

TRIGGER POINT INJECTION, DRY NEEDLING AND PROLOTHERAPY PROTOCOL

TRIGGER POINT INJECTIONS AND DRY NEEDLING

A. DESCRIPTION:

Myofascial trigger points are localized hyperirritable palpable nodules in extremely sensitive bands of taut skeletal muscle fibers. These nodules are painful on compression and give rise to local pain and pain referred to distant structures. Trigger point injections may be useful in some cases. Trigger point treatment can consist of either dry needling or the injection of a local anesthetic, with or without corticosteroid, into highly localized, extremely sensitive bands of skeletal muscle fibers that produce local and referred pain when activated. If medication is used, it be injected in a four-quadrant manner in the area of maximum tenderness. Injection efficacy can be enhanced if injections are immediately followed by myofascial therapeutic interventions, such as vapo-coolant spray and stretch, ischemic pressure massage (myotherapy), specific soft tissue mobilization, and physical modalities. Dry needling does not include the injection of a local anesthetic and/or steroid medication into myofascial trigger points.

There is conflicting evidence that the injection of medications provides benefit over the results of dry needling alone. Trigger point injection and/or dry needling is not the equivalent of acupuncture.

B. CURRENT EVIDENCE SUPPORTING USE:

There is conflicting evidence regarding the benefit of trigger point injections. A truly blind study comparing dry needle treatment of trigger points is not feasible. There is no evidence that injection of medications improves the results of trigger-point injections. Needling alone may account for some of the therapeutic response. Needling must be performed by practitioners with the appropriate credentials in accordance with state and other applicable regulations. There is no indication for conscious sedation for patients receiving trigger point injections. The patient must be conscious and alert to help identify the site of the injection(s).

C. INDICATIONS:

Dry needling should only be considered appropriate for use after other, less invasive modalities (physical therapy, heat/ice, electrical stimulation) have been tried and failed.

D. COMPLICATIONS:

Potential but rare complications of trigger point injections include infection, pneumothorax, anaphylaxis, penetration of viscera, neurapraxia, and neuropathy. If corticosteroids are injected in addition to local anesthetic, there is a risk of local myopathy. Severe pain on injection suggests the possibility of an intraneural injection, and the needle should be immediately repositioned.

E. DETAILS:

Time to produce effect: Local anesthetic 30 minutes; 24 to 48 hours for no anesthesia, i.e. dry needling.

Frequency: may be performed weekly, but with no more than 4 injection sites per session per week to avoid significant post-injection soreness, and not to exceed 4 sessions per 12-month period.

Optimal duration of effect: at least 4 Weeks. However, an initial trial of three injections, with objective improvement documented, must precede ongoing treatment(s). If no significant objectifiable improvement is seen after three injections, no further injections should be pursued. If there are not documented subjective and objective improvements at that point, further injections are not recommended.

Maximum duration: 8 weeks. Occasional patients may require 2 to 4 repetitions of trigger point injection series over a 1-to-2-year period.

Future modifications to the Trigger Point/Dry Needling Protocol may become necessary, as there is growing evidence that the injection of local anesthetics and/or corticosteroids may not provide substantial benefit over dry needling alone in the treatment of localized myofascial trigger points.

PROLOTHERAPY

A. DESCRIPTION:

A series of injections of hypertonic dextrose, with or without glycerine and phenol, into ligaments of various joints including those of the low back. Also known as sclerotherapy. An imaging tool such as ultrasound or fluoroscopy may be utilized to guide the injection.

B. INDICATIONS:

Prolotherapy may be used to treat musculoskeletal pain. Prolotherapy is generally *not* recommended for non-specific low back pain. However, it may provide a longer duration of pain relief than intra-articular steroid injections for some patients with ligamentous and/or SI joint pain.

For a patient with SI joint pain to be a candidate for prolotherapy, the provider must document all of the following:

At least 6 months of persistent functional impairment, unresponsive to intensive conservative therapies.

Localization of reported pain at the posterior superior iliac spine.

Three positive physical examination findings consistent with the SI joint being the source of pain.

Imaging and/or laboratory studies failing to indicate other more likely sources of the described symptoms.

Psychological evaluation and treatment if required.

Positive response to initial and confirmatory image-guided SI joint local anesthetic blocks, consisting of:

- Documented improvement in previously impaired SI joint function and provocative physical examination maneuvers within the expected time frame of a local anesthetic.

- 80% improvement in accepted pain scales (e.g., VAS or NRS), consistent with:

- * The expected duration of the injected local anesthetic phase and

- * A post-injection pain diary with a response time of at least 8 hours.

C. INDICATIONS:

Prolotherapy should only be considered appropriate for use after other, less invasive modalities (physical therapy, heat/ice, electrical stimulation, etc.) have been tried and failed.

D. COMPLICATIONS:

Potential complications of prolotherapy include infection, hemorrhage, pneumothorax, anaphylaxis, joint contracture, neurapraxia, and neuropathy.

Protocol History:

Passed: 5/20/2025