

Subject: Facet Joint Diagnostic Injections for Chronic Spinal Pain		Original Effective Date: 7/5/07
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Medical Coverage Guidance Approval Date: 6/25/14		

PREFACE

This Medical Guidance is intended to facilitate the Utilization Management process. It expresses Molina's determination as to whether certain services or supplies are medically necessary, experimental, investigational, or cosmetic for purposes of determining appropriateness of payment. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered (i.e., will be paid for by Molina) for a particular member. The member's benefit plan determines coverage. Each benefit plan defines which services are covered, which are excluded, and which are subject to dollar caps or other limits. Members and their providers will need to consult the member's benefit plan to determine if there are any exclusions or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and a member's plan of benefits, the benefits plan will govern. In addition, coverage may be mandated by applicable legal requirements of a State, the Federal government or CMS for Medicare and Medicaid members. CMS's Coverage Database can be found on the following website: <http://www.cms.hhs.gov/center/coverage.asp>.

FDA INDICATIONS (PHARMACY)

The two most common local anesthetics used for zygapophyseal (facet) joint pain treatment, lidocaine and bupivacaine, are not specifically indicated for facet joint blockade. Instead, the indications for these drugs are more general. The indications for local anesthetics include production of local and regional anesthesia or analgesia for diagnostic and therapeutic procedures.¹

CENTERS FOR MEDICARE AND MEDICAID SERVICES (CMS)

The coverage directive(s) and criteria from an existing National Coverage Determination (NCD) or Local Coverage Determination (LCD) will supersede the contents of this Molina medical coverage guidance (MCG) document and provide the directive for all Medicare members. The directives from this MCG document may be followed if there are no available NCD or LCD documents available and outlined below.

CMS does not have a national coverage policy on the use of local anesthetic nerve blocks to diagnose facet syndrome.³ There are various LCD's that outline coverage for Facet Joint Blocks for the diagnosis or treatment of chronic pain that has failed conservative therapy. The number of injections in the diagnostic phase should be limited to no more than two times, and should be limited to three levels whether unilateral or bilateral for each region on any given date of service. The second diagnostic injection should be done no sooner than one week following the first diagnostic injection.³

Please access the Medicare Local Coverage Determination (LCD) for coverage criteria that may be available in you specific region at: <http://www.cms.gov/mcd/search.asp?clickon=search>

INITIAL COVERAGE CRITERIA

Diagnostic facet joint injections may be considered medically necessary and may be authorized for patients with chronic facet joint pain when the following criteria are met:

- ☐ Prescriber and physician administering injections is a Board certified Pain Management Specialist
 - Documented comprehensive pain evaluation with a comprehensive treatment plan has been submitted (e.g., medications, rehabilitation, and, psychological assessment and intervention as appropriate).
- ☐ Diagnosis of chronic severe somatic, nonradicular back pain³⁴ (cervical, thoracic, or lumbar): **[ALL]**
 - Chronic back pain is defined as persisting beyond 3 months: **[ALL]**³⁸
 - ◇ Affecting activity of daily living functional ability: > 6 on the NRS Pain Rating Scale*
 - ◇ Unresponsive to the following methods of pain control:
 - A trial of conservative treatment modalities^{15 23 34 38} have been tried and failed for a minimum of 3 months: **[ALL]**
 - ◇ Medications: NSAIDS, muscle relaxants, corticosteroids, antidepressants, anticonvulsants, or opiates;
 - ◇ activity modification; and
 - ◇ physical therapy

***The Numeric Rating Scale (NRS-11): Rating Pain Level**³⁷

0: No Pain

1 – 3: Mild Pain (nagging, annoying, interfering little with ADLs)

4 – 6: Moderate Pain (interferes significantly with ADLs)

7 – 10: Severe Pain (disabling; unable to perform ADLs)

- ☐ Indications for pain related to facet joint pathology: [Two or more]⁵⁶
 - Tenderness to palpation in the paravertebral areas;
 - Normal sensory examination;
 - Absence of radicular findings although pain may radiate below the knee;
 - Normal straight leg raising exam (SLR) exam
- ☐ Neuro-imaging studies are negative of pathology requires treatment of pathology before consideration of facet injections³⁴ (not an all-inclusive listing) **[ALL]**
 - Disc herniation
 - Spinal stenosis
 - Spondylolisthesis
 - Fracture
 - Remedial spinal lesions
 - Ankylopoietica
 - Discogenic or stenotic compression
 - Malignancy
 - Infection
 - Trauma

- ☐ Age 18 or older⁶⁸

- ☐ None of the following absolute contraindications: **[NONE]**

- previous history of spinal fusion in the area treated³⁴
- significant narrowing of the vertebral canal or spinal instability
- unstable medical conditions or psychiatric illness^{3,4}
- current anticoagulation treatment
- current systemic infection or infection over the injection site.

