

Randomized Controlled Trial on the Efficacy of Exercise for Patients With Chronic Neck Pain.

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Abstract:

Study Design. A randomized controlled trial with single-blind outcome assessments.

Objective. To evaluate the efficacy of a neck exercise program in patients with chronic neck pain.

Summary of Background Data. The effect of exercise for patients with chronic neck pain has been investigated in a number of studies. The efficacy is, however, questionable.

Methods. A total of 145 patients were randomly allocated into an exercise (n = 67) and a nonexercise (control) group (n = 78). Patients in the control group were given infrared irradiation and neck care advice. In addition to infrared irradiation and advice, patients in the exercise group had undergone an exercise program with activation of the deep neck muscles and dynamic strengthening of the neck muscles for 6 weeks. Subjective pain and disability and isometric neck muscle strength were measured at baseline, 6 weeks, and 6 months. Analysis was by intention-to-treat.

Results. At week 6, the exercise group had a significantly better improvement in disability score (P = 0.03), subjective report of pain (P = 0.01), and in isometric neck muscle strength (P = 0.57-0.00) in most of the directions than the control group. However, significant differences between the two groups were found only in the subjective report of pain and patient satisfaction at the 6-month follow-up.

Conclusions. At week 6, patients with chronic neck pain can benefit from the neck exercise program with significant improvement in disability, pain, and isometric neck muscle strength in different directions. However, the effect of exercise was less favorable at 6 months.