Prior Authorization Review Panel

CHC-MCO Policy Submission

A separate copy of this form must accompany each policy submitted for review.
Policies submitted without this form will not be considered for review.

Plan: PA Health & Wellness	**Submission Date: 10/01/2018**
Policy Number: PA.PA. 118	**Effective Date: 01/01/18** **Revision Date: 08/2018**
Policy Name: Injections and Radiofrequency Neurotomy for Pain Management	**HC Approval Date:**

Type of Submission – Check all that apply:

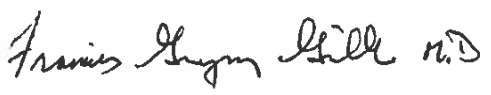
- ☐ **New Policy**
- ☒ **Revised Policy***
- ☐ **Annual Review – No Revisions**
- ☐ **Attestation of HC PARP Policy –** *This option should only be used during Readiness Review for Community HealthChoices. The policy must be identical to the PARP approved policy for the HealthChoices Program, with the exception of revisions/clarifications adding the term "Community HealthChoices" to the policy.*

***All revisions to the policy must be highlighted using track changes throughout the document.**

Please provide any changes or clarifying information for the policy below:

Retire PA.CP.MP 118. The Criteria have been split into the following separate NEW Clinical Policies:

- PA.CP.MP.164 Caudal or Interlaminar Epidural Steroid Injections
- PA.CP.MP.165 Selective Nerve Root Blocks and Transforaminal Epidural Steroid Injections
- PA.CP.MP.166 Sacroiliac Joint Interventions
- PA.CP.MP.167 Intradiscal Steroid Injections
- PA.CP.MP. 169 Trigger Point Injections
- PA.CP.MP.170 Nerve Blocks
- PA.CP.MP.171 Facet Joint Interventions

Name of Authorized Individual (Please type or print): Francis G. Grillo, MD	**Signature of Authorized Individual:** 

Clinical Policy: Injections and Radiofrequency Neurotomy for Pain Management

Reference Number: PA.CP.MP.118
Effective Date: 01/18
Last Review Date: 09/17
RETIRED 09/2018

Coding Implications
Revision Log

Description

Invasive pain management procedures considered in this policy include epidural steroid injections/selective nerve root blocks, facet joint diagnostic and therapeutic blocks and radiofrequency ablation, sacroiliac joint injections and radiofrequency ablation, intradiscal steroid injections, trigger point injections, occipital nerve blocks, peripheral nerve blocks and sympathetic blocks.

Policy/Criteria

It is the policy of Pennsylvania Health and Wellness® that invasive pain management procedures performed by a physician are **medically necessary** when *the relevant criteria are met and the patient receives only one procedure per visit, with or without radiographic guidance.*

I.

I. Cervical/thoracic/lumbar/caudal, interlaminar epidural Steroid Injections

A. Up to a total of two diagnostic cervical/thoracic/lumbar/caudal, interlaminar epidural steroid injections (ILESI's) given at one level per session, at least 2 weeks apart for chronic pain are considered medically necessary to establish a diagnosis and confirm beneficial response when all of the following are met:
   1. Persistent radicular pain caused by spinal stenosis, disc herniation or degenerative changes in the vertebrae, that interferes with ADLs, that has lasted for at least 3 months;
   2. Patient has failed 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.
   3. Patient is not currently being treated with full anticoagulation therapy. For patients on warfarin, INR (international normalized ratio) 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.

B. If no improvement is seen after the first two injections, *subsequent ILESI's* are considered **not medically necessary** because effectiveness has not been established.

C. If recurrence of symptoms occurs after a favorable response to diagnostic injections, *therapeutic ILESI's* are considered **medically necessary** when all of the following are met:
   1. There is ≥ 50% relief for at least 2 months associated with functional improvement from the initial injection(s);
   2. *ILESI* is given at intervals of no more frequently than every 3 months.
   3. A maximum of 4 therapeutic injections may be given at the same site within 12 months.

