

Comparing Effects of Supervised Exercise Therapy versus Home-Based Exercise Therapy on Low Back Pain Severity, Muscle Strength and Anthropometric Parameters in Patients with Nonspecific Chronic Low Back Pain

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Abstract : Introduction: There are a number of exercises-protocols have been applied to improve low back pain. We compared the effect of supervised exercise therapy and home-based exercise therapy among patients with nonspecific chronic low back pain. Methods: 70 patients with nonspecific chronic low back pain were randomly (using a random number generator, excel) divided into two groups to compare the effects of two types of exercise therapy. After a common educational session to learn how to live with low back pain as well as to use core training protocols to strengthen the muscles, the subjects were randomly assigned to follow supervised exercise therapy (n = 31) or home-based exercise therapy (n = 34) for 20 weeks. Results: Although both types of exercise programs resulted in reduced pain, this factor decreased more significantly in supervised exercise program. All scores of fitness improved significantly in supervised exercise group. But only knee extensor strength score was increased in the home base exercise group. Conclusion: Comparing between two types of exercise, supervised group exercise showed more effective than the other one. Reduction in low back pain severity and improvement in muscle flexibility and strength can be more achieved by using a 20-week supervised exercise program compared to the home-based exercise program in patients with nonspecific chronic low back pain.

Keywords : low back pain, anthropometric parameters, supervised exercise therapy, home-based exercise therapy

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