❑ Diagnostic blocks do not involve more than 2 joint levels bilaterally or 2 joint levels unilaterally in one spinal region³⁵

- cervical/thoracic are considered one region and lumbar/sacral are considered one region³⁴

❑ Documented positive response to diagnostic block(s): [ALL]^{12 56}

- 80% symptom or pain relief (using visual analog scale or verbal descriptor scale) within 1 hour using short acting local anesthetic or 2 hours with longer-acting anesthetic achieved for both blocks; and¹²
- opioids and IV sedation should not be given unless there is severe anxiety; and⁵⁶
- no pain medications from home should be taken within 4 hours prior the procedure and up to 6 after the procedure; and⁵⁶
- documented decrease in pain medication; and⁵⁶
- a total of two fluoroscopy guided diagnostic injections on two separate occasions are covered at intervals of no sooner than 2 weeks apart¹²

Repeat diagnostic facet injections may be authorized for members who meet all of the above initial criteria and all of the following criteria: [ALL]

- ❑ Documented positive response to diagnostic block(s) in a different level as evidenced by 80% symptom or pain relief (using visual analog scale or verbal descriptor scale) within 1 hour using short acting local anesthetic or 2 hours with longer-acting anesthetic achieved for both blocks
 - Once a diagnostic paravertebral block is negative at a specific level, no repeat interventions should be directed at that level unless there is a new clinical presentation with symptoms, signs, and diagnostic studies of known reliability and validity that implicate that level (new review of criteria would be indicated)
- ❑ No more than 2 sessions per spinal level per rolling calendar year and with sessions at least 2 weeks apart (A rolling calendar year is twelve months after the event, beginning and ending in the same month the initial event took place (e.g., first diagnostic injection is given in December 2013, the rolling calendar year would end in December 2014))

*Please refer to Radiofrequency Ablation MCG-085 for additional criteria

COVERAGE EXCLUSIONS

Therapeutic Facet joint injections with any substance **will not** be authorized for patients with facet joint pain as there is insufficient data to support the effectiveness of these interventions. Therefore, these procedures remain investigational, unproven treatments. Investigational treatments are generally not covered by Molina Healthcare plans.

DESCRIPTION OF PROCEDURE/SERVICE/PHARMACEUTICAL

Facet Joint Injections/Blocks for Chronic Pain (Intraarticular or Medial Branch Blocks)²

Facet blocks can be considered a diagnostic or therapeutic procedure.² Facet blocks using short or long-acting local anesthetics can be used to diagnose facet (zygapophyseal) joint syndrome as the cause of chronic back pain. Diagnostic injections involve the injection of a local anesthetic into the facet joints (intra-articular) or around the nerve supply to the joints (medial branches of the dorsal rami). Injections should be fluoroscopically guided. Pain relieved after 2 to 8 hours following the injection, without definitive clinical or imaging findings, would suggest that the pain originated in the facet joint. A positive diagnostic block is the prerequisite for undergoing further treatments to alleviate facet joint pain.

Facet blocks utilizing long acting local anesthetics, anti-inflammatory agents such as corticosteroids, or nerve ablating techniques such as radiofrequency lesioning have been investigated for treatment of chronic back pain attributed to facet joint syndrome.² Therapeutic treatments are performed to attempt to provide pain relief for as long as possible to perform other methods of conservative treatment such as tolerance to physical therapy or exercise.