D. *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.

E. *ILESI 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 that interferes substantially with ADLs;
   2. Severe pain persists after treatment with NSAID and/or opiate (both ≥ 3 days or contraindicated/not tolerated);
   3. The member cannot tolerate chiropractic or physical therapy and the injection is intended as a bridge to therapy.

F. *ILESI for any other indication or location* is considered **not medically necessary** because effectiveness has not been established.

II. Selective Nerve Root Blocks/Transforaminal Epidural Steroid Injections

A. *Diagnostic SNRB/TFESI* performed at either two levels unilaterally, or one level bilaterally, at the exact level of the lesion per session, up to a total of two sessions given at least 2 weeks apart for chronic pain are considered **medically necessary** to establish a diagnosis and confirm beneficial response when all the following criteria are met:
   1. Persistent radicular pain in a defined nerve root level caused by disc herniation or foraminal stenosis at that specific level in the spine, as confirmed by imaging, that interferes with ADLs and has lasted for at least 3 months;
   2. Patient has failed 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;

3. Patient is not currently being treated with full anticoagulation therapy. For patients 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.

C. If no improvement is seen after the first two injections, subsequent *SNRB/TFESI* are considered **not medically necessary** because their effectiveness has not been established

D. If recurrence of symptoms occurs after a favorable response to diagnostic injections, *therapeutic SNRB/TFESI* are considered **medically necessary** when all of the following is met:
   1. There is ≥ 50% relief for at least 2 months associated with functional improvement from the initial injection(s);
   2. SNRB/TFESI is given at intervals of no more frequently than every 3 months;
   3. A maximum of 4 therapeutic injections may be given at the same site within 12 months.

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. *SNRB/TFESI* for ***acute*** *pain management* (pain lasting < 3months) 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. Severe pain persists after treatment with NSAID and/or opiate (both ≥ 3 days or contraindicated/not tolerated);
   3. The member cannot tolerate chiropractic or physical therapy and the injection is intended as a bridge to therapy.

G. *SNRB/TFESI* for any other indication or location is considered **not medically necessary** because effectiveness has not been established.

III. Facet Joint Interventions

A. Up to two* *controlled medial branch blocks* given at least 2 weeks apart are considered **medically necessary** when all the following criteria are met:
   1. Intermittent or continuous back pain that interferes with ADLs has lasted for ≥ 3 months;
   2. Patient has failed 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;

3. Clinical findings suggest facet joint syndrome and imaging studies suggest no other obvious cause of the pain (e.g., disc herniation, radiculitis, discogenic or sacroiliac pain). Physical findings of spinal facet joint syndrome can include low back pain exacerbated on extension and rotation; positive response to facet loading maneuvers or pain worse at night;

*Note: If the first *controlled medial branch block/facet joint injection* is negative, a second block is ***not medically necessary***

B. *Facet joint medial branch conventional radiofrequency neurotomy in the lumbar and cervical regions* is considered **medically necessary** in the treatment of chronic back or neck pain when all of the following criteria are met:
   1. Two positive diagnostic controlled facet joint injections/medial branch block(s) (at each region to be treated) as indicated by ≥ 75% pain relief with the ability to perform prior painful movements without significant pain;
   2. All regions being treated will be treated at the same time provided all can be performed safely.

C. *Repeat facet joint medial branch conventional radiofrequency neurotomy of the lumbar and cervical regions* is considered **medically necessary** in the management of chronic back or neck pain when the following criteria are met:
   1. At least 6 months have elapsed since the previous treatment;
   2. ≥ 50% relief is obtained for at least 4 months with associated functional improvement following the previous treatment;
   3. No more than three spinal levels, or two levels bilaterally, are to be treated at the same session.

D. *Conventional radiofrequency neurotomy of the facet joints* of the thoracic region is considered **not medically necessary** because effectiveness has not been established. There is a need for further well-designed, randomized controlled trials to evaluate effectiveness.

