

AEROBIC FITNESS EFFECTS IN FIBROMYALGIA

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Abstract

Objective. To compare 2 exercise modalities, aerobic fitness training and stretching exercises, in patients with fibromyalgia (FM) in relation to function, pain, quality of life, depression, and anxiety, and to correlate the cardiorespiratory fitness gain with symptom improvement.

Methods. Seventy-six women with FM between 18 and 60 years old were randomized to either an aerobic program or stretching program, for 20 weeks. They were evaluated at the beginning of the program and after 10 and 20 weeks in relation to the improvement of aerobic fitness, flexibility, function, Fibromyalgia Impact Questionnaire (FIQ), Short-form Health Survey (SF-36), and depression and anxiety levels. Ventilatory anaerobic threshold (VT) and maximum oxygen uptake ($VO_{2\text{ max}}$) were determined by expired gas analyses.

Results. Aerobic exercise was superior to stretching in relation to $VO_{2\text{ max}}$, VT, function, depression, pain, and the emotional aspects and mental health domains of SF-36. Patients in the stretching group showed no improvement in depression, “role emotional”, and “mental health”. No association was noted between improvement in aerobic fitness as measured by VT and the improvement of pain, function, or scores in FIQ and SF-36.

Conclusion. Our results confirm that aerobic exercise is beneficial to patients with FM, but the cardiorespiratory fitness gain is not related to improvement of FM symptoms.

Key Indexing Terms: fibromyalgia, aerobic fitness, exercise, flexibility, stretching, anaerobic threshold, oxygen uptake.