

primary studies - published RCT

The Effects of Telerehabilitation Versus Home-based Exercise on Muscle Function, Physical Activity, and Sleep in Children with Cystic Fibrosis: A Randomized Controlled Trial.

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

Randomized Controlled Trial

Participants

30 children with CF (mean age = 10.2 ±â€‰1.9 years)

Interventions

Telerehabilitation (TG) compared with an unsupervised home exercise training program (HG)

Outcome measures

Muscle function (one-minute sit-to-stand (1-min STS), sit-up, pushup, squat, and plank tests)), PA (Physical Activity Questionnaire for Older Children), and sleep (Epworth Sleepiness Scale (ESS) and Pediatric Sleep Questionnaire (PSQ)) were assessed before and after the 6-week study period.

Main results

The 1-min STS significantly improved in the TG compared with the HG ($p\hat{a}\in\inftya^{0}, u^{2}\hat{a}\in\infty.001, \hat{i}\cdot(p)(2)\hat{a}\in\infty=\hat{a}\in\infty.0.474$). The sit-up ($p\hat{a}\in\infty=\hat{a}\in\infty.005, \hat{i}\cdot(p)(2)\hat{a}\in\infty=\hat{a}\in\infty.0.180$), squat ($p\hat{a}\in\infty=\hat{a}\in\infty.002, \hat{i}\cdot(p)(2)\hat{a}\in\infty=\hat{a}\in\infty.0.284$), and plank ($p\hat{a}\in\infty$

Authors' conclusions

Children who received TG improved muscle function more than children who received an HG. The effectiveness of longer term TG programs should be investigated in children with CF.

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See also

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Keywords

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