primary studies - published RCT

Measurement properties of the one-minute sit-to-stand test in children and adolescents with cystic fibrosis: A multicenter randomized cross-over trial.

Code: PM33577586 **Year:** 2021 **Date:** 2021 **Author:** Combret Y

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

Multicenter randomized study

Participants

Thirty-six children with CF were included (mean age 12.0 ±3.5 years and FEV1 95.8 ±25.0%).

Interventions

The six-minute walk test (6MWT) and the sit-to-stand test (STST)

Outcome measures

Criterion validity was determined by assessing correlations between STST repetitions and 6MWT distance (6MWD). Intra-rater reliability, test-retest repeatability, mean bias and limits of agreement were also assessed. Relationships with other outcomes (i.e. respiratory and quadriceps muscle strength) and cardio-respiratory responses were analysed for both tests.

Main results

Thirty-six children with CF were included (mean age 12.0 ±3.5 years and FEV1 95.8 ±25.0%). On average, 39.6 ±10.5 repetitions were performed during the STST and mean 6MWD was 596.0 ±102.6 meters. STST number of repetitions was significantly correlated with 6MWD (r = 0.48; p

Authors' conclusions

The STST is an easy-to-use functional test with moderate criterion validity when compared to the 6MWT in children with CF, probably because both tests measure different components of functional exercise capacity. The STST is useful when the 6MWT is unfeasible, however further investigations are required to explore the clinical implications of STST results in children with CF.

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See also

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Keywords

non pharmacological intervention - diagn;