primary studies - published RCT

Effects of a Partially Supervised Conditioning Program in Cystic Fibrosis: An International Multicenter Randomized Controlled Trial (ACTIVATE-CF).

Code: PM34735776 **Year:** 2021 **Date:** 2021 **Author:** Hebestreit H

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

Parallel arm multicenter randomized controlled trial

Participants

117 CF patients (40% of target sample size)

Interventions

Vigorous physical activity (PA). A 12-month partially supervised PA intervention using motivational feedback. The intervention group consented to add 3 hours of vigorous PA per week, while the control group was asked not to change their PA behavior.

Outcome measures

Primary endpoint was change in percent predicted forced expiratory volume in 1s (Î”FEV(1)) at 6 months. Secondary endpoints included PA, exercise capacity, exercise motives, time to first exacerbation and exacerbation rates, quality of life, anxiety, depression, and stress, and blood glucose control. Data were analyzed using mixed linear models.

Main results

117 patients (40% of target sample size) were randomized to an intervention (n=60) or control group (n=57). After 6 months, Î”FEV(1) was significantly higher in the control group compared to the intervention group (2.70% predicted, 95% CI 0.13 to 5.26; p=0.04). The intervention group reported increased vigorous PA compared with the control group at each study visit, had higher exercise capacity at 6 and 12 months, and higher PA at 12 months. No effects were seen in other secondary outcomes.

Authors' conclusions

ACTIVATE-CF increased vigorous PA and exercise capacity, with effects carried over for the subsequent 6 months, but resulted in better FEV(1) in the control group.

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See also

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Keywords

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