



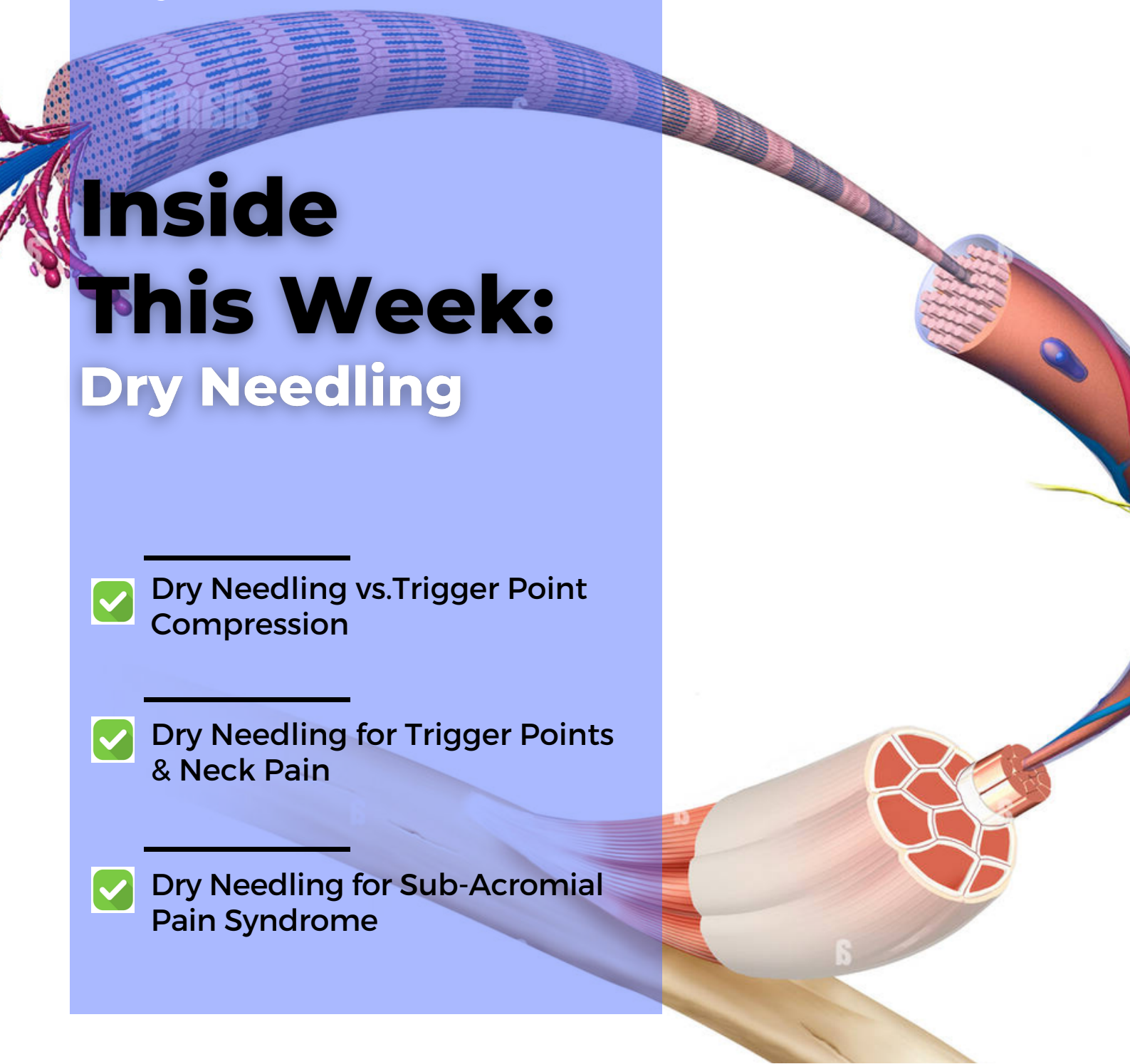
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RAPID RESEARCH

