

Paraspinal Stimulation Combined With Trigger Point Needling and Needle Rotation for the Treatment of Myofascial Pain: A Randomized Sham-controlled Clinical Trial.

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Source

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Abstract

BACKGROUND:: There are different types and parameters of dry needling (DN) that can affect its efficacy in the treatment of pain that have not been assessed properly. **OBJECTIVE::** To test the hypothesis that either multiple deep intramuscular stimulation therapy multiple deep intramuscular stimulation therapy (MDIMST) or TrP lidocaine injection (LTrP-I) is more effective than a placebo-sham for the treatment of myofascial pain syndrome (MPS) and that MDIMST is more effective than LTrP-I for improving pain relief, sleep quality, and the physical and mental state of the patient. **METHODS::** Seventy-eight females aged 20 to 40 who were limited in their ability to perform active and routine activities due to MPS in the previous 3 months were recruited. The participants were randomized into 1 of the 3 groups as follows: placebo-sham, LTrP-I, or MDIMST. The treatments were provided twice weekly over 4 weeks using standardized MDIMST and LTrP-I protocols. **RESULTS::** There was a significant interaction (time vs. group) for the main outcomes. Compared with the sham-treated group, MDIMST and LTrP-I administration improved pain scores based on a visual analog scale, the pain pressure threshold ($P < 0.001$ for all analyses), and analgesic use ($P < 0.01$ for all analyses). In addition, when comparing the active groups for these outcomes, MDIMST resulted in better improvement than LTrP-I ($P < 0.01$ for all analyses). In addition, both active treatments had a clinical effect, as assessed by a sleep diary and by the SF-12 physical and mental health scores. **CONCLUSIONS::** This study highlighted the greater efficacy of MDIMST over the placebo-sham and LTrP-I and indicated that both active treatments are more effective than placebo-sham for MPS associated with limitations in active and routine activities.