

primary studies - published RCT

Randomized trial of biofilm testing to select antibiotics for cystic fibrosis airway infection.

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

Randomized controlled trial

Participants

The study population comprised 7-20-y-old children and adolescents with CF. 2 groups: intervention (group 1), with 17 subjects; and control (group 2), also with 17 subjects.

Interventions

The intervention consisted of handing out a manual with guidelines for aerobic physical exercises and reinforcing recommendations in telephone calls every 2 weeks.

Outcome measures

Increase in physical exercise practice as reported by subjects after 3 months

Main results

Thirty-four subjects were included in the study, 20 of whom were boys (58.5%). The groups were similar at baseline. In group 1, 6 subjects (35.2%) reported practicing physical exercises regularly. The mean age was 13.4 +/- 2.8 y, the mean percent-of-predicted FEV1 was 95.5 +/- 17.9%, and the mean peak oxygen uptake (VO₂) relative to body mass was 34.9 +/- 9.0 mL/kg/min. In group 2, 4 subjects (23.5%) reported practicing physical exercises regularly. The mean age was 12.7 +/- 3.3 y, the mean percent-of-predicted FEV1 was 100.1 +/- 21.2%, and the mean peak VO₂ was 33.2 +/- 8.2 mL/kg/min. In group 1, there was a significant increase in physical exercise practice as reported by subjects after 3 months of intervention compared with group 2 (P = .01). No statistically significant differences were found for the other variables.

Authors' conclusions

Verbal and written guidelines for aerobic exercise, together with supervision over the telephone, had a positive impact on the self-reported regular physical exercise practice of children and adolescents. However, no improvement was found in lung function and maximum exercise capacity or domains of the quality of life questionnaire.

<http://dx.doi.org/10.1002/ppul.21350>

See also

Pediatr Pulmonol. 2011 Feb;46(2):184-92. doi: 10.1002/ppul.21350. Epub 2010 Oct 20.

Keywords

Exercise; non pharmacological intervention - devices OR physiotherapy; Counseling; Psychoeducation; non pharmacological intervention - psycho-soc-edu-org; telemedicine; training;