GENERAL INFORMATION

Summary of Medical Evidence

Therapeutic facet joint injections for back pain are controversial.¹³ No randomized-control study comparing placebo to corticosteroids or other substances have demonstrated consistent positive results for therapeutic injections.^{4,8,9,14, 16,24} One study reported some improvement in lumbar mobility but no greater improvement in pain or disability when facet joint injections were added to an exercise program compared with exercise alone.¹⁹ There is insufficient evidence from randomized trials comparing corticosteroids and other substances with placebo to determine whether or not these interventions are truly effective.^{4,8,9,14, 16,24} There are several studies comparing facet injections with anesthetic to anesthetic and corticosteroid with no differences in pain or functional improvement.^{25,26} Strong evidence to support facet joint and intradiscal corticosteroid injections are not available. It is suggested by several evidence review literature resources to not perform these therapeutic procedures.^{4,8,15} The American Pain Society does not recommend facet joint injections as a treatment for chronic back pain.⁴

Use of diagnostic blocks with injection of local anesthesia into the facet joints or around the medial branch nerves to identify the possible sources of spinal pain appears to be an established diagnostic procedure.² However, there is no gold standard for the diagnosis of facet syndrome against which the accuracy of diagnostic facet blocks can be assessed. Since the existence of a spinal facet joint syndrome has not been established, and

there is no gold standard for facet syndrome, the accuracy of anesthetic blockades to diagnose the syndrome is difficult to determine. Moreover, such blocks may be nonspecific in localizing any putative source of pain, and single blocks may have high false-positive rates. Therefore, diagnostic facet blocks may be more useful for ruling out the facet joints as the cause of pain rather than providing a definitive diagnosis.

Diagnostic Facet Injections

This prospective study evaluated the accuracy of facet blocks for diagnosis of cervical, thoracic, or lumbar joint facet back pain in 500 consecutive patients presenting with chronic neck, thoracic, or low back pain, or a combination of each.³⁰ Patients were 18 to 90 years of age, had pain for at least 6 months, and pain was non-specific rather than radicular in nature. Disc related pain with radicular symptoms was excluded in all patients based on radiologic or neurologic testing, lack of a neurological deficit, and no radicular symptoms or pain that involved predominantly the upper or lower extremity. All patients had failed conservative management, which included physical therapy, chiropractic manipulation, exercises, drug therapy, bedrest, etc. Painful cervical facets were identified in 55% of patients with neck pain, 42% of patients with thoracic pain, and 31% of patients with low back pain. The results suggested that there was a higher correlation between initial nerve block and the confirmatory injection, with the highest prevalence of facet joint pain in patients with cervical spine pain. Single diagnostic blocks appear to be unreliable, with a relatively high false-positive rate; true-positive results were obtained by performing two sets of diagnostic blocks on separate occasions.

A second study of 230 patients with low back pain identified that diagnostic blocks were able to exclude facet joint syndrome as a cause of pain in some patients.³² Therapeutic blocks provided substantial pain relief for 50% of patients, with no effect in the other 50%.

A study was conducted to investigate the diagnostic and clinical value of lumbar facet joint injections in 277 patients (136 males and 141 females, aged 15–82 years) with chronic lower back pain and met the following criteria: pain for more than 1 year; no root signs; and no history of back surgery.²⁹ Good response was demonstrated in 72.1% of patients after 3 weeks, 40.7% of patients after 6 weeks, and 31.4% of patients after 12 weeks.

Therapeutic Facet Injections

Lumbar:

Falco et al (2012) evaluated the effect of therapeutic lumbar facet joint interventions in managing chronic low back pain in a systematic review. The available literature on lumbar facet joint interventions in managing chronic low back pain was reviewed. The quality assessment and clinical relevance criteria utilized were the Cochrane Musculoskeletal Review Group criteria as utilized for interventional techniques for randomized trials and the criteria developed by the Newcastle-Ottawa Scale criteria for observational studies. The level of evidence was classified as good, fair, and limited or poor based on the quality of evidence developed by the U.S. Preventative Services Task Force. Data sources included relevant literature identified through searches of PubMed and EMBASE from 1966 through June 2012, and manual searches of the bibliographies of known primary and review articles. The primary outcome measure was pain relief with short-term relief defined as up to 6 months and long-term relief as 12 months. Secondary outcome measures were improvement in functional

status, psychological status, return to work, and reduction in opioid intake. For this systematic review, 122 studies were identified. Of these, 11 randomized trials and 14 observational studies met inclusion criteria for methodological quality assessment. The evidence for radiofrequency neurotomy is good and fair to good for lumbar facet joint nerve blocks for short- and long-term improvement; whereas the evidence for intraarticular injections and pulsed radiofrequency neurotomy is limited. The authors concluded that there is good evidence for the use of conventional radiofrequency neurotomy, and fair to good evidence for lumbar facet joint nerve blocks for the treatment of chronic lumbar facet joint pain resulting in short-term and long-term pain relief and functional improvement. There is limited evidence for intraarticular facet joint injections and pulsed radiofrequency thermoneurolysis.⁴²

