Clinical Policy: Selective Nerve Root Blocks and Transforaminal Epidural Steroid Injections

Reference Number: LA.CP.MP.165 Coding Implications
Date of Last Revision: 1/2022 Revision Log

See Important Reminder at the end of this policy for important regulatory and legal information.

Description
Transforaminal epidural steroid injections (TFESIs) and selective nerve root blocks (SNRBs) are alternatives to interlaminar epidural steroid injections for the treatment of radicular pain. SNRBs consist of a small amount of local anesthetic injected adjacent to a spinal nerve root, and are most often used to diagnose the source of pain.[1] During a TFESI, a larger amount of local anesthetic or corticosteroid is injected into the intervertebral foramen, where the injectate spreads to target multiple nerves. SNRBs and TFESIs share similar safety considerations, procedural techniques, and anatomical benchmarks.[1]

Policy/Criteria
It is the policy of Louisiana Healthcare Connections that invasive pain management procedures performed by a physician are **medically necessary** when *the relevant criteria are met, only one procedure is performed per visit, with radiographic guidance, and the member/enrollee is not currently being treated with full anticoagulation therapy. If on warfarin, international normalized ratio (INR) should be ≤ 1.4 prior to the procedure.* Discontinuing anti-platelet therapy is a clinical decision balancing risks and benefits of the procedure on therapy, versus the underlying medical condition if not treated appropriately.

I. Selective Nerve Root Blocks

A. *One SNRB for acute pain management* (pain lasting < 3 months) is considered **medically necessary** when all of the following are met:
1. There is severe radicular pain in a specific nerve root distribution that interferes substantially with activities of daily living (ADLs);
2. Severe pain persists after treatment with nonsteroidal anti-inflammatory drugs (NSAID) and/or opiate (both ≥ 3 days or contraindicated/not tolerated);
3. Cannot tolerate chiropractic or physical therapy and the injection is intended as a bridge to therapy.

B. *One selective nerve root block (SNRB) for chronic pain* is considered **medically necessary** to establish a diagnosis and confirm beneficial response when all the following criteria are met:
1. Request is for an SNRB with a local anesthetic at a single nerve root;
2. Persistent radicular pain in a defined nerve root level and the diagnosis remains uncertain after standard evaluation (neurologic examination, radiological studies and electrodiagnostic studies;
3. Pain interferes with ADLs and has lasted for at least 3 months;
4. Failure to respond to conservative therapy, including all of the following:
   a. ≥ 6 weeks chiropractic, physical therapy or prescribed home exercise program;
   b. NSAIDs ≥ 3 weeks or NSAID contraindicated or not tolerated;

c. ≥ 6 weeks activity modification.

C. *A second SNRB for chronic pain* is considered **medically necessary** when multilevel pathology is suspected and it has been at least two weeks since the prior injection.

D. *SNRBs* are considered **not medically necessary** for any other indication because effectiveness has not been established.

II. Transforaminal Epidural Steroid Injections

A. *One TFESI for acute* pain management (pain lasting < 3 months) is considered **medically** necessary when all of the following are met:

1. There is severe radicular pain in a specific nerve root distribution that interferes substantially with ADLs;
2. If a cervical TFESI is requested, non-particulate steroid must be used and the procedure must be conducted with real-time imaging, such as fluoroscopy;
3. Severe pain persists after treatment with NSAID and/or opiate (both ≥ 3 days or contraindicated/not tolerated);
4. Cannot tolerate chiropractic or physical therapy and the injection is intended as a bridge to therapy.

B. *One transforaminal epidural steroid injection (TFESI) for chronic pain* is considered **medically necessary** when all of the following are met:

1. TFESI is requested for a single level bilaterally or up to two levels unilaterally;
2. If a cervical TFESI is requested, non-particulate steroid must be used and the procedure must be conducted with real-time imaging, such as fluoroscopy;
3. There is persistent radicular pain caused by disc herniation in a defined nerve root level, or spinal stenosis confirmed by physical exam and imaging;
4. Pain interferes with ADLs and has lasted for at least 3 months;
5. Failure to respond to conservative therapy including all of the following:
   a. ≥ 6 weeks chiropractic, physical therapy or prescribed home exercise program;
   b. NSAID ≥ 3 weeks or NSAID contraindicated or not tolerated;
   c. ≥ 6 weeks activity modification.

C. *A second TFESI for chronic pain* that **did not** improve from the initial injection is considered **medically necessary** when meeting all of the following:

1. Request is for a TFESI at one level bilaterally or up to two levels unilaterally;
2. If a cervical TFESI is requested, non-particulate steroid must be used and the procedure must be conducted with real-time imaging, such as fluoroscopy;
3. At least two weeks have passed since the first TFESI;

D. *Subsequent TFESIs for recurrence of chronic pain* that **had improved** from the first or second TFESI are considered **medically necessary** with all of the following:

1. The TFESI is requested at a single level bilaterally or up to two levels unilaterally;
2. If a cervical TFESI is requested, non-particulate steroid must be used and the procedure must be conducted with real-time imaging, such as fluoroscopy;
3. There was ≥ 50% relief and functional improvement for at least 2 months;

4. At least 2 months have passed since the last TFESI;
5. Less than 4 injections have been given at the same site within 12 months;
6. Less than 12 months have elapsed since the initial injection at the level requested.

