primary studies - published RCT

A randomized controlled trial of a 3-year home exercise program in cystic fibrosis.

Code: PM10700685 **Year:** 2000 **Date:** 2000 **Author:** Schneiderman-Walker J

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

RCT

Participants

72 patients with CF (7-19 years)

Interventions

exercise group (a minimum of 20 minutes of aerobic exercise, at a heart rate of approximately 150 beats/min, 3 times weekly) or a control group (usual physical activity participation).

Outcome measures

Pulmonary function, exercise tolerance, clinical status, hospitalizations, and compliance with therapy were monitored during scheduled visits to the hospital's CF clinic.

Main results

65 patients were included in the analyses. The control group demonstrated a greater annual decline in percent of predicted forced vital capacity compared with the exercise group (mean slope +/- SD, -2.42 +/- 4.15 vs -0.25 +/- 2.81; P =.02), with a similar trend for forced expiratory volume in 1 second (-3.47 +/- 4.93 vs -1.46 +/- 3. 55; P =.07). Patients remained compliant with the exercise program over the study period. An improved sense of well-being was reported with exercise.

Authors' conclusions

Pulmonary function declined more slowly in the exercise group than in the control group, suggesting a benefit for patients with CF participating in regular aerobic exercise. Consistent compliance with the home exercise program and a self-reported positive attitude toward exercise provide further evidence of the feasibility and value of including an aerobic exercise program in the conventional treatment regimen of patients with CF.

http://dx.doi.org/10.1067/mpd.2000.103408

See also

The Journal of pediatrics YR: 2000 VL: 136 NO: 3

Keywords

Adolescent; Artificial Ventilation; exercise; Home; Home Care Services; non pharmacological intervention - devices OR physiotherapy; non pharmacological intervention - psyco-soc-edu-org; Ventilators; Organization;