

primary studies - published RCT

Effects of Exercise Intervention Program on Bone Mineral Accretion in Children and Adolescents with Cystic Fibrosis: A Randomized Controlled Trial.

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

Randomized controlled trial

Participants

34 adults with CF hospitalized for pulmonary exacerbation

Interventions

An early rehabilitation program. The intervention group underwent an early rehabilitation program for 14 days after admission.

Outcome measures

Lung function, muscle strength, inflammatory markers, and quality of life. All patients underwent spirometry, one-repetition maximum tests (1RM), and the 6-min walk test, and answered the Revised Cystic Fibrosis Questionnaire (CFQ-R) for quality of life and the International Physical Activity Questionnaire. Serum levels of interleukin and tumor necrosis factor alpha (TNF- α) were measured.

Main results

In the intervention group, there were increases in 1RM biceps ($P=0.009$), triceps ($P=0.005$), shoulder abductors ($P=0.002$), shoulder flexors ($P=0.004$), hamstrings (P

Authors' conclusions

In adult CF patients with pulmonary exacerbation, early hospital rehabilitation had a significant impact on improving resting fatigue, muscle strength, and quality of life.

<http://dx.doi.org/10.1007/s12098-019-03019-x>

See also

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Keywords

adult; non pharmacological intervention - psycho-soc-edu-org; Home; non pharmacological intervention - devices OR physiotherapy; Organization; training; Infection; Respiratory Tract Diseases; Respiratory Tract Infections; Exacerbation;