E. *Pulsed radiofrequency neurotomy of the facet joints* is considered **not medically necessary.** The available evidence on the effectiveness of pulsed radiofrequency in the treatment of patients with various chronic pain syndromes is largely based on retrospective, case series studies. Its clinical value needs to be examined in well-designed, randomized controlled trials with large sample size and long-term follow-up. Studies on pulsed radiofrequency ablation continue to be done.

F. *Therapeutic facet joint injections* are considered **not medically necessary** because effectiveness has not been established.

I. Sacroiliac Joint Interventions

II. Up to two *diagnostic sacroiliac joint (SIJ) injections for the diagnosis of SIJ pain* separated by at least 2 weeks are considered medically necessary **when all of the following criteria are met:**

III. Somatic or nonradicular low back and lower extremity pain below the level of L5 vertebra that interferes with ADLs for at least 3 months;

IV. Tenderness by palpation present over SIJ;

V. **There is a positive response to at least three SIJ pain provocation tests (distraction, compression, thigh thrust, Gaenslen's, and sacral thrust);**
VI. **Patient has failed to respond to conservative therapy including all of the following:**
VII. **≥ 6 weeks chiropractic, physical therapy or prescribed home exercise program;**
VIII. **NSAID ≥ 3 weeks or NSAID contraindicated or not tolerated;**
IX. **≥ 6 weeks activity modification;**
X. **Clinical findings and imaging studies, when available, lack obvious evidence for disc-related or facet joint pain;**
XI. **No other possible diagnosis is more likely.**
XII.
XIII. **If recurrence of symptoms occurs after a favorable response to diagnostic injections, *therapeutic SIJ injections* are considered** medically necessary **when all of the following are met:**
XIV. **There is ≥ 50% relief for at least 2 months associated with functional improvement from the initial injection(s);**
XV. **Administered for temporary relief of lower back pain in conjunction with other noninvasive treatment methods (e.g., to participate in physical therapy), and not as a stand-alone therapy;**
XVI. **SIJ injection is given at intervals of no more frequently than every 2 months;**
XVII. **A maximum of 4 therapeutic injections may be given at the same site within 12 months.**
XVIII.
XIX. ***Continuation of injections* beyond 12 months 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.**
XX.

Radiofrequency neurotomy (conventional, cooled, and pulsed) of the SIJ is considered not medically necessary because effectiveness has not been established. High-quality studies are lacking for conventional and pulsed radiofrequency neurotomy of the SIJ. For cooled radiofrequency neurotomy, additional well-designed studies are needed to evaluate effectiveness.

XXI. Intradiscal Steroid Injection

1. *Intradiscal steroid injections* are considered not medically necessary because effectiveness has not been established. The published literature suggests both positive and negative results. Further research is being done to determine the safety and efficacy of injecting steroids directly into the disc.

XXII. Trigger Point Injections

A. Trigger point injections of corticosteroids and/or local anesthetics, are considered **medically necessary** for *diagnosis/stabilization* when all of the following are met:
   1. Patient has local pain symptoms in the neck, shoulder and/or back that have persisted for more than 3 months causing tenderness and/or weakness, restricting motion and/or causing referred pain when compressed;
   2. Patient has failed ≥ 3 weeks of conventional multidisciplinary medical therapy including all of the following:
      a. Chiropractic, physical therapy, or prescribed home exercise program or the member is unable to tolerate such therapy and the injection is intended as a bridge to therapy;
      b. NSAID unless contraindicated or not tolerated;
      c. Activity modification;
   3. Trigger points have been identified by palpation;

4. Trigger points are located in a *few* discrete areas, and are not associated with widespread areas of muscle tenderness (as with fibromyalgia);
5. Injections are not used in isolation as sole method of treatment. They should facilitate mobilization by providing pain relief and assist in application of non-invasive modalities, e.g., physical therapy, medications, and other alternate therapies that address muscle strengthening, flexibility, and functional restoration.

Up to 2 sets of injections may be given for diagnosis and stabilization at intervals no more frequently than every 7 days for the same trigger point. When a given body region is injected, it will be considered as one injection service no matter how many injections are given.