Civelek and associates (2012) compared the clinical effectiveness of facet joint injections (FJI) and facet joint radiofrequency (FJRF) denervation in patients with chronic low back pain. This study included 100 patients; 50 in FJI and 50 in FJRF group. VNS, NASS and EQ-5D were used to evaluate the outcomes. All outcome assessments were performed at baseline, 3 months, 6 months and 12 months. FJI in early post-op but FJRF in 1st, 6th and 12th month VNS showed better results ($p < 0.001$). There was no significant difference in the 1st ($p=1$) and 6th month ($p=0.13$) but in 12th month ($p=0.04$) in NASS. Increase in level number showed positive effect in NASS in FJRF group ($p=0.018$) but no effect in FJI group ($p=0.823$) in the 12th month follow-up. There was no significant difference with respect to 1st month ($p=0.17$), 6th month ($p=0.22$) and 12th month ($p=0.11$) post-procedure follow-ups in EQ-5D. At the short term FJI was more effective than FJRF however in midterm follow-up FJRF had more satisfying results than FJRF. Investigators concluded the first choice should be the FJI and if pain reoccurs after a period of time or injection is not effective, RF procedure should be used for the treatment of chronic lumbar pain.⁴⁰

Manchikanti et al (2012) investigated the incidence in characteristics of adverse effects and complications of facet joint nerve blocks. The study was carried out over a period of 20 months including almost 7,500 episodes of 43,000 facet joint nerve blocks with 3,370 episodes in the cervical region, 3,162 in the lumbar region, and 950 in the thoracic region. All facet joint nerve blocks were performed under fluoroscopic guidance in an ambulatory surgery center by 3 physicians. The complications encountered during the procedure and postoperatively were evaluated prospectively. Measurable outcomes employed were intravascular entry of the needle, profuse bleeding, local hematoma, dural puncture and headache, nerve root or spinal cord irritation with resultant injury, and infectious complications. There were no major complications. Multiple side effects and complications observed included overall intravascular penetration in 11.4% of episodes with 20% in cervical region, 4% in lumbar region, and 6% in thoracic region; local bleeding in 76.3% of episodes with highest in thoracic region and lowest in cervical region; oozing with 19.6% encounters with highest in cervical region and lowest in lumbar region; with local hematoma seen only in 1.2% of the patients with profuse bleeding, bruising, soreness, nerve root irritation, and all other effects such as vasovagal reactions observed in 1% or less of the episodes. The study was limited by the lack of contrast injection, use of intermittent fluoroscopy and also an observational nature of the study. Investigators concluded the study illustrated that major complications are extremely rare and minor side effects are common.⁴⁶

Fotiadou and associates (2012) evaluated the performance of facet joint and nerve root infiltrations under computed tomography guidance for the management of low back pain and investigated the complications and patient tolerance. 86 consecutive patients (47 male, 39 female, age range 47-87 years, mean age 63) with low back pain for more than 2 years were included. All patients were clinically examined and had cross-sectional imaging performed before the procedure. Fifty-five facet joint infiltrations and 31 nerve blocks were performed under computed tomography guidance. All patients completed two valid pain questionnaires before and 3 months after the procedures. At the same time, they were clinically examined by the referring orthopedic surgeon. The pain response was assessed by comparing the scores of the questionnaires. The improvement in clinical examination findings was assessed as well. In patients who underwent facet joint infiltrations, long-term pain improvement was achieved in 79% and in those with nerve blocks in 85%. Immediate pain relief was demonstrated in 83% of patients with nerve infiltrations. No complications were observed. All procedures were very well tolerated by patients. The authors concluded facet joint and nerve infiltrations under computed tomography guidance constitute an accurate and safe method that could be used to relieve low back pain and minimize the risk of disability.⁴⁴

