

primary studies - published RCT

Airway clearance physiotherapy improves ventilatory dynamics during exercise in patients with cystic fibrosis: a pilot study.

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

Randomized controlled trial.

Participants

Adults with cystic fibrosis (CF). 23 participants (age 32.13±7.72 years).

Interventions

A remotely supervised, individualized 8-week resistance training program of moderate to high intensity. The exercise group (EX) performed three 1-h resistance training sessions per week over 8 weeks. The control group (CON) followed the physical activity recommendations of their physician.

Outcome measures

The main outcomes were muscle strength and body composition, with secondary measures including pulmonary function and quality of life. Two-way repeated measures analysis was used.

Main results

In 23 participants (age 32.13±7.72 years), the intervention showed a significant beneficial effect on leg press strength, with a large effect size, both in absolute ($p=0.011$; $d=0.281$) and relative ($p=0.007$; $d=0.310$) terms. Large intervention effects were observed on total fat mass ($p=$

Authors' conclusions

An 8-week remotely supervised resistance training program, with moderate to high intensity, effectively improved lower limb muscle strength and body composition.

<http://dx.doi.org/10.1136/archdischild-2017-314365>

See also

Arch Dis Child. 2019 Jan;104(1):37-42. doi: 10.1136/archdischild-2017-314365. Epub 2018 May 24.

Keywords

exercise; non pharmacological intervention - devices OR physiotherapy; training; Combined Modality Therapy; Aerobic training; Chest physiotherapy; strength training;