B. *Therapeutic trigger point injections* are considered **medically necessary** when all of the following are met:
   1. Prior injections (diagnostic or therapeutic) resulted in ≥ 50% improvement for ≥ 6 weeks;
   2. There was a return of pain and/or deterioration following 6 weeks of improvement;
   3. Injections are given in the neck, shoulder, and/or back;
   4. Injections are given no more frequently than every 2 months for up to 12 months (maximum of 6 sessions);
   5. Injections are not used in isolation as sole method of treatment. They should facilitate mobilization by providing pain relief and assist in application of non-invasive modalities, e.g., physical therapy, medications, and other alternate therapies that address muscle strengthening, flexibility, and functional restoration.

   When a given body region is injected, it will be considered as one injection service no matter how many injections are given.

C. The following types of *trigger point therapies* are considered **not medically necessary**, because although there are ongoing studies, there is little scientifically based data that their use results in improved patient outcomes in the medical literature:
   1. Dry needle stimulation of trigger points;
   2. Trigger point injection with saline or glucose;
   3. The use of Botox during trigger point injections.

XXIII. Interventions for Occipital Neuralgia (Occipital Nerve Block)

A. Local injections of corticosteroids and/or local anesthetics for *occipital neuralgia* are considered **medically necessary** for the diagnosis and treatment of occipital neuralgia when all of the following is met:
   1. Patient has unilateral or bilateral pain located in the distribution of the greater, lesser and/or third occipital nerves;
   2. Pain has two of the following three characteristics:
      a. Recurring in paroxysmal attacks lasting from a few seconds to minutes
      b. Severe intensity
      c. Shooting, stabbing, or sharp in quality
   3. Pain is associated with both of the following:

a. Dysesthesia and/or allodynia apparent during innocuous stimulation of the scalp and/or hair
b. Tenderness over the affected nerve branches

4. Patient has failed 6 weeks of conservative treatment including all of the following:
   a. Heat, rest and/or physical therapy, including massage;
   b. NSAID unless contraindicated or not tolerated;
   c. Oral anticonvulsant medications (e.g., carbamazepine, gabapentin, pregabalin);
   d. Tricyclic antidepressants;
   e. Activity modification to address triggers.

B. Repeat occipital nerve block is considered medically necessary if recurrence of symptoms occurs after a favorable response, when both of the following is met:
   1. There is ≥ 50% relief for at least 2 months associated with functional improvement from the initial injection;
   2. A maximum of 4 injections may be given within 12 months.

XXIV. Genicular Nerve Blocks and Genicular Nerve Radiofrequency Neurotomy

Genicular nerve blocks and *radiofrequency neurotomy of the articular nerve* are considered **not medically necessary** because effectiveness has not been established. There is a paucity of published studies to determine safety and effectiveness.

XXV. Peripheral/Ganglion Nerve Blocks for the Treatment of Chronic Nonmalignant Pain

Peripheral/ganglion nerve blocks for any condition not indicated elsewhere in this policy are considered **not medically necessary** as there is ongoing research but insufficient evidence to establish efficacy.

XXVI. Sympathetic Nerve Blocks

Sympathetic nerve blocks have **limited evidence** to prove effectiveness of treatment and consideration will be made on a case by case basis. The criteria in 1 through 3 below provide a basis for documenting patient-specific clinical information to help guide clinical decision making.