A randomized, multicenter study (2010) was performed in 151 subjects with suspected lumbar facetogenic pain comparing three treatment paradigms. Group 0 received radiofrequency denervation based solely on clinical findings; group 1 underwent denervation contingent on a positive response to a single diagnostic block; and group 2 proceeded to denervation only if they obtained a positive response to comparative blocks done with lidocaine and bupivacaine. A positive outcome was predesignated as $\geq 50\%$ pain relief coupled with a positive global perceived effect persisting for 3 months. In group 0, 17 patients (33%) obtained a successful outcome at 3 months versus eight patients (16%) in group 1 and 11 (22%) patients in group 2. Denervation success rates in groups 0, 1, and 2 were 33, 39, and 64%, respectively. Pain scores and functional capacity were significantly lower at 3 months but not at 1 month in group 2 subjects who proceeded to denervation compared with patients in groups 0 and 1. The costs per successful treatment in groups 0, 1, and 2 were \$6,286, \$17,142, and \$15,241, respectively. The authors concluded that using current reimbursement scales, these findings suggest that proceeding to radiofrequency denervation without a diagnostic block is the most cost-effective treatment paradigm.³⁶

Cervical

Park and Kim (2012) investigated the effects of therapeutic cervical facet joint (CFJ) injections on patients with long-standing cervical myofascial pain syndrome (MPS) with referral pain patterns of CFJ syndrome. Four hundred patients presented with long-standing cervical MPS with referral pain patterns of CFJ syndrome over a period of 6 months. A randomized clinical trial was performed wherein 200 patients (group 1) received therapeutic CFJ injections at bilateral C5/C6 and C6/C7 after diagnostic, controlled double-blind blocks. The same co-interventions, such as medication and a home exercise program, were simultaneously applied to patients in group 1 and the noninjection group (group N). Cervical range of motion (CROM), mean reduction of numeric rate scale (NRS) for pain, and comorbid tension-type headache were compared between groups during the 1-year follow-up period. Treatment duration and symptom-free periods were compared according to age

group. Group 1 showed increased CROM, increased mean NRS pain reduction, and decreased incidence of combined tension-type headache compared with group N during the follow-up. Younger patients in group 1 required a shorter treatment cycle and experienced a longer symptom-free period. Investigators concluded addition of therapeutic CFJ injections to a multimodal treatment program is a useful therapeutic modality for patients, especially young patients, suffering from long-standing MPS with referral pain of CFJ syndrome.⁴⁷

Efficacy of facet joint steroid injection versus control (saline) facet joint injection

A systematic review of the literature regarding facet joint injections and medial branch blocks revealed no clear differences between facet joint corticosteroids and placebo injections.⁸ A well designed randomized, placebo-controlled trial with 101 patients with chronic low back pain who reported immediate relief of pain following injections of local anesthetic into the facet joints found no difference in pain relief following randomization to corticosteroids or saline injections at one or three months post injection.¹⁴ A higher number of patients in the steroid injection group reported marked improvement following six months (45 versus 15 percent). The differences were reduced when co-interventions in the steroid group were taken into account. There is no known biologic explanation for a delayed benefit from steroids.¹⁵ Moreover, only 11 patients (22 percent) in the methylprednisolone group and 5 (10 percent) in the placebo group had sustained improvement from the first month to the sixth month (95 percent confidence interval for the difference, -2 to 26; $P = 0.19$).¹⁴ The authors concluded that injecting methylprednisolone acetate into the facet joints is of little value in the treatment of patients with chronic low back pain. The second smaller trial reported no differences between steroid and/or bupivacaine injection compared with placebo.¹⁶ A guideline from the American Pain Society recommends against facet joint corticosteroid injections for chronic low back pain based upon these two trials.⁴

Efficacy of medial branch block versus placebo

There were no trials comparing therapeutic medial branch block versus placebo found in the literature.

