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Comparison of laser, dry needling, and placebo laser treatments in myofascial pain syndrome.

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OBJECTIVE: We aimed to evaluate the effectiveness of laser therapy in myofascial pain syndrome treatment. **BACKGROUND DATA:** Myofascial pain syndrome is a disease that is characterized by hypersensitive points called trigger points found in one or more muscles and/or connective tissues. It can cause pain, muscle spasm, sensitivity, stiffness, weakness, limitation of range of motion and rarely autonomic dysfunction. Physical therapy modalities and exercise are used in the treatment of this frequently encountered disease. **METHODS:** The placebo controlled, prospective, long-term follow up study was planned with 60 patients who had trigger points in their upper trapezius muscles. The patients were divided into three groups randomly. Stretching exercises were taught to each group and they were asked to exercise at home. Treatment duration was 4 weeks. Placebo laser was applied to group 1, dry needling to group 2 and laser to group 3. He-Ne laser was applied to three trigger points in the upper trapezius muscles on both sides with 632.8 nm. The patients were assessed at before, post-treatment, and 6 months after-treatment for pain, cervical range of motion and functional status. **RESULTS:** We observed a significant decrease in pain at rest, at activity, and increase in pain threshold in the laser group compared to other groups. Improvement according to Nottingham Health Profile gave the superiority of the laser treatment. However, those differences among the groups were not observed at 6-month follow up. **CONCLUSIONS:** Laser therapy could be useful as a treatment modality in myofascial pain syndrome because of its noninvasiveness, ease, and short-term application.