1. Diagnosis of *complex regional pain syndrome* (CRPS) (also called reflex sympathetic dystrophy) and all of the following:
   a. Pain is being managed by a pain management specialist with experience treating CRPS;
   b. Patient is in an active rehabilitation regimen;
   c. Failed ≥ 3 weeks of conservative therapies such as activity modification, exercises, topical capsaicin cream, and oral medical management such as nonsteroidal anti-inflammatories, antidepressants, anticonvulsants and glucocorticoids;
   d. ≥ 2 of the following findings of the involved digit/extremity:
      i. Allodynia (pain sensation in response to a typically non-painful stimulus);
      ii. Swelling/tenderness;
      iii. Cyanotic/red/pale digit/extremity;
      iv. Increased sweating;
      v. Alteration of temperature;
      vi. Persistent loss of motion;

2. Diagnosis of *ischemic limb pain* and all of the following:
   a. Intractable pain at rest or non-healing ulcer;
   b. Severe peripheral artery disease by angiogram or Doppler;
   c. Patient not a candidate for revascularization (lesion(s) not amenable to reconstruction, lesion(s) not amenable to angioplasty, patient with comorbid condition or previous failed revascularization);
3. Diagnosis of *pancreatic cancer* with severe abdominal/back pain.

A. Celiac nerve block for *acute or chronic pancreatitis* is considered **not medically necessary** as effectiveness has not been established.

XXVII. Intercostal Nerve Block, Neurolysis

A. *Intercostal nerve block/neurolysis* is considered **medically necessary** for chronic neuralgic pain secondary to an injured intercostal nerve as a result of a rib fracture, a thoracotomy incision or chronic pain due to post herpetic neuralgia, or other neuropathic process when all of the following are met:
   2. Suspected organic problem;
   3. Non-responsiveness to conservative modalities of treatment;
   4. Pain and disability of moderate to severe degree;
   5. No evidence of contraindications such as infection or pain of predominately psychogenic origin.

XXVIII. All other procedures not specifically addressed in this policy will be considered on a case by case basis.

Background

Pain adversely affects the function and wellbeing of an individual. Chronic pain can be persistent or episodic in duration or intensity. Invasive pain management procedures considered in this policy include facet joint diagnostic and therapeutic blocks and radiofrequency ablation, sacroiliac joint injections, epidural steroid injections/selective nerve root blocks, percutaneous adhesiolysis, trigger point injections, trochanteric bursa injections, sympathetic blocks, lumbar discography and spinal cord stimulation.

Epidural steroid injections/selective nerve root blocks

The debate continues on the efficacy and medical necessity of multiple interventions provided in managing 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.

Zhai et al (2015) 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. 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 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.

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. Caudal and interlaminar trials used in the assessment showed some superiority of steroids over local anesthetic, at 3 and 6 month follow-up. Interlaminar with steroids were superior to transforaminal at 12-months.[53]

Facet Joint Interventions
Chronic low back pain is frequently attributed to disorders of the facet joint. Neck pain related to whiplash injury is also thought to be related to the cervical zygapophyseal facet joint. However, the diagnosis of facet joint pain is difficult and often is based on pain relief following a diagnostic pain block of the medial branch of the posterior rami of the spinal nerve supplying the facet joint.

Patients referred for facet injections most often have degenerative disease of the facet joints. However, even if the facet joint appears radiologically normal, facet injections still may be of use as radiologically occult synovitis can cause facet pain, particularly in younger patients. Post laminectomy syndrome, or nonradicular pain occurring after laminectomy, is also an acceptable reason to perform facet injections.

Based on the outcome of a facet joint nerve block, if the patient gets sufficient relief of pain but the pain recurs, one of the options is to denervate the facet joint. Radiofrequency neurotomy, also known as radiofrequency ablation, has been shown to temporarily reduce cervical and lumbar pain. Radiofrequency neurotomy involves delivering radio waves to targeted nerves via needles inserted through the skin. The heat created by the radio waves interferes with the nerves' ability to transmit pain signals.

Sacroiliac Joint Injections
Treatment for sacroiliac joint dysfunction is usually conservative (non-surgical) and focuses on trying to restore normal motion in the joint. In patients who have failed 4 to 6 weeks of a comprehensive exercise program, local icing, mobilization/manipulation and NSAIDs, a SIJ injection can be helpful for both diagnostic and therapeutic purposes. SIJ injections into the synovial sac of the SIJ may provide immediate and significant pain relief. At least 50% resolution of the patient's pain over the ipsilateral SIJ is considered diagnostic of pain emanating from the SIJ. Adding a steroid to the solution injected may help to reduce any inflammation that may exist within the joint(s) and result in a prolonged period of freedom from pain.