Efficacy of facet joint injection versus medial branch block

One higher-quality trial found no difference in pain relief one to three months after a facet joint injection with a steroid and local anesthetic compared to medial branch block of the posterior primary ramus with a steroid and local anesthetic.²¹ A second, lower-quality trial not included in any previously published systematic review reported no benefit with either facet joint injection with local anesthetic plus steroid or medial branch block with local anesthetic only, but outcomes were reported using unconventional and difficult to interpret methods (paired sequential analysis).^{8,22}

Efficacy of facet joint injection plus home stretching versus home stretching alone

A randomized single-blind clinical trial of facet injections plus exercise, versus exercise alone, in chronic disabling work-related lumbar spinal disorders accompanied by pilot interrater reliability to evaluate the use of facet injections as an adjunct to supervised lumbar stretching exercises in 70 patients.¹⁹ Both groups (exercise plus injections and exercise alone) reported similar improvements in pain and disability, with some improvement in lumbar mobility in patients who received facet injections in addition to exercise. The authors concluded that there is no evidence that facet injections increase the improvements in pain/disability report noted in both groups.

Efficacy of different types of facet joint injections

A randomized study controlled, blind-observer clinical study of 60 patients randomly assigned to intraarticular sodium hyaluronate compared with intraarticular glucocorticoids groups in the treatment of chronic nonradicular lumbar pain.²³ There were no clear differences in pain, back-specific functional status, or other outcomes between facet joint injection with a steroid versus facet joint injection with hyaluronic acid.

Efficacy of different types of medial branch blocks

One small randomized-control double-blind trial with 73 patients found no differences in outcomes between a medial branch block with a local anesthetic, Sarapin (a substance derived from the pitcher plant), and methylprednisolone versus the same intervention without methylprednisolone.²⁷ A small randomized control trial with 60 patients compared nerve block injection with bupivacaine alone, bupivacaine plus steroid, bupivacaine plus sarapin, or bupivacaine plus sarapin and steroid.²⁸ There were no significant differences among all three groups in pain or functional status at 3, 6 and 12 month follow-ups.

A double-blind, randomized, controlled trial of 120 patients with chronic facet neck joint pain were randomized one of two groups; local anesthetic cervical medial branch blocks with or without steroid. Pain relief and functional improvement was noted in 83% patients.²⁴ There were no differences between the two groups. Similar results were reported in a randomized double-blind trial of 120 patients with low back pain.²⁵ There were no significant differences between the local anesthetic and local anesthetic with steroids at the two year follow-up.

A systematic review of literature of prospective, double-blind, randomized placebo-controlled trials in interventional spine.¹⁸ The authors concluded no firm conclusions can be drawn about cervical epidural corticosteroid injections, lumbosacral epidural corticosteroid injections for the treatment of chronic radicular pain, cervical or lumbosacral intraarticular zygapophysial joint corticosteroid injections for the treatment of degenerative zygapophysial joint pain, or intradiscal corticosteroid injections.

Hayes, Cochrane, UpToDate, MD Consult etc.

Hayes

A Hayes directory report exists for facet blocks for chronic back pain.² There are inconsistent results from randomized-control trials regarding (zygapophyseal joint) nerve block using a local anesthetic for the diagnosis of facet joint syndrome as a cause of chronic back pain and for intra-articular injections of the facet joints (medial branch block) using local anesthetics with or without corticosteroids for treatment of chronic back pain. There is some positive published evidence regarding safety and/or efficacy supporting the use of diagnostic blocks and therapeutic injections but a beneficial impact on health outcomes has not been proven as the data are inconsistent or conflicting. Annual Hayes literature reviews have been conducted with no change to the Hayes ratings. The last update summary performed at the time of this document revision was October 10, 2010 and the report was archived November, 2011.

A Cochrane systematic review (2008) was conducted evaluating 18 randomized trials that included 1179 participants for injection therapy including facet injections (e.g., intra-articular injections, peri-articular injections and nerve blocks) for subacute and chronic low-back pain.²⁰ A meta-analysis was not conducted due to clinical heterogeneity of data. The medication used for injections included local anesthetics, corticosteroids and other agents. There was insufficient evidence available to support the use of injection therapy or provide a recommendation for or against any type of injection therapy.

UpToDate:

In a report called Subacute and Chronic Low Back Pain: nonsurgical interventional treatment, the following is summarized:⁵¹

- Evidence does not support use of facet joint and intradiscal glucocorticoid or anti-tumor necrosis factor injections. Recommendations include not performing these procedures for chronic low back pain (Grade 2B).
- Evidence is unavailable, unreliable, or contradictory regarding medial branch blocks, intradiscal methylene blue injections, sacroiliac injections, or piriformis injections. Recommendations include not performing these procedures for chronic low back pain (Grade 2C).

