Physical exercises for fibromialgy: muscle stretching vs. physical conditioning

Exercícios físicos para fibromialgia: alongamento muscular x condicionamento físico

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We have read with much interest the recent study by Bressan et al.¹, entitled "Effects of muscle stretching and fitness training in the physical therapy treatment of patients with fibromyalgia", published in this journal¹. The issue is extremely relevant because patients with fibromyalgia make frequent and prolonged use of health care services, leading to high medical care costs².

Exercise is often used in the treatment of fibromyalgia due to the fact that it constitutes a low cost intervention which can promote health in several aspects. It can reduce pain, fatigue and other symptoms, resulting in improved quality of life³⁻⁵. In the literature, low impact aerobic exercise is considered the physical rehabilitation intervention that most reduces the impacts of fibromyalgia symptoms⁶. The benefits of aerobic exercise for patients with fibromyalgia appear only eight to ten weeks after the beginning of the program, with even longer periods of intervention needed for adaptation^{4,7}. It should also be emphasized that the benefits achieved with aerobic exercise depend on time period, frequency, duration and intensity of the exercise prescribed in the program⁸.

In clinical practice, however, there is often low adherence to intensive exercise programs such as fitness training, which must be performed several times a week in order to yield positive results and may not fit the patient's schedule. Another determining factor in low adherence is the constant increase in the intensity of pain and fatigue in the initial phase of the exercise program.

All these factors may contribute to the performance and adherence to other forms of exercise for the treatment of fibromyalgia. Muscle stretching exercises are described in the literature as positive interventions for fibromyalgia symptoms^{9,10}.

The study by Bressan et al. was extremely pertinent because, as reported by the authors, most studies combined aerobic exercise with muscle stretching, making it impossible to identify the isolated effects of each of these interventions. In this study, the authors found positive and statistically significant results in the intra-group analysis only for the patients who performed muscle stretching. We believe, however, that the frequency of one session per week may have influenced the results obtained with the aerobic exercise.

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Therefore, although the literature does not establish the best exercise protocol for fibromyalgia patients, this article presents relevant information for exercise prescription. Although aerobic exercise is described in the literature as the physical intervention which promotes the most benefits for fibromyalgia patients, the referred study observed that, for short-term, once-weekly training, the performance of stretching exercises seems to be more effective.

References :::.

- 1. Bressan LR, Matsutani LA, Assumpção A, Marques AP, Cabral CMN. Efeitos do alongamento muscular e condicionamento físico no tratamento fisioterápico de pacientes com fibromialgia. Rev Bras Fisioter. 2008;12(2):88-93.
- 2. Penrod JR, Bernatsky S, Adam V, Baron M, Dayan N, Dobkin PL. Health services costs and their determinants in women with fibromyalgia. J Rheumatol. 2004;31(7):1391-8.
- 3. Nichols DS, Glenn TM. Effects of aerobic exercise on pain perception, affect, and level of disability in individuals with fibromyalgia. Phys Ther. 1994;74(4):327-32.
- 4. Valim V, Oliveira LM, Suda A, Silva L, de Assis M, Barros Neto T, et al. Aerobic fitness effects in fibromyalgia. J Rheumatol. 2003;30(5):1060-9.
- 5. McCain GA, Bell DA, Mai FM, Halliday PD. A controlled study of the effects of a supervised cardiovascular fitness training program on the manifestations of primary fibromyalgia. Arthritis Rheum. 1988;31(9):1135-41.
- 6. Valim V. Benefícios dos exercícios físicos na fibromialgia. Rev Bras Reumatol. 2006;46(1):49-55.
- 7. Gowans SE, Dehueck A, Voss S, Silaj A, Abbey SE. Six-month and one-year followup of 23 weeks of aerobic exercise for individuals with fibromyalgia. Arthritis Rheum. 2004;51(6):890-8.
- 8. American College of Sports Medicine Position Stand. The recommended quantity and quality of exercise for developing and maintaining cardiorespiratory and muscular fitness, and flexibility in healthy adults. Med Sci Sports Exerc. 1998;30(6):975-91.
- 9. Jones KD, Burckhardt CS, Clark SR, Bennett RM, Potempa KM. A randomised controlled trial of muscle strengthening versus flexibility training in fibromyalgia. J Rheumatol. 2002;29(5):1041-8.
- 10. Marques AP, Mendonça LLF, Cossermelli W. Alongamento muscular em pacientes com fibromialgia a partir de um trabalho de reeducação postural global (RPG). Rev Bras Reumatol. 1994;34(5):232-4.