Visser et al (2013) assessed which treatment is successful for SIJ-related back and leg pain. Using a single-blinded randomized trial, the authors assessed the short-term therapeutic efficacy of physiotherapy, manual therapy, and intra-articular injection with local corticosteroids in the SIJ in 51 patients with SIJ-related leg pain. The effect of the treatment was evaluated after 6 and 12 weeks. Manual therapy had a significantly better success rate than physiotherapy ($p = 0.003$). The authors concluded in the small single-blinded prospective study, manual therapy appeared to be the choice of treatment for patients with SIJ-related leg pain. A second choice of treatment to be considered is an intra-articular injection.

Intradiscal Steroid Injections

There is no convincing evidence that intradiscal glucocorticoids are effective for low back pain.[6] In patients with MRI evidence of degenerative disc disease and a positive response to discography, two trials found no difference between intradiscal steroid and control injection (saline or local anesthetic).[6] A third trial found that in patients with degenerative disc disease who failed an epidural steroid injection, intradiscal steroid injection was superior to discography alone only in the subgroup of patients with inflammatory endplate changes on MRI. However, outcomes were not well defined in this trial and levels of statistical significance were poorly reported. Based on these trials, the American Pain Society guideline recommends against intradiscal glucocorticoid injection for chronic low back pain.[9]

The use of intradiscal steroid injections is also debated because intradiscal steroid may cause discitis, progression of disc degeneration, and calcification of the intervertebral disc.

Trigger Point Injections

A trigger point is a discrete, hyperirritative focus found in a palpable taut band occurring in any skeletal muscle and/or muscle fascia on the body that is particularly sensitive to touch and, when compressed, gives rise to characteristic referral pain patterns, tenderness and autonomic phenomena. These trigger points are thought to result from repetitive strain produced by acute or chronic overload or a degenerative and/or inflammatory problem, such as arthritis.

Gerwin et al. (2012) completed a review of literature relevant to the treatment of myofascial pain syndrome by botulinum injections. All identifiable series were reviewed, including open label, single-blinded and double-blinded studies, randomized and controlled, or not. The studies were evaluated according to their design and the selection of outcome measurements, and the interpretation of results. Problems that were common to the studies were robust placebo responders, incomplete treatment of a regional myofascial pain syndrome, inappropriate or confounding control populations or treatments, and inappropriate time periods for assessment of outcomes, or misinterpretation of the time-frame of action of botulinum toxin. The studies of the effect of botulinum toxin treatment of myofascial trigger points have had mixed results. However, few studies have been designed to avoid many of the pitfalls associated with a trial of botulinum toxin treatment of trigger points. Better-designed studies may give results that can be used to guide practice based on reliable evidence. At the present time, the available evidence is insufficient to guide clinical practice.

Local Injections for Cervicogenic and Occipital Neuralgia

Greater occipital nerve blocks have been advocated as a diagnostic test for cervicogenic headache and occipital neuralgia. The effectiveness of greater occipital nerve block in patients with primary headache syndromes is controversial. The International Headache Society (IHS) defines occipital neuralgia as unilateral or bilateral paroxysmal, shooting or stabbing pain in the posterior part of the scalp, in the distribution of the greater, lesser or third occipital nerves, sometimes accompanied by diminished sensation or dysaesthesia in the affected area and commonly associated with tenderness over the involved nerve(s).[54] The IHS includes relief of pain following a local anesthetic block of the affected nerve as part of their diagnostic criteria for occipital neuralgia. Thus, the principal indication for occipital block is diagnosis. Another indication is the treatment of chronic occipital neuralgia, often with a series of therapeutic blocks combining local anesthetic and corticosteroid. Pain relief is typically prompt and may last several weeks or even months. At that time the injection may be repeated.

