

Compass Opioid Stewardship in Practice

Microlearning Series

Module 2: Trigger Points and Trigger Point Injections

Welcome to Compass Opioid Stewardship in Practice. Each week, our Compass coaches will explore a real-world case, define a clinical goal, and walk through practical strategies to improve care. Whether you're tuning in via video, audio, or reading the summary, this session is built for busy clinicians like you.

This week's session is brought to you by Dr. Donald Stader, MD, FASAM, FACEP; Chief Executive Officer and Clinical Coach in the Compass Opioid Stewardship Program.

Case Presentation

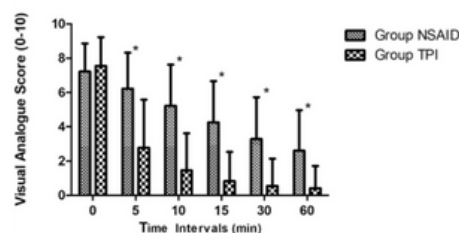
This week's case features Greg, a 42-year-old male patient, who while lifting a box at work developed sudden lumbar back pain, which is non-radiating but debilitating. The patient was seen in the ER, where he was diagnosed with a back strain, and provided with prescriptions for cyclobenzaprine and lidocaine patches. In addition, the patient has been using over-the-counter NSAIDs and Acetaminophen – with mild relief. He sees you in clinic, concerned about his continued pain and asking what else can be done. On exam, the patient has areas that are exquisitely TTP at his left SI joint and left perilumbar region around L4-5. This is the perfect patient to possibly receive in office trigger point injections, an effective and safe intervention – and the subject of today's microlearning.

Clinical Background

Trigger points, are a type of "myofascial pain". They are thought to occur from localized muscle spasm and sensitization after an injury. Trigger point injections are a procedure by which a clinician injects trigger points, typically with local anaesthetic to relieve pain. Although studies have also shown that dry needling, or injection of normal saline can also result in similar pain relief – and there is no local anaesthetic that has been shown to be superior to any other.

Trigger point injections can be done – all over the body, including the neck, upper and lower back. The evidence for benefit is significant – one ED based study showed trigger point injections resulted in faster and more significant pain relief than IV NSAIDs. Patients often experience significant relief in less than 15 minutes.

Am. J. Emerg. Med. 2019 Jan 15; pii: S0735-6757(19)30015-4; doi: 10.1016/j.ajem.2019.01.015. [Epub ahead of print]
Comparison of intravenous NSAIDs and trigger point injection for low back pain in ED: A prospective randomized study.
 Kocak AO¹, Ahiskalioglu A², Sengun E³, Gur STA³, Akbas I⁴.



"...trigger point injection was superior to the intravenous NSAIDs in the treatment of acute low back pain due to trigger points."

"Trigger point injection can be used in the emergency departments for the acute treatment of low back pain in selected patients."

How to Reach the Goal

This section covers how to identify trigger points and perform trigger point injections. Diagnosis is based on palpation and a focused physical exam, assessing for taut bands and hypersensitive nodules within skeletal muscle—these are the trigger points. Patients may demonstrate a “jump sign,” flinching or pulling away during palpation, or may report referred pain. Any area with significant tenderness to palpation becomes a potential injection target.

Once trigger points are identified, the clinician prepares the patient by explaining the procedure and reviewing risks such as bleeding, infection, and unintended injury to nearby structures. Consent is obtained, and patients are reassured that trigger point injections are a low-risk, targeted intervention, particularly in the lower lumbar region. A typical approach involves injecting 10–20 mL of local anesthetic and optionally performing dry needling afterward.

A demonstration video of lumbar trigger point injections can be found here: <https://advanced-analgesia.com/othermsk/trigger-point-injection-and-lumbar-muscles>.

In the case example, the patient agreed to lumbar injections and received four trigger point injections, each with 4 mL of 0.5% bupivacaine, resulting in significant relief without the need for additional medications. He was referred to physical therapy and returned to normal function within one month.

Clinical Pearls

The clinical pearls we want you to remember are:

- Trigger point injections are effective for localized myofascial pain and can be done in the outpatient office setting.
- You can use any local anesthetic, or even normal saline in trigger point injections
- They combine very well with other multimodal therapies
- Finally, these are billable procedures, which clinicians can document and for which they can receive compensation.
- If you have any questions about trigger points please reach out to a Compass Coach.

Thank You

This education has been brought to you through the generous support of the Centers of Medicare and Medicaid Services. Thanks for reading this week's Compass Opioid Stewardship in Practice Microlearning Series. Thank you for being part of the Compass Opioid Stewardship Program. And thank you for all you do caring for your patients.

Resources

- [A demonstration video of lumbar trigger point injections](#)
- [Comparison of intravenous NSAIDs and trigger point injection for low back pain in ED: A prospective randomized study](#)