Clinical Policy Title: Spine pain — facet joint injections

Clinical Policy Number: CCP.1030

Effective Date: April 1, 2016
Initial Review Date: June 16, 2013
Most Recent Review Date: January 8, 2019
Next Review Date: January 2020

Related policies:

CCP.1003 Spine pain — epidural steroid injections
CCP.1010 Radiofrequency ablation for spine pain
CCP.1063 Spinal surgeries
CCP.1072 Spine pain — trigger point injections

ABOUT THIS POLICY: Prestige Health Choice has developed clinical policies to assist with making coverage determinations. Prestige Health Choice’s clinical policies are based on guidelines from established industry sources, such as the Centers for Medicare & Medicaid Services (CMS), state regulatory agencies, the American Medical Association (AMA), medical specialty professional societies, and peer-reviewed professional literature. These clinical policies along with other sources, such as plan benefits and state and federal laws and regulatory requirements, including any state- or plan-specific definition of “medically necessary,” and the specific facts of the particular situation are considered by Prestige Health Choice when making coverage determinations. In the event of conflict between this clinical policy and plan benefits and/or state or federal laws and/or regulatory requirements, the plan benefits and/or state and federal laws and/or regulatory requirements shall control. Prestige Health Choice’s clinical policies are for informational purposes only and not intended as medical advice or to direct treatment. Physicians and other health care providers are solely responsible for the treatment decisions for their patients. Prestige Health Choice’s clinical policies are reflective of evidence-based medicine at the time of review. As medical science evolves, Prestige Health Choice will update its clinical policies as necessary. Prestige Health Choice’s clinical policies are not guarantees of payment.

Coverage policy

Prestige Health Choice considers the use of facet joint injections or medial branch blockade for spine pain to be clinically proven and, therefore, medically necessary for members ages 18 years and older for the following indications (InterQual®, 2018a; Watters, 2014):

- For diagnosis of suspected cervical or lumbar facet joint pain, when all of the following criteria are met:
  - Pain is nonradicular.
  - Nonfacet etiology is excluded.
  - Pain causes functional impairment.
  - Neurologic deficits are not present.
  - No infection or malignancy is present at the injection site.
Imaging is nondiagnostic for etiology of pain.
Conservative treatment failed within the last year, defined as at least three weeks of non-steroidal anti-inflammatory drugs or acetaminophen, and at least six weeks of activity modification and physical therapy.

- For treatment of known cervical or lumbar facet joint pain and all of the following criteria:
  - Documented pain reduction of at least 80 percent after a diagnostic facet joint injection or medial branch blockade.
  - Treatment administered by a board-certified physician certified in the diagnosis and treatment of members with chronic and acute spine pain. Appropriately trained physicians* include:
    - Those certified in pain management.
    - Neurologist.
    - Physiatrist, physical medicine specialist, and rehabilitation specialist.
    - Radiologist.
    - General anesthesia specialist.
    - Neurosurgeon.
    - Orthopedic specialist.
* For Prestige Health Choice-designated rural areas or members with difficulty accessing these specialties, Medical Directors shall determine authorization for this procedure.

For any determinations of medical necessity for medications, refer to the applicable state-approved pharmacy policy.

**Limitations:**

Coverage determinations are subject to benefit limitations and exclusions as delineated by the state Medicaid authority. The Florida Medicaid website may be accessed at http://ahca.myflorida.com/Medicaid/.

Relative contraindications to facet joint injections include (Verhagen, 2016):
- Anticoagulant therapy (e.g., warfarin sodium, low-molecular-weight heparin).
- Concomitant malignancy and spinal metastases.
- Severe foraminal stenosis.
- Allergy to contrast agents or injection agents.
- Pregnancy.
- Infection.
- Cauda equina syndrome.
- Other untreated causes of spine pain.
- End of life care.

All other uses of facet joint injections are considered not medically necessary.
A diagnostic medial branch blockade is medically necessary for planning radiofrequency ablation treatment for pain of cervical or lumbar origin only (see Clinical Policy CCP.1010 Radiofrequency ablation for spine pain; Falco, 2012a, 2012b; Manchikanti, 2012). Diagnostic medial branch blockade for all other spine regions (e.g. thoracic or sacral) is not medically necessary.

To minimize false positive responses to medial branch blockade, the preferred diagnostic method is the double-injection technique with a pain improvement threshold of at least 80 percent (InterQual, 2018a; Watters, 2014).

Once a structure is proven to be negative as a pain generator, no repeat interventions should be directed at that structure, unless there is a new clinical presentation with symptoms, signs, and diagnostic studies of known reliability and validity that implicate the structure.