Genicular Nerve Blocks and Radiofrequency Neurotomy
Genicular nerve blocks and radiofrequency neurotomy are emerging interventions for knee pain. A few small studies suggest that genicular radiofrequency neurotomy based on results of genicular nerve blocks may be effective for relief of pain. However, further research, including RCTs, are needed to establish safety and effectiveness.

Sympathetic Nerve Blocks
Nerve blocks are the temporary interruption of conduction of impulses in peripheral nerves or nerve trunks created by the injection of local anesthetic solutions. Sympathetic nerves may be injected for several reasons:

- Diagnostic - to determine the source of pain, e.g., to identify or pinpoint a nerve that acts as a pathway for pain; to determine the type of nerve that conducts the pain; to distinguish between pain that is central (within the spinal cord) or peripheral (outside the spinal cord) in origin; or to determine whether a neurolytic block or surgical lysis of the nerve should be performed;
- Therapeutic - to treat painful conditions that respond to nerve blocks (e.g., celiac block for pain of pancreatic cancer); and
- Prognostic - to predict the outcome of long-lasting interventions (e.g., lumbar sympathectomy).

The response to sympathetic blockade is the best diagnostic test for CRPS. If the patient has had a technically successful sympathetic block and does not obtain significant relief, then the patient probably does not have CRPS. Over two thirds of patients will obtain significant relief with minimal effect on motor and sensory function because the sympathetic fibers are the least myelinated (as compared to motor and sensory nerve fibers) these fibers are the first to be affected by the local anesthetic.

Intercostal Nerve Blocks
Intermittent intercostal nerve blocks can be used to control pain in the chest and upper abdomen, such as pain associated with rib fractures or chronic pain due to post herpetic neuralgia. Intercostal nerve blocks can be performed using anatomic landmarks or with ultrasound guidance, which can be used to minimize the chance of intravascular injection and pneumothorax and to increase reliable dermatomal coverage. [41 45]

For isolated injuries, such as single rib fracture, nonsteroidal anti-inflammatory drugs with or without opioids would be the initial treatment. For more severe injuries, particularly if ventilation is compromised, intercostal nerve blocks may be needed. For patients with multiple rib fractures, there is a need to perform the procedure at multiple intercostal levels. Repeated blockade may be needed for prolonged relief upon return of pain and/or deterioration in functional status. For repeat blocks or other interventions, patient must have been responsive to prior interventions with improvement in physical and functional status. [42] [45]

Regional anesthesia plays an important role in thoracic surgery, particularly with regard to post-operative pain control. The first choice of regional anesthesia for thoracic surgery is epidural analgesia or thoracic paravertebral block. In general, the analgesic efficiencies of both these types of anesthesia are equivalent; however, thoracic paravertebral block has some advantages over epidural analgesia, including fewer complications. When these two blocks are contraindicated, intercostal nerve block or interpleural block should be considered. [43] [44]

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 2017, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

CPT®* Codes	Description
20552	Injection(s); single or multiple trigger point(s), 1 or 2 muscle(s)
20553	Injection(s); single or multiple trigger point(s), 3 or more muscle(s)
27096	Injection procedure for sacroiliac joint, anesthetic/steroid, with image guidance (fluoroscopy or CT) including arthrography when performed
62323	Injection(s), of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); with imaging guidance (ie, fluoroscopy or CT)
64405	Injection, anesthetic agent, greater occipital nerve
64420	Injection, anesthetic agent, intercostal nerve, single
64421	Injection, anesthetic agent, intercostal nerves, multiple, regional block
64450	Injection, anesthetic agent, other peripheral nerve or branch

