Clinical Practice Guideline: Trigger Point Injections

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Date of Implementation: December 18, 2015

45 **Product:**

Specialty

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GUIDELINES

American Specialty Health – Specialty (ASH) considers services consisting of CPT Codes 20552 and 20553 to be medically necessary for the treatment of myofascial pain syndrome (see diagnoses in table below) with a local anesthetic, with or without steroid, when the following indications are met:

- 1. The patient's medical record must contain documentation that fully supports the medical necessity for trigger point injections as opposed to alternate forms of therapy; and
- 2. There is a regional pain complaint in the expected distribution of referral pain from a trigger point; and
- 3. There is restricted range of motion; and
- 4. A taut band is palpable in an accessible muscle with exquisite tenderness at one point along its length; and
- 5. Patient has been unsuccessful with ≥ 6 weeks or intolerant of conservative therapies:
 - o Activity modification
 - o Physical therapy/chiropractic
 - o Oral medication; and
- 6. The trigger point injections are being given as part of an overall management (usually short term) plan including other types of therapy (e.g., physical therapy, occupational therapy).

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The following schedule for trigger point injections is considered medically necessary when the previous criteria are met:

- In the diagnostic or stabilization phase, individuals may receive injections at intervals of no sooner than two weeks. The number of trigger point injections should be limited to no more than 4 times per year for the diagnostic and/or stabilization phase.
- In the treatment or therapeutic phase, trigger point injections should continue only if the previous diagnostic injections provided pain relief and the frequency should include an interval of 2 months or longer between each injection. The previous injections should have provided at least greater than 50% relief of pain for a period of at least 6 weeks and this should be documented in the medical record. Continued injections are based on the medical necessity criteria above and these will be limited to a maximum of 4 times per year for local anesthetic and steroid injections.

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| • | Regardless of the number of injections administered to sites or regions on a |
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| | particular day, only one service (CPT® 20552 or 20553) is medically necessary. |

- If a patient requires more than 4 sets/series of injections during one year, (trigger points in different anatomical locations), a report stating the unusual circumstances and medical necessity for giving the additional injections must accompany the request for review and individual consideration.
- The use of corticosteroid injections is *always* subject to medical necessity review. If the above criteria are not met, this service is considered not medically necessary.
 - Examples: Trigger point injections for treatment of headache, neck pain or low back pain in absence of actual trigger points, diffuse muscle pain, a chronic pain syndrome, lumbosacral canal stenosis, fibromyalgia, non-malignant multifocal musculoskeletal pain, complex regional pain syndrome, sexual dysfunction/pelvic pain, whiplash, neuropathic pain, and hemiplegic shoulder pain are considered unproven and therefore are not considered medically reasonable and necessary.

Use of fluoroscopy or MRI guidance for performance of TPI is not considered reasonable and necessary.

The use of ultrasound guidance for the performance of TPI is considered unproven. **CPT®** Codes and Descriptions

| CPT® Code | CPT® Code Description |
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| 20552 | Injections(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) |

DESCRIPTION/BACKGROUND

Myofascial trigger points (MTrPs) are defined as "hyperirritable spots in skeletal muscle associated with hypersensitive palpable nodules in a taut band" (Simons et al., 1998). These are characteristic of myofascial pain syndrome (MPS). Findings suggest that MPS is a complex form of neuromuscular dysfunction consisting of both motor and sensory abnormalities involving both the peripheral and central nervous systems (Shah and Gilliams, 2008). MTrPs are painful upon compression and can give a characteristic pain referral pattern. They can also give rise to referred tenderness, autonomic responses, motion restriction, and motor dysfunction. More specifically, trigger points are classified into active and latent trigger points. An "active" trigger point refers pain at rest, upon direct palpation, and with activity. On the other hand, "latent" trigger points are also painful upon compression but do not give off the characteristic referral pattern for the specific muscle

while at rest. Identification of MTrPs by palpation (flat or pincer technique) includes the following features:

- Identification of a taut muscle band containing a discrete palpable nodule
- Focal tenderness
- Spontaneous exclamation of pain by the patient (e.g., "jump sign", whole body movement) in response to digital pressure or dry needling
- Consistent and reproducible pattern of referred pain
- A local twitch response [LTR (muscle fasciculation)] by snapping or palpation

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Referred pain, LTR and EMG demonstration are not essential for clinical diagnosis but can be considered confirmatory observations (Dommerholt and Huijbregts, 2011).

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MTrPs are thought to form due to acute trauma or repetitive microtrauma, lack of exercise, nutritional deficiencies, postural faults, joint problems with dysfunctional movement patterns, proximal nerve compression and muscle spasm, muscle overload, and emotional stress (Shah et al., 2008; Simons et al., 1998; Dommerholt and Huijbregts, 2011). There is no laboratory or imaging test for establishing the diagnosis of trigger points; it depends therefore upon the detailed history and thorough examination.