One diagnostic procedure and up to two therapeutic series of injections within 12 months of the diagnostic injection are considered medically necessary (InterQual, 2018a).

Only one type of facet joint procedure during one day/session of treatment is considered medically necessary, unless the member has recently discontinued anticoagulant therapy for the purpose of interventional pain management.

Use of epidural block or sympathetic block on the same day as facet joint injections is considered not medically necessary.

Fluoroscopic imaging is medically necessary to guide accurate placement of the needle for facet joint injections (Watters, 2014).

Ultrasound guidance of facet injections is not medically necessary, as its clinical efficacy relative to fluoroscopic guidance has not been established (Wang, 2018).

For Medicare members only:

Prestige Health Choice considers the use of facet joint blocks to be clinically proven and, therefore, medically necessary for diagnosing chronic pain (persistent pain for three months or greater) suspected to originate from the facet joint. Facet joint block is one of the methods used to document/confirm suspicions of posterior element biomechanical pain of the spine. Hallmarks of posterior element biomechanical pain are as follows (L34974, L33930):

- The pain does not have a strong radicular component.
- There is no associated neurological deficit.
- Pain is aggravated by hyperextension, rotation, or lateral bending of the spine, depending on the orientation of the facet joint at that level.
Prestige Health Choice considers the use of facet joint blocks to be clinically proven and, therefore, medically necessary for treatment of chronic pain (history of at least three months of moderate to severe pain) and all of the following criteria (L36471, L35996):

- There is functional impairment.
- Pain is inadequately responsive to conservative care such as nonsteroidal anti-inflammatory drugs, acetaminophen, and/or physical therapy (as tolerated).
- The pain is predominantly axial.
- The pain is not associated with radiculopathy or neurogenic claudication, with the possible exception of facet joint cysts.
- There is no nonfacet pathology that could explain the source of the patient’s pain, such as fracture, tumor, infection, or significant deformity.
- Clinical assessment implicates the facet joint as the putative source of pain.
- There is documented pain reduction greater than 50 percent after diagnostic injections for at least three months (InterQual, 2018b).

A maximum of five facet joint injection sessions inclusive of medial branch blocks, intra-articular injections, facet cyst rupture, and radiofrequency ablations may be performed per rolling 12-month year in the cervical/thoracic spine and five in the lumbar spine (InterQual, 2018b).

Alternative covered services:

- Pharmacotherapy.
- Physical therapy, osteopathic manipulation, chiropractic manipulation.
- Surgical intervention.

Background

Facet joints are common sources of axial spinal pain and referred pain in the extremities (Filippiadis, 2016). A distinguishing feature of facet involvement is pain without a radicular component that is aggravated with motion, yet establishing a definitive diagnosis based on a combination of clinical examination and imaging studies can be difficult. Facet joint injections consist of intra-articular joint injections or medial branch blocks to evaluate or alleviate pain in the cervical, thoracic, or lumbar regions of the spine, using local anesthetic alone or with corticosteroids. The procedure is performed under imaging guidance.

Diagnostic facet joint injections are used to determine if pain is arising from facet joints, distinguish painful from nonpainful joints, and prognosticate response to therapeutic facet joint interventions (Sehgal, 2007). A positive response requires that the patient’s back pain significantly improve following both blocks for a period of time consistent with the anesthetic’s duration of action. If pain relief is
achieved, then the diagnosis can be made. Serial injections may be needed to make the diagnosis at a specific level.

Proposed therapies for back pain and neuralgia due to facet joint pathology include conservative therapy, injections, percutaneous (minimally invasive) techniques, and surgical treatments. Therapeutic facet joint injections may use a variety of agents to relieve pain. These include saline, local anesthetics, steroids, and other drugs such as clonidine, ketamine, hypertonic sodium chloride solution, and amitriptyline.

**Searches**

Prestige Health Choice searched PubMed and the databases of:

- UK National Health Services Centre for Reviews and Dissemination.
- Agency for Healthcare Research and Quality.
- The Centers for Medicare & Medicaid Services.

We conducted searches on November 19, 2018. Search terms were: “injections, spinal” (MeSH), “zygapophyseal joint” (MeSH), and free text terms “spinal surgery” and “facet joint.”

We included:

- **Systematic reviews**, which pool results from multiple studies to achieve larger sample sizes and greater precision of effect estimation than in smaller primary studies. Systematic reviews use predetermined transparent methods to minimize bias, effectively treating the review as a scientific endeavor, and are thus rated highest in evidence-grading hierarchies.
- **Guidelines based on systematic reviews**.
- **Economic analyses**, such as cost-effectiveness, and benefit or utility studies (but not simple cost studies), reporting both costs and outcomes — sometimes referred to as efficiency studies — which also rank near the top of evidence hierarchies.

