primary studies - published RCT

Individualised unsupervised exercise training in adults with cystic fibrosis: a 1 year randomised controlled trial.

Code: PM15563708 **Year:** 2004 **Date:** 2004 **Author:** Moorcroft AJ

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

RCT. 1-year parallel design.

Participants

42 participants with CF completed the study. Group demographics: mean (SD) age 23.5 years (6.4 years) for training group; 23.6 years (5.5 years) for control group. 3 participants dropped out at the start of programme: 1 from training group due to failure to attend on initial assessment; and 2 in the control group were withdrawn due to ill health. A further 6 participants dropped out during the 1-year period.

Interventions

Long-term aerobic and anaerobic study. Comparison of unsupervised exercise (based on individual preferences general aerobic exercises for lower body and weight training for upper body) 3 times per week over 1 year versus control (continue with usual activities).

Outcome measures

Included in this study were: whole blood lactate; RER; heart rate; Borg breathlessness and muscle effort; VE, RR peak for arm and bicycle ergometry at 55% maximal workload; and weight.

Main results

For leg exercise, significant differences were seen at 12 months between the active and control groups in the mean (SE) change in blood lactate levels (-0.38 (0.23) mmol/l v 0.45 (0.25) mmol/l, p

Authors' conclusions

A training effect, as measured by a reduction in lactate levels and heart rate, can be achieved with unsupervised individualised home exercise in adults with cystic fibrosis. A benefit to pulmonary function was observed and together these findings suggest that exercise programmes should be encouraged as an important component of care in cystic fibrosis.

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See also

Thorax. 2004 Dec;59(12):1074-80.

Keywords

Adult; exercise; non pharmacological intervention - devices OR physiotherapy; training;