Effect of Ultrasound Combined with Conventional Therapy on Neck Pain, Function, and Disability in Patients with Cervical Spondylosis: A Randomized Placebo-Controlled Trial

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ABSTRACT

Objective: The purpose of this study was to evaluate the effect of continuous ultrasound [US] compared with placebo US combined with conventional physiotherapy program for patients with cervical spondylosis.

Methods: This was a randomized placebo-controlled trial. Patients, diagnosed with cervical spondylosis, were randomly assigned to one of two groups in an orthopedic physical therapy clinic: a group that received electrotherapy, exercise, hot packs, and therapeutic US [True US group] and a group that received electrotherapy, exercise, hot packs, and sham US [Sham US group]. Patients were treated, on average, three times per week for 4 weeks. Outcome measurements were collected at baseline and after 4 weeks using the Numeric Pain Rating Scale, Patient-Specific Functional Scale, and Neck Disability Index.

Results: Analysis of variance showed that both groups had improved regarding Numeric Pain Rating Scale, Patient-Specific Functional Scale, and Neck Disability Index [p<0.05]. There was no significant difference between both groups for pretest and post-test values [p<0.05] for all measures.

Conclusions: The addition of US to conventional physiotherapy program of electrotherapy, exercise, and hot packs yields no additional benefit to neck pain, function, or disability in patients with cervical spondylosis.

KEYWORDS: Physical therapy, cervical spondylosis, ultrasound

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