July 2023

Inside This Week: Dry Needling

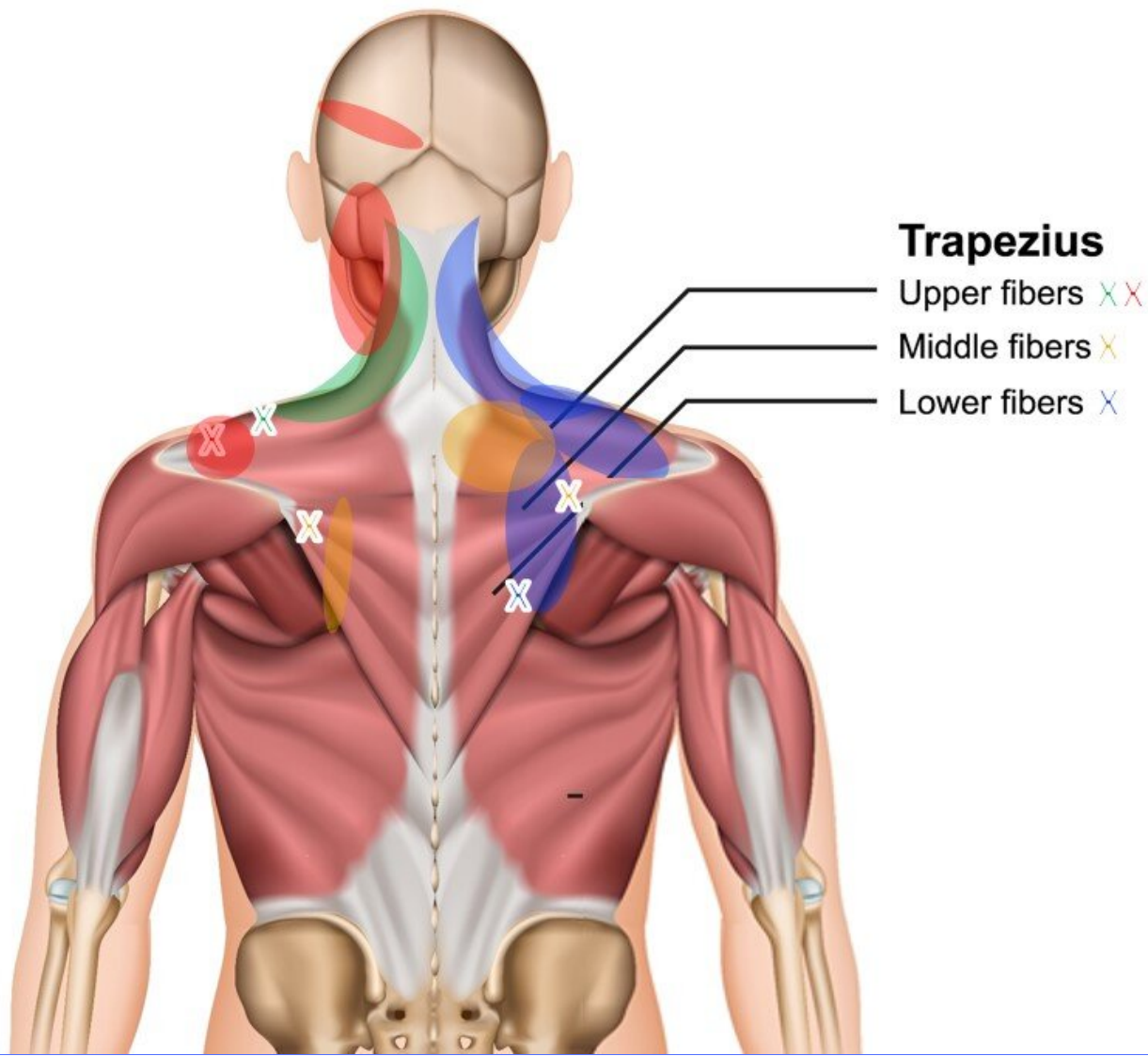
- ✓ Dry Needling vs. Trigger Point Compression
- ✓ Dry Needling for Trigger Points & Neck Pain
- ✓ Dry Needling for Sub-Acromial Pain Syndrome



DRY NEEDLING VS. TRIGGER POINT COMPRESSION

[Click for Full Text
\(Ziaefar et al. 2019\)](#)

This research investigated the long-term clinical effect of dry needling vs. trigger point compression with 2-week and 3-month follow up, on individuals with myofascial trigger points in the upper trapezius muscle.



KEY FINDINGS

33 individuals participated; 2 groups:

Trigger Point Compression (N = 17) or Dry Needling (N = 16)

Outcome Measures:

VAS (Pain Scale)

NPQ (Neck Pain Questionnaire)

DASH (Disabilities of the Arm, Shoulder, and Hand questionnaire)

Improvements were seen in VAS, NPQ, and DASH scores after 3 treatment sessions, 2wks, and 3-months for both DN and TPC groups.

No significant difference in VAS, NPQ, and DASH between the DN and TPC groups when comparing with pretreatment scores, except for pain intensity (VAS) immediately after 3 sessions.

Effect size of DN treatment on VAS, NPQ, and DASH was greater vs TPC technique after treatment sessions, 2wks, and 3months.

MAIN TAKEAWAYS

The study showed significant improvements in pain intensity, neck disability, and DASH scores after treatment in both DN and TPC groups when compared to pretreatment scores. The effect was observed at one week, two weeks, and three months after treatment.

