primary studies - published RCT

Effect of daily short bouts of trampoline exercise during 8 weeks on the pulmonary function and the maximal oxygen uptake of children with cystic fibrosis.

Code: PM3360541 **Year:** 1988 **Date:** 1988 **Author:** Stanghelle JK

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

Randomized controlled trial, cross-over design

Participants

6 girls and 2 boys with cystic fibrosis (CF) 10-13.5 years of age (mean 11.5 years). The CF children were divided into two groups. 3 patients in each group completed the study.

Interventions

prescribed exercise program on a mini-trampoline, maximum 109 min/week, during 8 weeks. The training consisted of three short bouts of trampoline exercise. The first group was a control as the other group exercised on the trampoline and vice versa.

Outcome measures

Pulmonary and exercise tests were performed before and after the exercise/control periods.

Main results

The pulmonary tests (FVC, FEV1, and PEFR) showed minor changes during the exercise period, but a slight increase in FVC (P less than 0.05) during the total time of the study was found. The two patients with more advanced lung disease improved their spirometric results during the training period. The maximal oxygen uptake (VO2 max) improved from 45 to 49 ml/kg/min (P less than 0.025) during the exercise period.

Authors' conclusions

Trampoline exercise programs are suggested to supply other types of training to avoid monotony in the training for CF patients.

http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/629/CN-00568629/frame.html

See also

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Keywords

Adolescent; Child; exercise; non pharmacological intervention - devices OR physiotherapy; Sports;