In a report called Treatment of Neck Pain the following is summarized:⁵²

- Cervical medial branch blocks anesthetize the innervation of the cervical zygapophyseal (facet) joint and are used for both diagnosis and treatment of cervical zygapophyseal joint mediated neck pain. High quality studies supporting treatment effectiveness are not available.

Professional Organizations

The American Society of Interventional Pain Physicians (ASIPP) Interventional Pain Management (IPM):

The guidelines called Comprehensive Evidence-Based Guidelines for spinal interventional techniques in the Management of Chronic Spinal Pain were last updated in 2009.¹² These guidelines provide evidence review and

provide recommendation for both diagnostic and therapeutic facet joint injections. Low back, neck, or thoracic pain indications for diagnostic facet injections include:

- Patients suffering with somatic or non-radicular neck, upper, mid or low back and upper or lower extremity pain or headache, with duration of pain of at least 3 months.
- Average pain levels are of greater than 6 on a scale of 0 to 10.
- Pain is at least intermittent or continuous causing functional disability.
- Condition has failed to respond to more conservative management, including physical therapy modalities with exercises, chiropractic management, and non-steroidal anti-inflammatory agents.
- Lack of preponderance of evidence of either discogenic or sacroiliac joint pain and lack of disc herniation or evidence of radiculitis.
- No evidence of contraindications is present for the needle placement and injection of local anesthetics.
- Presence of contraindications or inability to undergo physical therapy, chiropractic management, or inability to tolerate non-steroidal anti-inflammatory drugs.

A positive response is based on the following evidence:

- Patient has met the above indications.
- Patient responds positively to controlled local anesthetic blocks either with placebo control or comparative local anesthetic blocks with appropriate response to each local anesthetic (< 1 mL per level).
- At least 80% relief as criterion standard with ability to perform previously painful movement without deterioration of the relief (i.e., extension, lateral rotation, flexion, overhead activity etc.).
- The patient's response should be recorded independently by the assessor - generally a registered nurse familiar with patient or another physician.

The American College of Occupational and Environmental Medicine (ACOEM): The evidence-based practice guidelines on low back disorders (updated in 2011) state that one diagnostic facet joint injection may be recommended for patients with chronic low back pain that is significantly exacerbated by extension and rotation or associated with lumbar rigidity, and is not alleviated with other conservative treatments e.g., NSAID, progressive aerobic exercises, other exercises, and manipulation).³³ This diagnostic injection may determine whether specific interventions targeting the facet joint are recommended. Repeated diagnostic injections in the same location are not recommended. The guideline states that therapeutic facet joint injections are not recommended for acute, subacute, or chronic low back pain or for any radicular pain syndrome.

American Association of Neurological Surgeons (AANS): The guideline on injection therapies, low-back pain, and lumbar fusion concluded that there is evidence that suggests that facet joint injections can be used to predict outcome of radiofrequency ablation of a facet joint.³⁴ No evidence exists, however, to support the effectiveness of facet injections in the treatment of patients with chronic low-back pain.

American College of Radiology (ACR): Current recommendations from the ACR regarding diagnosis of causes of chronic back pain state that facet injection is useful for patients with multilevel disease diagnosed by any imaging modality to identify the specific level(s) producing symptoms.⁵⁰

The American Pain Society: The practice guidelines for low back pain (2009) recommends against facet joint steroid injections, therapeutic medial branch block, and radiofrequency denervation for persistent nonradicular low back pain.⁴ There is insufficient evidence from randomized trials that these interventions are effective. Therapeutic facet joint steroid injections are not recommended as randomized trials consistently found them to be no more effective than sham therapies. There are no placebo-controlled randomized trials to evaluate therapeutic medial branch blocks with opioids or other medications. No reliable reference standard for facet joint pain is available to estimate the diagnostic accuracy of intra-articular facet joint blocks and medial branch blocks as in other invasive diagnostic procedures for low back pain. There was no recommendation regarding diagnostic facet joint injections. Results of intra-articular facet joint blocks and medial branch blocks do not correlate well with findings on imaging studies. The evidence review focused on evidence that evaluated whether use of intra-articular facet joint blocks or medial branch blocks to select patients for procedures intended to treat presumed facet joint pain improves clinical outcomes compared to not using facet joint blocks. There have been no further updates to this guideline since 2009.