**Findings**

The contemporary peer-reviewed medical literature includes a growing evidence base of the safety, diagnostic efficacy, and effectiveness of facet joint injections for relief of spinal pain. For diagnosing chronic spinal pain, evidence from high-quality diagnostic accuracy studies supports using diagnostic facet joint nerve blocks when available techniques cannot identify the source of chronic spinal pain (Boswell, 2015; Watters, 2014). The evidence is stronger for lumbar facet joint nerve blocks than for cervical and thoracic facet joint nerve blocks. Patients enroled in the studies had chronic spine pain without evidence of disc herniation, radiculitis, or sacroiliac joint arthritis after failure of conservative management.

Depending on disease prevalence, the false-positive rates for facet joint diagnostic blocks ranged from 27 percent to 63 percent for the cervical spine, from 42 percent to 48 percent for thoracic spine, and
from 25 percent to 44 percent for the lumbar spine (Boswell, 2015). Watters (2014) recommended using the double-comparative local anesthetic blockade technique with a pain relief threshold at least 80 percent to improve diagnostic performance, although the double technique is rarely performed in routine practice.

Two systematic reviews identified sufficient evidence supporting the safety of therapeutic facet joint injections. The strongest evidence supports cervical medial branch blocks and lumbar facet joint nerve blocks for the treatment of chronic neck and low back pain, for their ability to improve short- and long-term pain relief and functional improvement (Falco, 2012a and b). The evidence for intra-articular injections of the spine is far more limited. Results of relatively few studies suggest intra-articular injections for either cervical or lumbar spine pain achieved pain relief. Stronger evidence supports other treatment alternatives such as lumbar and cervical radiofrequency neurotomy and ablative procedures (Falco, 2012a and b), and no published evidence existed that supported the effectiveness of intra-articular injections for thoracic facet joint pain (Manchikanti, 2012).

The American Society of Anesthesiologists Task Force on Chronic Pain Management (2010) recommended intra-articular facet joint injections for symptomatic relief of facet-mediated pain, and medial branch blocks for treatment of facet-mediated spine pain. They made no recommendations for the optimal number of injections. Fluoroscopic guidance is recommended for facet joint injections (Watters, 2014).

Policy updates:

A systematic review (Manchikanti, 2015) of 31 trials concluded that local anesthetic alone and in combination with steroids was effective in epidural and facet joint injections for the management of spinal pain without acute trauma, fractures, malignancies, and inflammatory diseases, of at least three months’ duration. Clinical improvement was sustained after two years in 70 percent to 92 percent of patients undergoing facet joint injection. At one-year follow-up, improvement was seen in 80 percent to 92 percent of the patients.

Evidence supporting the effectiveness of therapeutic intra-articular facet joint injections for patients with suspected facet joint pain is sparse. A systematic review (Vekaria, 2016) found inconclusive evidence to determine if the effectiveness of intra-articular facet joint injections with an active drug was superior to a sham procedure, placebo, or conservative treatment.

A synthesis of 16 guidelines identified common red flag symptoms that may be indicative of more serious neurologic conditions from spinal instability (Verhagen, 2016). The categories are:

- Suspected unstable fractures of the spine evidenced by a history of a recent fall or injury, major motor weakness of a limb, progressive neurological deficits, or bladder or bowel dysfunction.
- History of cancer with suspicion of metastatic spread evidenced by major motor weakness of a limb, pain that increases at night or at rest, progressive neurological deficits, bladder or bowel dysfunction, or unexplained weight loss of more than 10 pounds in six weeks.
• Infection with suspicion of an epidural abscess/diskitis evidenced by progressive neurological deficits, fever of 100.4°F for more than 48 hours, C-reactive protein > 10 mg/L, recent (within two weeks) interventional spine procedures, erythrocyte sedimentation rate > 20 mm/hr, or immunocompromise (either immunodeficiency from any cause or intravenous drug abuse).

• Cauda equina syndrome evidenced by bladder or bowel dysfunction, saddle anesthesia, or progressive neurological deficits.

In 2019, we added one systematic review comparing the efficacy of facet joint injections using ultrasonographic versus fluoroscopic guidance (Wang, 2018). Currently, the evidence is insufficient to recommend ultrasonographic guidance for facet joint injections. The medical necessity criteria for facet joint injections were revised to align with InterQual (2018) criteria, and specific criteria from Medicare Local Coverage Determinations were added to the coverage section (L33930, L34974, L35996, L36471). The policy ID was changed from CP# 03.02.07 to CCP.1030.

