Trigger Point Injections Questions for Subject Matter Expert Panel

Please limit discussion to what is supported by evidence for the following questions. This discussion will be limited to trigger points and will not include Botox or nerve injections.

1. Do you agree with the following definitions (and if not, how would you define)?
    - Trigger point- a hyperirritable spot in skeletal muscle that is associated with a hypersensitive palpable nodule in a taut band and frequently associated with referred pain.
    - Trigger point injection- an invasive procedure where medication is injected directly into a trigger point.
    - Dry needling – an invasive procedure where a small needle is used to penetrate a trigger point in an area of a muscle without any injection of a medication.
    - Nerve block- an invasive procedure where medication is injected directly into or around a nerve.
    - Fibromyalgia - a chronic pain syndrome which presents with tender points, somatic symptoms and widespread musculoskeletal pain associated with the development of peripheral and central sensitization.
    - Myofascial pain syndrome - a chronic pain syndrome characterized by trigger points associated with the development of peripheral and central sensitization.
    - Tendon sheath injection – an invasive procedure where medication is injected into a tendon sheath.
    - Acupuncture- placement of thin needles to strategic points in treat pain and disease without injection of a medicine.

2. Do you agree the clinical history and physical exam requires: a taut band, a hypersensitive spot and/or nodule, and referred pain to diagnosis trigger points?

3. Is there evidence / society guidance to provide conservative care prior to proceeding with Trigger Point Injections (Conservative care includes analgesics, physical therapy, home exercise and other non-interventional modalities)?

4. What injectant should be used during trigger point injections? Is there any evidence to guide the type of injectant used and if a combination (such as local anesthetic alone or in combination with steroids) is more effective?

5. What is the expected duration of relief from trigger point injections? Define the variance, if any, with the specific agents used. Define the variance, if any, regarding underlying disease processes?

6. What pain assessment(s) should be done before and after trigger point injections? What if the use of trigger points is prolonged (chronic)? Should Fear Avoidance Behaviors be assessed? Should Pain Catastrophizing be assessed?

7. What percent improvement is considered a positive response? What criteria should be met to consider repeating injections? What evidence or societal guidance supports this?

8. Is there evidence for or guidance on repeating the injection to the same area? If yes, how frequently should trigger point injections be performed?

9. Is there a limit to how many trigger point injections can be performed during the same session? What evidence or societal guidance supports this?

10. For what duration should trigger point injections be utilized? What evidence or societal guidance supports this?

11. Do you agree trigger point injections should be performed as sole procedure and not in conjunction with other procedures during same session? Please explain why?

12. Are the circumstances where image guidance is necessary for trigger point injections?

13. What absolute contraindications are there for trigger point injections?

14. Rate the strength of evidence to support the effectiveness of Trigger Point Injections to relieve pain for the following conditions using very insufficient, low, moderate, or high quality to describe supporting evidence:
    a. Myofascial pain disorders
    b. Chronic low back pain
    c. Migraine/ other headache disorders
    d. Non-radicular neck pain
    e. Anterior cutaneous nerve entrapment syndrome
    f. Chronic pain syndrome
    g. Fibromyalgia
    h. Neuropathic pain
    i. Non-malignant musculoskeletal pain
    j. Lumbosacral canal stenosis
    k. Cancer pain
    l. Hemiplegic shoulder pain
    m. Pelvic floor myalgia/ sexual pain
    n. Others

Grade	Definition
High	**We are very confident that the estimate of effect lies close to the true effect for this outcome.** The body of evidence has few or no deficiencies. We believe that the findings are stable, i.e., another study would not change the conclusions.
Moderate	**We are moderately confident that the estimate of effect lies close to the true effect for this outcome.** The body of evidence has some deficiencies. We believe that the findings are likely to be stable, but some doubt remains.
Low	**We have limited confidence that the estimate of effect lies close to the true effect for this outcome.** The body of evidence has major or numerous deficiencies (or both). We believe that additional evidence is needed before concluding either that the findings are stable or that the estimate of effect is close to the true effect.
Insufficient	**We have no evidence, we are unable to estimate an effect, or we have no confidence in the estimate of effect for this outcome**. No evidence is available or the body of evidence has unacceptable deficiencies, precluding reaching a conclusion.

From: Grading the Strength of a Body of Evidence When Assessing Health Care Interventions for the Effective Health Care Program of the Agency for Healthcare Research and Quality: An Update: https://www.ncbi.nlm.nih.gov/books/NBK174881/