primary studies - published RCT

Effectiveness of the hippotherapy simulator in children and adolescents with cystic fibrosis: A randomized controlled trial.

Code: PM41385838 **Year:** 2025 **Date:** **Author:** Cinar B

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

Randomized controlled trial

Participants

Thirty-two patients (8-14 years) with CF

Interventions

Hippotherapy simulator (HS) added to comprehensive chest physiotherapy (CCP) Patients (8-14 years) were randomized into either CCP group (received CCP only), or CCP+HS group (received HS alongside CCP). CCP was performed twice daily. The HS program consisted of two 30-minute sessions per week.

Outcome measures

Functional capacity, pulmonary functions, amount of sputum, ease of expectoration, sense of chest congestion, core muscle endurance, postural stability, dynamic balance, peripheral muscle strength, flexibility, physical activity (PA), and quality of life (QoL) were assessed at baseline and after the 8-week treatment. R

Main results

Functional capacity, pulmonary functions, amount of sputum, core muscle endurance, postural stability, peripheral muscle strength, PA, and emotional functioning and body image scores in QoL improved only in the CCP+HS group (p

Authors' conclusions

HS alone appears insufficient to improve functional capacity, pulmonary functions, amount and ease of expectoration, postural stability, flexibility, and PA in children and adolescents with CF; however, it may be used as an adjunctive approach to enhance core muscle endurance and dynamic balance.

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See also

Heart Lung. 2025 Dec 11;77:102688. doi: 10.1016/j.hrtlng.2025.102688.

Keywords

Hippotherapy; non pharmacological intervention - devices OR physiotherapy;