64479	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); cervical or thoracic, single level
64480	Injection(s), anesthetic agent 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 and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); lumbar or sacral, single level
64484	Injection(s), anesthetic agent 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
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)
64505	Sympathetic nerve block: sphenopalatine ganglion
64508	Sympathetic nerve block, carotid sinus
64510	Sympathetic nerve block, stellate ganglion (cervical sympathetic)
64517	Sympathetic nerve block, superior hypogastric plexus
64520	Sympathetic nerve block, lumbar or thoracic (paravertebral sympathetic)
64530	Sympathetic nerve block, celiac plexus
64620	Destruction by neurolytic agent, intercostal nerve
64633	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); cervical or thoracic, single facet joint
64634	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); cervical or thoracic, each additional facet joint (List separately in addition to code for primary procedure)
64635	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); lumbar or sacral, single facet joint

64636	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); lumbar or sacral, each additional facet joint (List separately in addition to code for primary procedure)
64640	Destruction by neurolytic agent; other peripheral nerve or branch
77003	Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinous diagnostic or therapeutic injection procedures (epidural, subarachnoid, or sacroiliac joint), including neurolytic agent destruction

ICD-10-CM Diagnosis Codes that Support Coverage Criteria

ICD-10-CM Code	Description
B02.23	Postherpetic polyneuropathy
B02.29	Other Postherpetic nervous system involvement
C25.0-C25.9	Malignant neoplasm of pancreas
C56.42	Causalgia of upper limb
D49.9	Neoplasm of unspecified behavior of unspecified site
G56.40	Causalgia of unspecified upper limb
G54-G54.9	Nerve root and plexus disorders
G54.0	Brachial plexus disorders
G60.9	Hereditary and idiopathic neuropathy
G89.21	Chronic pain due to trauma
G89.22	Chronic post thoracotomy pain
G89.28	Other chronic post procedural pain
G89.29	Other chronic pain
G89.4	Chronic pain syndrome
G90.5-G90.59	Complex regional pain syndrome
M25.579	Pain in joint
M43.00	Spondylolysis, site unspecified
M43.10-M43.19	Spondylolisthesis, site unspecified
M46.00-M46.99	Other inflammatory spondylopathies
M46.1	Sacroiliitis, not elsewhere classified
M47	Spondylosis
M47.1	Other Spondylosis with myelopathy
M47.12	Other Spondylosis with myelopathy, cervical region
M47.13	Other Spondylosis with myelopathy, cervicothoracic region
M47.14	Other Spondylosis with myelopathy, thoracic region
M47.15	Other Spondylosis with myelopathy, thoracolumbar region
M47.16	Other Spondylosis with myelopathy, lumbar region
M47.17	Other Spondylosis with myelopathy, lumbosacral region
M47.812	Spondylosis without myelopathy or radiculopathy, cervical region
M47.813	Spondylosis without myelopathy or radiculopathy, cervicothoracic region

ICD-10-CM Code	Description
M47.814	Spondylosis without myelopathy or radiculopathy, thoracic region
M47.815	Spondylosis without myelopathy or radiculopathy, thoracolumbar region
M47.816	Spondylosis without myelopathy or radiculopathy, lumbar region
M47.817	Spondylosis without myelopathy or radiculopathy, lumbosacral region
M47.819	Spondylosis without myelopathy or radiculopathy, site unspecified
M48.00 - M48.9	Other spondylopathies
M49.8 - M49.89	Spondylopathy in diseases classified elsewhere
M50.00 - M50.03	Cervical disc disorder with myelopathy
M50.1 - M54.9	Other dorsopathies
M75.0	Adhesive capsulitis of shoulder
M76.9	Entesopathies, lower limb, excluding foot
M77.00-M77.9	Other entestopathies
M79.0-M79.9	Other and unspecified soft tissue disorders, not elsewhere classified
M96.1	Postlaminectomy syndrome, not elsewhere classified
Q76.2	Congenital spondylolisthesis
S22.41	Multiple fractures of ribs, right side
S22.42	Multiple fractures of ribs, left side
S22.43	Multiple fractures of ribs, bilateral
S33.6	Sprain of sacroiliac joint
S33.8	Sprain of other parts of lumbar spine and pelvis
S33.9	Sprain of unspecified parts of lumbar spine and pelvis

Reviews, Revisions, and Approvals	Date	Approval Date

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