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Trigger point injections are used to alleviate this pain. The goal is to identify and treat the cause of the pain, not just the symptoms. After making the diagnosis of myofascial pain syndrome and identifying the trigger point(s) responsible for it, various treatment options are available. Activity modification and physical therapy should be the first line of care. Passive and active physical therapy modalities should be implemented, including "stretch and spray" cold therapy, range of motion and deep soft tissue mobilization exercise therapy, and physical conditioning. Application of low intensity ultrasound directed at the trigger point may be helpful when the trigger point is otherwise inaccessible. Medical management may include consultation with a specialist in pain medicine or the use of analgesics and adjunctive medications, including anti-depressant medications, shown to be effective in the management of chronic pain conditions. If non-operative treatments fail or are not possible, trigger point injection of local anesthetic, with or without corticosteroid, into the muscle trigger points can be an effective modality for inactivating trigger points and providing relief of symptoms. Although not supported by rigorous randomized controlled trials (Cummings 2001), trigger point injections with a local anesthetic, with or without a steroid, are considered an accepted therapy for pain associated with myofascial pain syndrome or fibromyalgia. Ahmed et al. (2019) compared the effectiveness of local anesthetics and (botulinum-toxin A) BTX-A on pain intensity in patients with myofascial pain. In total, 33 studies were included. The meta-analyses revealed that local anesthetic injections were more effective than BTX-A at mitigating pain intensity. Multiple injection sessions of local anesthetics were more beneficial than a single session. Authors concluded that additional studies are needed to determine sources of heterogeneity mediating the observed differences in effectiveness of local anesthetic and BTX-A injections among the studies. Additional replicative studies are also needed to delineate the relative efficacy and effectiveness of local anesthetic and BTX-A injection. The quantitative results of this study suggest that patients overall experience more pain relief with local anesthetic injections.

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In order to establish trigger points, the practitioner should identify the muscle or muscles where the trigger point(s) is/are located and document that in the patient's medical record.

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Use of injections should be done as part of an overall management (usually short term) plan including one or more of the following:

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- 1. Diagnostic evaluation to clearly identify the primary cause, if possible
- 2. Physical and occupational therapy
- 3. Psychiatric evaluation and therapy
- 4. A trial of oral non-steroid analgesic/anti-inflammatory drugs, if not contraindicated

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Shipton et al. (2023) summarized trigger point management in an American Family Physician article. Trigger points producing myofascial pain syndromes are common in primary care. Some evidence from clinical trials supports massage, physical therapy, and osteopathic manual medicine as first-line less invasive treatment strategies. Trigger points are often treated with injections; although randomized trials have found statistically significant results with trigger point injections, conclusions are limited by low numbers of study participants, difficulty in blinding, the potential for a placebo effect, and lack of posttreatment follow-up. No single pharmacologic agent used in trigger point injections has been proven superior to another, nor has any single agent been proven superior to placebo. Trigger point injections, therefore, should be reserved for patients whose myofascial pain has been refractory to other measures, and family physicians should first employ less invasive treatment strategies. Trigger point management is only one part of a comprehensive, multimodal, and team-based approach to patients with myofascial pain.

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Per the summary published in Centers for Medicare & Medicaid Service LCD (L34211), trigger point injections (TPIs) have been described as an overall safe and effective modality for the treatment of pain associated with myofascial trigger points. There is moderate evidence to support the role of trigger point injections for myofascial pain related to the presence of a trigger point. However, there are no high quality randomized controlled trials or large observational studies to support this and most studies that have investigated TPI are not blinded, lack controls, standardized patient selection and assessment of improvement, have small sample sizes and lack of long-term follow-up.

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41 42 Evidence suggests that early conservative measures, such as physical therapy, may prevent the need for injections. Therefore, TPI are covered for refractory pain associated with trigger points that do not respond to conservative therapy or in patients with significant limitations in mobility that can be improved by the trigger point while undergoing conservative treatment. The frequency of trigger point injections is not well established in the literature, but most experts agree that the benefit should last at least 4 weeks and typically several months. There is lack of evidence to support more frequent injections are effective and beneficial for management of myofascial pain. There is a paucity of evidence on long term use of TPI and most literature is limited to 2 to 8 weeks. Use of TPI beyond 6 months is not supported in current literature.

The use of TPI for other conditions other than myofascial pain including non-specific low back pain (LBP), complex regional pain syndrome, widespread diffuse pain, chronic pain syndrome, fibromyalgia, pelvic floor myalgia, hemiplegic shoulder pain, lumbosacral canal stenosis, whiplash, non-malignant musculoskeletal pain, and neuropathic pain is not supported by evidence and therefore considered unproven.

There are some emerging studies that help define the ultrasound characteristics associated with trigger points and exploring a role of ultrasound guidance for TPI. There is a paucity of evidence that ultrasound improves effectiveness of TPI and a lack of evidence that it improves safety. Therefore, its use is considered not medically necessary.

PRACTITIONER SCOPE AND TRAINING

Practitioners should practice only in the areas in which they are competent based on their education, training, and experience. Levels of education, experience, and proficiency may vary among individual practitioners. It is ethically and legally incumbent on a practitioner to determine where they have the knowledge and skills necessary to perform such services and whether the services are within their scope of practice.

It is best practice for the practitioner to appropriately render services to a member only if they are trained, equally skilled, and adequately competent to deliver a service compared to others trained to perform the same procedure. If the service would be most competently delivered by another health care practitioner who has more skill and training, it would be best practice to refer the member to the more expert practitioner.

Best practice can be defined as a clinical, scientific, or professional technique, method, or process that is typically evidence-based and consensus driven and is recognized by a majority of professionals in a particular field as more effective at delivering a particular outcome than any other practice (Joint Commission International Accreditation Standards for Hospitals, 2020).

Depending on the practitioner's scope of practice, training, and experience, a member's condition and/or symptoms during examination or the course of treatment may indicate the need for referral to another practitioner or even emergency care. In such cases it is prudent for the practitioner to refer the member for appropriate co-management (e.g., to their primary care physician) or if immediate emergency care is warranted, to contact 911 as

| 1 | appropriate. See the Managing Medical Emergencies (CPG 159 - S) policy for |
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