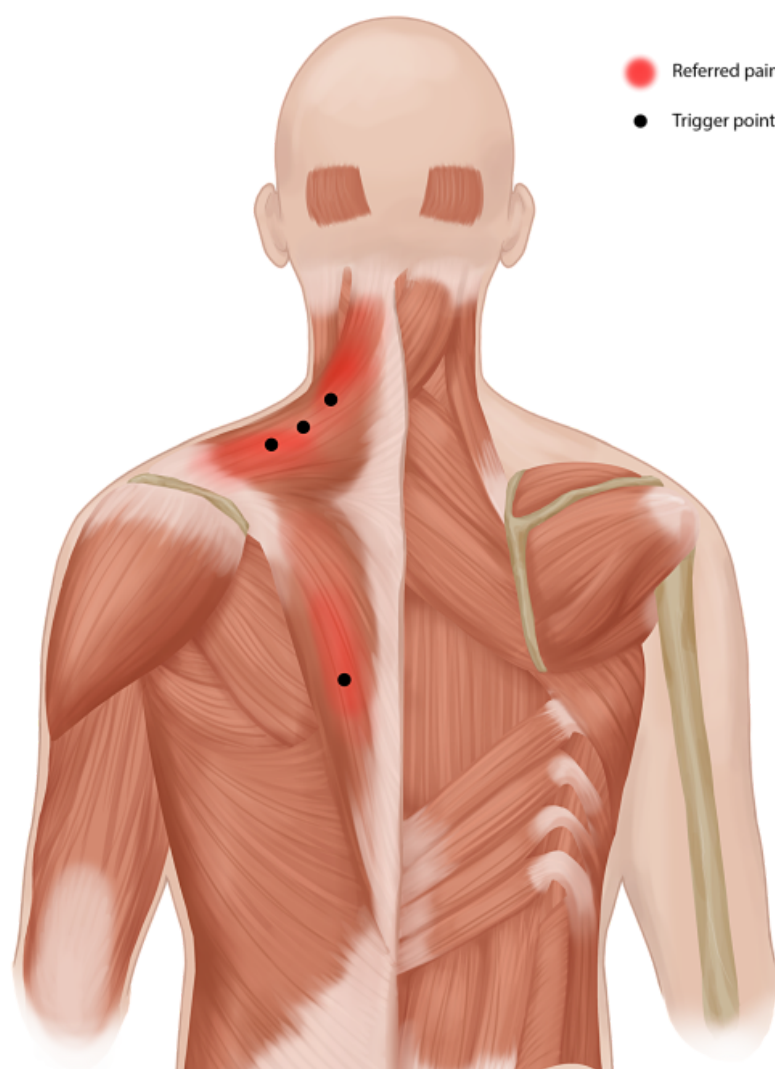
Overall, the study suggests that both DN and TPC can lead to significant improvements in pain and disability, with DN having stronger evidence for its positive effects.

Additionally, DN's longer-term effects may be related to chemical and mechanical changes in the MTrP site.

DRY NEEDLING FOR TRIGGER POINTS & NECK PAIN

[Click for Full Text
\(Navarro-Santana et al.
2020\)](#)

This systematic review evaluated the effect of dry needling alone as compared to sham needling, no intervention, or other physical interventions applied over trigger points (TrPs) related with neck pain symptoms.



28 studies, 1300+ participants were included

Dry Needling & Neck Pain Intensity:

Significant overall small effect in reducing neck pain immediately.

Significant overall short-term effect in reducing the intensity of neck pain.

No significant effect at mid-term.

Dry Needling & Pain-related Disability:

Significant overall small effect size in short-term vs. sham.

No significant effect at mid-term follow-up.

Dry Needling & Pressure Pain Sensitivity:

No significant overall effect immediately after treatment or at short-term.

Significant immediate effect in increasing pressure pain thresholds.

Dry Needling & Cervical Range of Motion:

No significant overall effects immediately after treatment.

No significant short-term effects.

MAIN TAKEAWAYS

The meta-analysis found moderate-to-low evidence supporting the effectiveness of trigger point dry needling for improving pain intensity and related-disability immediately after and at short-term follow-ups.

The overall decrease in pain intensity did not reach the minimal clinically important difference.

