

Effect of high-intensity laser therapy in the management of myofascial pain syndrome of the trapezius: a double-blind, placebo-controlled study

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Received: 2 June 2014 / Accepted: 24 September 2014 / Published online: 2 October 2014
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Abstract Myofascial pain syndrome (MPS) of the trapezius muscle is one of the main causes of neck pain. In this randomized, double-blind study, we evaluated the effects of high-intensity laser therapy (HILT) in female patients with chronic MPS of the trapezius muscle. The patients were assigned to two groups. The HILT group was treated with HILT and exercise, and the sham therapy group was treated with placebo HILT and exercise. The patients were assessed for pain, cervical active range of motion, disability, and quality of life. Evaluations were performed before treatment (week 0) and after treatment (weeks 4 and 12). Both groups showed significant improvement in all parameters at weeks 4 and 12. However, in a comparison of the percentage changes in the parameters at weeks 4 and 12 relative to pretreatment values, the HILT group showed greater improvement in pain scores, the neck disability index, and several subparts of the short-form 36 health survey (SF-36) (physical functioning, role limitations due to physical functioning, bodily pain, general health perceptions, social functioning, and role limitations due to emotional problems) than did the sham therapy group. We conclude that HILT is an effective therapeutic method in the treatment of patients with chronic MPS of the trapezius muscle.

Keywords Myofascial pain syndrome · High-intensity laser therapy · Exercise · Pain · Disability · Quality of life

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