlled study. Radiology 2007 Nov;245(2):584-90.
- Jung H, et al. The validation of ultrasound-guided lumbar facet nerve blocks as confirmed by fluoroscopy. Asian Spine J 2012 Sep;6(3):163-7.
- Lakemeir S, et al. A comparison of intraarticular lumbar facet joint steroid injections and lumbar facet joint radiofrequency denervation in the treatment of low back pain: a randomized, controlled, double-blind trial. Anesth Analg 2013 Jul;117(1):228-35.
- Manchikanti L, et al. Effectiveness of therapeutic lumbar transforaminal epidural steroid injections in managing lumbar spinal pain. Pain Physician 2012 May-Jun;15(3):E199-245.
- Manchikanti L, et al. Comprehensive evidence-based guidelines for interventional techniques in the management of chronic spinal pain. Pain Physician 2009 Jul-Aug;12(4):699-802.
- Manchikanti L, et al. Comprehensive review of therapeutic interventions in managing chronic spinal pain. Pain Physician 2009 Jul-Aug;12(4):E123-198.
- Manchikanti L, et al. The role of thoracic medial branch blocks in managing chronic mid and upper back pain: a randomized, double-blind, active-control trial with a 2-year followup. Anesthesiol Res Pract 2012;2012:585806.
- Manchikanti L, et al. Thoracic interlaminar epidural injections in managing chronic thoracic pain: a randomized, double-blind, controlled trial with 2-year follow-up. Pain Physician 2014 May-Jun;17(3):E327-38.
- Manchikanti L, et al. Cost utility analysis of caudal epidural injections in the treatment of lumbar disc herniation, axial or discogenic low back pain, central spinal stenosis, and post lumbar surgery syndrome. Pain Physician 2013 May-Jun;16(3):E129-43.
- Manchikanti L, et al. Results of 2-year follow-up of a randomized, double-blind, controlled trial of fluoroscopic caudal injections in central spinal stenosis. Pain Physician 2012 Sept-Oct;15(5):371-84.
- Manchikanti L, et al. Two-year follow-up results of fluoroscopic cervical epidural injections in chronic axial or discogenic neck pain: a randomized, double-blind, controlled trial. Int J Med Sci 2014 Feb 6;11(4):309-20.
- Manchikanti L, et al. Assessment of escalating growth of facet joint interventions in the Medicare population in the United States from 2000-2011. Pain Physician 2013 Jul-Aug;16(4):E365-78.

<p>SUBJECT: SPINAL INJECTIONS (EPIDURAL AND FACET INJECTIONS) FOR PAIN MANAGEMENT</p> <p>POLICY NUMBER: 7.01.87</p> <p>CATEGORY: Technology Assessment</p>	<p>EFFECTIVE DATE: 08/15/13</p> <p>REVISED DATE: 07/17/14</p> <p>PAGE: 7 OF: 7</p>
---	---

Manchikanti L, et al. An update of comprehensive evidence-based guidelines for interventional techniques in chronic spinal pain. Part II: guidance and recommendations. Pain Physician 2013 Apr;6(Suppl 2):S49-283.

Manchikanti L, et al. A randomized, double-blind, active control trial of fluoroscopic cervical interlaminar epidural injections in chronic pain of cervical disc herniation: results of a 2-year follow-up. Pain Physician 2013 Sep-Oct;16(95):465-78.

Parr AT, et al. Caudal epidural injections in the management of chronic low back pain: systematic appraisal of the literature. Pain Physician 2012 May-Jun;15(3):E159-98.

Peterson C, et al. Evidence-based radiology (part 1): Is there sufficient research to support the use of therapeutic injections for the spine and sacroiliac joints? Skeletal Radiol 2010 Jan;39(1):5-9.

Pinto RZ, et al. Epidural corticosteroid injections in the management of sciatica. Ann Intern Med 2012;157(12):865-77.

Quraishi NA. Transforaminal injection of corticosteroids for lumbar radiculopathy: systematic review and meta-analysis. Eur Spine J 2012 Feb;21(2):214-9.

Roberts ST, et al. Efficacy of lumbosacral transforaminal epidural steroid injections: a systematic review. PM R 2009 Jul;1(7):657-68.

Savegh FE, et al. Efficacy of steroid and nonsteroid caudal epidural injections for low back pain and sciatica: a prospective, randomized, double-blind clinical trial. Spine 2009 Jun 15;34(14):1441-7.

Siegenthaler A, et al. Accuracy of ultrasound-guided nerve blocks of the cervical zygapophysial joints. Anesthesiology 2012 Aug;117(2):347-52.

Staal JB, et al. Injection therapy for subacute and chronic back pain: an updated Cochrane review. Spine 2009 Jan 1;34(1):49059.

Weininger M, et al. Accuracy of CT guidance of lumbar facet joint block. AJR Am J Roentgenol 2013 Mar;200(3):673-6.

* key article

KEY WORDS:

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

CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

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

http://apps.ngsmedicare.com/lcd/LCD_L28529.htm

http://apps.ngsmedicare.com/sia/ARTICLE_A48042.htm