primary studies - published RCT

Comparison of active cycle of breathing and high-frequency oscillation jacket in children with cystic fibrosis.

Code: PM14679493 **Year:** 2004 **Date:** 2004 **Author:** Phillips GE

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

RCT cross-over design. Single centre UK study. Randomisation via sealed envelope.

Participants

10 participants (7 males, 3 females). Median (range) age: 14 (9 - 16) years. CF diagnosed via sweat chloride testing or genetic testing. Participants admitted to the Brompton Hospital with an acute exacerbation as defined by conventional criteria

Interventions

ABCT versus HFCWO. 2 supervised treatments of either ACBT or HFCWO on 2 successive dates for 20 min.

Outcome measures

FVC, FEV1 (measured immediately before, immediately after and 10 min after each treatment), wet sputum weight (measured over 24-hour period, during treatment and 15 minutes after treatment), participant preference (measured at the end of the study).

Main results

Sputum weight increased significantly with ACBT compared with HFCC during treatment (5.2 g vs. 1.1 g, P

Authors' conclusions

Compared with ACBT, HFCC by Hayek Cuirass is not an effective airway clearance treatment modality for children with CF during an infective exacerbation.

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See also

Pediatr Pulmonol. 2004 Jan;37(1):71-5.

Keywords

Adolescent; Airway clearance technique; Chest Wall Oscillation; Child; non pharmacological intervention - devices OR physiotherapy; pharmacological_intervention; Active Cycle of Breathing Technique -ACBT-; Exacerbation; Respiratory Tract Infections; Respiratory Tract Diseases; Infection; Bacterial Infections; High Frequency Chest Wall Oscillation -HFCWO-; Chest physiotherapy; VEST Airway Clearance System; oscillating devices;