primary studies - published RCT

Short-term effects of high-frequency chest compression and positive expiratory pressure in patients with cystic fibrosis.

Code: PM22393338 **Year:** 2011 **Date:** 2011 **Author:** Fainardi V

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

controlled randomized cross-over trial

Participants

Thirty-four CF patients (26 +/- 6.5 years) were included in the study.

Interventions

high-frequency chest compression and positive expiratory pressure mask

Outcome measures

Before and 30 minutes after each treatment were recorded: pulmonary function testing, oxygen saturation, and perceived dyspnea. Preference for the two devices was assessed.

Main results

No statistically significant difference between high-frequency chest compression and positive expiratory pressure mask was found in sputum production and in lung function testing. A reduction in SpO(2) was found after positive expiratory pressure mask (98 +/- 1.0% versus 97 +/- 1.2%; P

Authors' conclusions

High-frequency chest compression and positive expiratory pressure mask have comparable short-term effects on expectorated sputum and lung function. Although positive expiratory pressure mask was associated with a lower SpO(2), it was better tolerated than high-frequency chest compression.

http://dx.doi.org/10.4021/jocmr697w

See also

J Clin Med Res. 2011 Dec;3(6):279-84. Epub 2011 Nov 10.

Keywords

non pharmacological intervention - devices OR physiotherapy; Airway clearance technique; Exacerbation; Respiratory Tract Infections; Respiratory Tract Diseases; Infection; Bacterial Infections; Positive-Pressure Respiration- PEP- pep mask; High Frequency Chest Wall Oscillation -HFCWO-; VEST Airway Clearance System; oscillating devices; Chest physiotherapy;