E. *Continuation of injections beyond 12 months or more than 4 therapeutic injections* is considered **not medically necessary** because effectiveness and safety has not been established. When more definitive therapies cannot be tolerated or provided, consideration will be made on a case by case basis.

F. *TFESIs* for any other indication are considered **not medically necessary** because effectiveness has not been established.

Background

Epidural steroid injections/selective nerve root blocks

There is great controversy regarding the effectiveness of invasive interventions for spinal pain. Epidural glucocorticoid injections have been used for pain control in patients with radiculopathy, spinal stenosis, and nonspecific low back pain despite inconsistent results as well as heterogeneous populations and interventions in randomized trials. Epidural injections are performed utilizing 3 approaches in the lumbar spine: caudal, interlaminar, and transforaminal. Generally, candidates for epidural steroid injection are individuals who have acute radicular symptoms or neurogenic claudication unresponsive to traditional analgesics and rest, with significant impairment in activities of daily living. Epidural steroid injections have been used in the treatment of spinal stenosis for many years, and no validated long-term outcomes have been reported to substantiate their use. However, significant improvement in pain scores, have been reported at 3 months. A SNRB is primarily used to diagnose the specific source of nerve root pain. In a SNRB, a local anesthetic is used. When used for therapeutic indications, a steroid is added and it is usually referred to as a selective transforaminal epidural steroid injection.

Zhai et al conducted a meta-analysis to assess the effects of various surgical and nonsurgical modalities, including epidural injections, used to treat lumbar disc herniation (LDH) or radiculitis.[2] A systematic literature search was conducted to identify RCTs which compared the effect of local anesthetic with or without steroids. The outcomes included pain relief, functional improvement, opioid intake, and therapeutic procedural characteristics. The reviewers concluded that the meta-analysis confirms that epidural injections of local anesthetic with or without steroids have beneficial but similar effects in the treatment of patients with chronic low back and lower extremity pain.[2]

Results of a 2 year follow-up of 3 randomized, double-blind, controlled trials, with a total of 360 patients with chronic persistent pain of disc herniation receiving either caudal, lumbar interlaminar or transforaminal epidural injections, showed similar efficacy of the 3 techniques with local anesthetic alone or local anesthetic with steroid.[3] Interlaminar injections with steroids were superior to transforaminal at 12-months.[3]

Coding Implications

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted

CPT® Codes	Description
64479	Injection(s), anesthetic agent(s) and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); cervical or thoracic, single level
64480	Injection(s), anesthetic agent(s) and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); cervical or thoracic, each additional level (List separately in addition to code for primary procedure)
64483	Injection(s), anesthetic agent(s) and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); lumbar or sacral, single level
64484	Injection(s), anesthetic agent(s) and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); lumbar or sacral, each additional level (List separately in addition to code for primary procedure)

HCPCS Codes	Description
N/A	

ICD-10-CM Diagnosis Codes that Support Coverage Criteria
+ Indicates a code requiring an additional character

ICD-10-CM Code	Description
G56.00-G56.93	Mononeuropathies of upper limb
G57.00-G57.93	Mononeuropathies of lower limb
M48.061- M48.062	Spinal stenosis, lumbar region
M50.00-M50.93	Cervical disc disorders
M51.04-M51.06	Thoracic, thoracolumbar, and lumbosacral intervertebral disc disorders with myelopathy
M51.14-M51.27	Thoracic, thoracolumbar and lumbosacral intervertebral disc disorders with radiculopathy
M54.12	Radiculopathy, cervical region
M54.13	Radiculopathy, cervicothoracic region
M54.14	Radiculopathy, thoracic region
M54.15	Radiculopathy, thoracolumbar region
M54.16	Radiculopathy, lumbar region
M54.17	Radiculopathy, lumbosacral region
M54.30-M54.32	Sciatica
M54.40-M54.42	Lumbago with sciatica
M54.5	Low back pain

Reviews, Revisions, and Approvals	Revision Date	Approval Date
Converted corporate to local policy.	08/15/2020	
Minor revision to description of CPT 64479, 64480, 64483 and 64484. Replaced "member" with "members/enrollee" in the disclaimer.	10/2021	
Annual review. References reviewed and updated. In policy statement, removed option for procedures "without radiographic guidance." Reviewed by specialist. Changed "Last Review Date" in header to "Date of Last Revision" and changed "Date" in Revision log to "Revision Date".	1/2022	

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Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional

organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. LHCC makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved.

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