primary studies - published RCT

Exercise conditioning and cardio pulmonary fitness in cystic fibrosis.

Code: PM7023863 **Year:** 1981 **Date:** 1981 **Author:** Orenstein DM

Study design (if review, criteria of inclusion for studies)

RCT

Participants

31 patients, 21 exercise and ten control, aged 10 to 30 years, with pulmonary involvement ranging from mild to severe. The exercise and control groups were not significantly different with respect to age, sex, pulmonary function, exercise tolerance, or cardiorespiratory fitness.

Interventions

supervised three-month running program

Outcome measures

exercise tolerance, pulmonary function, cardiorespiratory fitness (peak oxygen consumption), and respiratory muscle endurance

Main results

After three months of physical conditioning, the exercise group had significantly increased exercise tolerance and peak oxygen consumption and significantly lower heart rates for submaximal work loads, while the nonexercising (control) group was unchanged in all these variables. The FEV1 decreased significantly in the control group. There were no other significant changes in pulmonary function in either the control or exercise group. Respiratory muscle endurance increased significantly in the exercise patients, and did not change in the control patients. There were no adverse effects of the program.

Authors' conclusions

The data suggest that a supervised running program can increase CF patients' exercise tolerance and cardiorespiratory fitness, perhaps in part by increasing respiratory muscle tolerance. The effects of a much longer program deserve study.

http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/703/CN-00653703/frame.html

See also

Chest YR: 1981 VL: 80 DE: CCT NO: 4

Keywords

exercise; non pharmacological intervention - devices OR physiotherapy;