

Detailed Search Results

Masticatory muscle pain and low-level laser therapy: a double-blind and placebo-controlled study

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clinical trial

6/10 [Eligibility criteria: Yes; Random allocation: Yes; Concealed allocation: No; Baseline comparability: Yes; Blind subjects: Yes; Blind therapists: No; Blind assessors: Yes; Adequate follow-up: No; Intention-to-treat analysis: No; Between-group comparisons: Yes; Point estimates and variability: Yes. Note: Eligibility criteria item does not contribute to total score] *This score has been confirmed*

OBJECTIVE: This study was designed to evaluate the efficacy of low-level laser therapy (LLLT) in patients with chronic orofacial pain of muscular origin. **MATERIALS AND METHODS:** A sample of 40 patients with temporomandibular disorders (TMD) of muscular origin was randomly divided on the basis of the treatment applied: laser group versus placebo group. A continuous low-intensity semiconductor laser device with an output of 300 mW, emitting radiation with a wavelength of 820 nm and having energy density of 8 J/cm² was used. Laser irradiation was applied to the muscles of mastication every other day for three weeks for a total of ten sessions. Mandibular mobility was examined, masticatory muscles tenderness was assessed, pressure pain threshold (PPT) values and visual analog scale (VAS) scores were obtained. **RESULTS:** A repeated measurement one-way ANOVA demonstrated significant differences between the laser and placebo groups. In the laser group, there was a statically significant reduction in PPT values and in the number of muscles with pain on palpation ($p < 0.05$). Mandibular movements improved significantly ($p < 0.05$) The placebo group demonstrated slight improvement, but it was not statistically significant. **CONCLUSION:** This particular type of LLLT can be an alternative modality in the treatment of TMD in cases of myogenic origin.