The National Institute for Health and Clinical Excellence (NICE): A guideline for the management of persistent or recurrent low back pain (2009) defines low back pain as non-specific that has lasted for more than 6 weeks, but for less than 12 months.⁵ It does not address the management of severe disabling low back pain that has lasted longer than 12 months. Evidence review from this group indicates that there is evidence that pain arising from the facet joints can be a cause of low back pain, but the role of specific therapeutic interventions remains unclear. Case studies provide some evidence for the effectiveness of facet joint injections and medial branch blocks, but randomized controlled trials give conflicting evidence. NICE does not recommend referral for facet injections. There have been no further updates to this guideline since 2009.

The American Society of Anesthesiologists Task Force on Chronic Pain Management and the American Society of Regional Anesthesia and Pain Medicine: The practice guidelines for chronic pain management (2010) indicate that diagnostic medial branch blocks or facet joint injections may be considered for patients with suspected facet-mediated pain to screen for subsequent therapeutic procedures. Intra-articular facet joint injections may be used for the symptomatic relief of facet-mediated pain.⁴⁹

The Institute for Clinical Systems Improvement (ICSI) guideline entitled “Assessment and Management of Chronic Pain” (Updated November 2011) indicates that Facet joints are an important source of spinal pain in the cervical and lumbar regions. These joints can be reliably anesthetized by way of fluoroscopically guided joint injections. Generally, a depot corticosteroid is administered concomitantly, which may provide short-term

benefit for a subset of patients. However, clinical trials have failed to demonstrate any sustained therapeutic benefits following facet joint corticosteroid injections.⁵³

CODING INFORMATION: THE CODES LISTED IN THIS POLICY ARE FOR REFERENCE PURPOSES ONLY. LISTING OF A SERVICE OR DEVICE CODE IN THIS POLICY DOES NOT IMPLY THAT THE SERVICE DESCRIBED BY THIS CODE IS A COVERED OR NON-COVERED. COVERAGE IS DETERMINED BY THE BENEFIT DOCUMENT. THIS LIST OF CODES MAY NOT BE ALL INCLUSIVE.

CPT	Description
64490	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), cervical or thoracic; single level
64491	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), cervical or thoracic; second level (List separately in addition to code for primary procedure)
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; third and any additional level(s) (List separately in addition to code for primary procedure)
64493	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), lumbar or sacral; single level
64494	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), lumbar or sacral; second level (List separately in addition to code for primary procedure)
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; third and any additional level(s) (List separately in addition to code for primary procedure)
0213T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, cervical or thoracic; single level
0214T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, cervical or thoracic; second level (List separately in addition to code for primary procedure)
0215T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, cervical or thoracic; third and any additional level(s) (List separately in addition to code for primary procedure)
0216T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, lumbar or sacral; single level
0217T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, lumbar or sacral; second level (List separately in addition to code for primary procedure)
0218T	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with ultrasound guidance, lumbar or sacral; third and any additional level(s) (List separately in addition to code for primary procedure)

HCPCS	Description
	N/A

ICD-9	Description
722.81	Postlaminectomy syndrome, cervical
722.83	Postlaminectomy syndrome, lumbar
723.1	Cervicalgia
724.1	Pain in thoracic spine
724.2	Pain in lumbar spine
724.8	Other symptoms referable to back
338.29	Other chronic pain (use in conjunction with above codes)

ICD-10 CM	Description
M96.1	Postlaminectomy syndrome nec
M96.1	Postlaminectomy syndrome nec
M54.2	Cervicalgia
M54.6	Pain in thoracic spine
M54.5	Low back pain
M54.03	Panniculitis affect regions neck and back CT region
M54.04	Panniculitis affect regions neck back Thor region
M54.05	Panniculitis affect regions neck & back TL region
M54.06	Panniculitis affect regions neck & back Lumbar region
M54.07	Panniculitis affect regions neck & back LS region
M54.08	Panniculitis affect regions neck & back Sac SC region
M54.09	Panniculitis affect regions neck, back Mx sites spn
G89.28	Other chronic postprocedural pain (use in conjunction with above codes)

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