primary studies - published RCT

Combined Exercise Training Improves Glycemic Control in Adult With Cystic Fibrosis

Code: PM27669451 **Year:** 2017 **Date:** 2017 **Author:** Beaudoin N

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

RCT

Participants

18 adults with CF, sedentary with abnormal glucose tolerance (8 men, 10 women, mean age 33+/-9.4y, FEV1 71.5% pred+/-12.5, BMI 23.7 kg/m2+/-3.4).

Interventions

Participants were randomly assigned to a control or exercise group. Participants in the exercise group received a CEP for 12 weeks, including 3 weekly sessions of 40 to 60 minutes.

Outcome measures

The following tests were used to evaluate the impact of exercise, pre-and post-intervention: VO2max, oral glucose tolerance test (OGTT), muscular strength and endurance, blood test (plasma glucose, insulin and inflammatory markers) and quality of life (CFQ-R). Results: Fourteen participants (exercise n=8, control n=6), completed the study and returned for testing. Participants from the exercise group improved their plasmatic glucose at the 2nd hour of OGTT (-2.34 mmol/L; p

Main results

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Authors' conclusions

CEP improves glycemic control in CF patients. This non-pharmacological therapeutic approach could offer to CF patients an alternative that could delay the onset of CFRD. Further studies on long term effect of CEP should be considered to evaluate the effect on insulin sensitivity in CF.

https://www.ncbi.nlm.nih.gov/pubmed/?term=27669451

See also

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Keywords

Adolescent; Adult; Child; exercise; non pharmacological intervention - devices OR physiotherapy; training; non pharmacological intervention - psyco-soc-edu-org; strength training;