

Eli's Rehab Report

Clinical Rehab Roundup

Try Aerobic Exercise for Treating Fibromyalgia

"Exercise for treating fibromyalgia syndrome." Busch AJ, Barber KA, Overend TJ, Peloso PM, Schachter CL. *Cochrane Database Syst Rev.* 2007; Oct 17; (4): CD003786.

Researchers performed a systematic review to evaluate the effects of exercise training for fibromyalgia syndrome (FMS). Researchers examined several databases, including the Cochrane Central Register, for controlled trials up to and including July 2005. The randomized trials focused on cardiorespiratory endurance, muscle strength and/or flexibility. Researchers used the American College of Sport Medicine (ACSM) guidelines to evaluate whether interventions had provided a training stimulus that would affect changes in physical fitness.

Findings: Moderate quality evidence revealed that aerobic-only exercise training at recommended intensity levels has positive effects on global well-being and physical function and possibly on pain and tender points.

Strength and flexibility remain under-evaluated. Authors concluded that there is "gold" level evidence that supervised aerobic exercise training has beneficial effects on physical capacity and FMS symptoms. Strength training may also have benefits on some FMS symptoms, but further studies on muscle strengthening and flexibility are needed, as well as research on the long-term benefit of exercise for FMS.

Focus On Endurance Exercise Training for Parkinson's Cases

"Endurance exercise training to improve economy of movement of people with Parkinson's disease: three case reports." Schenkman M, Hall D, Kumar R, Kohrt WM. *Phys Ther.* 2008 Jan; 88(1):63-76. Epub 2007 Oct 16.

Researchers examined the effects of endurance exercise training on walking economy and other measures for three individuals in early and middle stages of Parkinson's disease (PD). Each patient completed four months of supervised endurance exercise training and 12 months of home exercise, with monthly clinic follow-up sessions. Strategies were included to enhance adherence to exercise. The main outcome measure was economy of movement (rate of oxygen consumption during gait) measured at four treadmill speeds. Secondary outcome measures included the Unified Parkinson's Disease Rating Scale (UPDRS), Continuous-Scale Physical Functional Performance Test (CS-PFP), Functional Reach Test (FRT), and Functional Axial Rotation Test (FAR).

Findings: Economy of movement improved for all three patients after four months of supervised exercise and remained above baseline at 16 months.

Two patients also had scores that were above baseline for UPDRS total score, CS-PFP, FRT, and FAR, even at 16 months. This suggests that gains may occur with a treadmill training program that is coupled with specific strategies to enhance adherence to exercise.