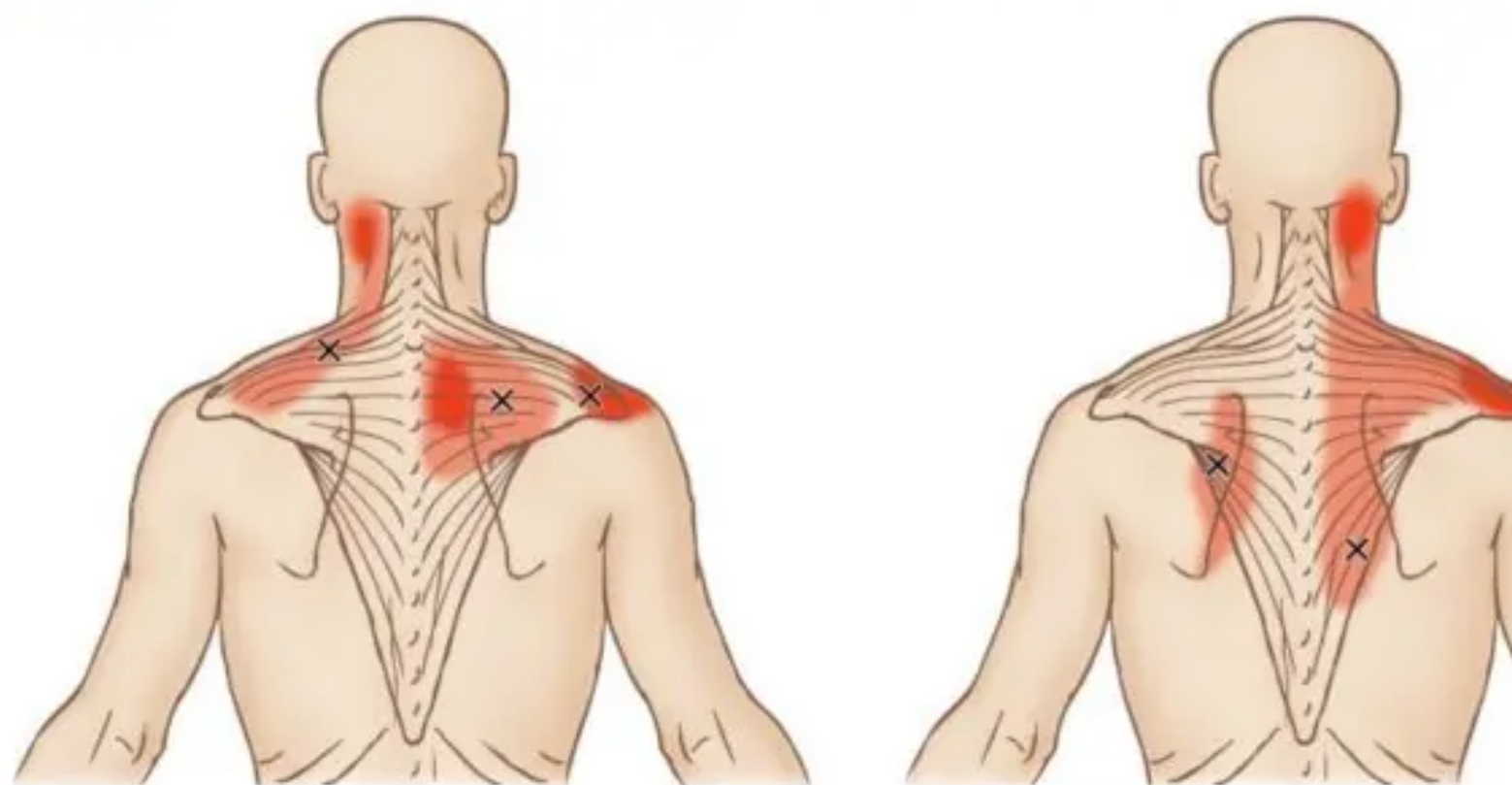
The most prevalent adverse events being minor, such as post-needling soreness.

Diverse sham needling interventions used, limiting comparability and potentially influencing therapeutic effects through cognitive factors like expectation or placebo.

DRY NEEDLING FOR SUB-ACROMIAL PAIN SYNDROME

[Click for Full Text
\(Para-Garcia et al.
2022\)](#)

This review examined the effects of dry needling alone or in combination with exercise therapy for reducing pain and disability in people with subacromial pain syndrome.



KEY FINDINGS

5 articles included; 315 patients.

Dry Needling Effectiveness for Sub-Acromial Pain Syndrome:

Medium effect, alone or combined with exercise therapy, for pain in short-term vs. other interventions (exercise, massage, or a combo).

Significant decrease in pain at the mid-term.

No differences in disability scores in the short- or medium-term.

Dry Needling alone had large significant effect on disability scores.

MAIN TAKEAWAYS

Dry needling, either alone or combined with exercise therapy, may provide small benefits on pain intensity in the short-term (<5 weeks) and mid-term (1-12 months).

There was a significant decrease in pain intensity at the mid-term follow-up.

Dry needling did not show significant differences in disability measures compared to other interventions in the short-term and mid-term.

Most of the included studies were rated at high risk of bias, mainly due to a lack of blinding of participants and outcome assessors, which may have affected the results.

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