References

Professional society guidelines/other:


Peer-reviewed references:


**Centers for Medicare & Medicaid Services National Coverage Determinations:**

No National Coverage Determinations identified as of the writing of this policy.

**Local Coverage Determinations:**
L34974 Facet Joint Injections.

L36471 Facet Joint Injections, Medial Branch Blocks, and Facet Joint Radiofrequency Neurotomy.

L35996 Facet Joint Injections, Medial Branch Blocks, and Facet Joint Radiofrequency Neurotomy.

L33930 Paravertebral Facet Joint Blocks.

**Commonly submitted codes**

Below are the most commonly submitted codes for the service(s)/item(s) subject to this policy. This is not an exhaustive list of codes. Providers are expected to consult the appropriate coding manuals and bill accordingly.

<table>
<thead>
<tr>
<th>CPT code</th>
<th>Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>64490</td>
<td>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</td>
<td></td>
</tr>
<tr>
<td>+64491</td>
<td>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)</td>
<td></td>
</tr>
<tr>
<td>+64492</td>
<td>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)</td>
<td></td>
</tr>
<tr>
<td>66493</td>
<td>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</td>
<td></td>
</tr>
<tr>
<td>+66494</td>
<td>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)</td>
<td></td>
</tr>
<tr>
<td>+66495</td>
<td>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)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ICD-10 code</th>
<th>Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>G54.1-G54.4</td>
<td>Nerve root and plexus disorders, lumbosacral, cervical and thoracic</td>
<td></td>
</tr>
<tr>
<td>G54.8-G54.9</td>
<td>Other nerve root and plexus disorders</td>
<td></td>
</tr>
<tr>
<td>M43.10-M43.19</td>
<td>Spondylolisthesis</td>
<td></td>
</tr>
<tr>
<td>M46.00-M46.09</td>
<td>Spinal ethesopathy</td>
<td></td>
</tr>
<tr>
<td>M47.812</td>
<td>Spondylosis without myelopathy or radiculopathy, cervical region</td>
<td></td>
</tr>
<tr>
<td>M47.814</td>
<td>Spondylosis without myelopathy or radiculopathy, thoracic region</td>
<td></td>
</tr>
<tr>
<td>M47.817</td>
<td>Spondylosis without myelopathy or radiculopathy, lumbosacral region</td>
<td></td>
</tr>
<tr>
<td>ICD-10 code</td>
<td>Description</td>
<td>Comments</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>M47.16</td>
<td>Other spondylosis with myelopathy, lumbar region</td>
<td></td>
</tr>
<tr>
<td>M47.819</td>
<td>Spondylosis without myelopathy or radiculopathy, site unspecified</td>
<td></td>
</tr>
<tr>
<td>M48.00</td>
<td>Spinal stenosis, site unspecified</td>
<td></td>
</tr>
<tr>
<td>M48.04</td>
<td>Spinal stenosis, thoracic region</td>
<td></td>
</tr>
<tr>
<td>M48.06</td>
<td>Spinal stenosis, lumbar region</td>
<td></td>
</tr>
<tr>
<td>M48.02-M48.08</td>
<td>Spinal stenosis (i.e., cervical, cervicothoracic, thoracic, thoracolumbar, lumbar, lumbosacral, sacral and sacrococcygeal region)</td>
<td></td>
</tr>
<tr>
<td>M50.00-M50.03</td>
<td>Cervical disc disorder with myelopathy</td>
<td></td>
</tr>
<tr>
<td>M51.04-M51.06</td>
<td>Thoracic, thoracolumbar and lumbosacral intervertebral disc disorders with myelopathy</td>
<td></td>
</tr>
<tr>
<td>M54.10-M54.18</td>
<td>Radiculopathy</td>
<td></td>
</tr>
<tr>
<td>M54.2</td>
<td>Cervicalgia</td>
<td></td>
</tr>
<tr>
<td>M54.5-M54.9</td>
<td>Low-back pain, pain in thoracic spine, dorsalgia</td>
<td></td>
</tr>
<tr>
<td>M79.1</td>
<td>Malagia (myofascial pain syndrome)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HCPCS Level II code</th>
<th>Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>G0260</td>
<td>Injection procedure for sacroiliac joint; provision of anesthetic, steroid and/or other therapeutic agent, with or without arthrography</td>
<td></td>
</tr>
</tbody>
</table>