primary studies - published RCT

The benefits of mechanical insufflator-exsufflator compared to autogenic drainage in adults with cystic fibrosis.

Code: PM32776649 **Year:** 2020 **Date:** 2020 **Author:** Helper N

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

Prospective cross-over trial

Participants

Fourteen males and eight females from the national center for CF, with an average FEV(1) of 54%

Interventions

Autogenic drainage (AD). Mechanical insufflator-exsufflator (MI-E). Subjects received either AD or MI-E in a random order.

Outcome measures

0â€‰minutes after and 1â€‰hour after treatment; additionally, a 2-minute walk test was performed at the end of all lung function tests. Saturation, dyspnea scores while resting and after a 2-minute walk and subjective fatigue were recorded.

Main results

Thirty-six percent more sputum was collected following MI-E than AD treatment (Pâ€‰

Authors' conclusions

Treatment with the MI-E was more effective for clearing sputum in CF subjects, initial evidence suggests that the MI-E may be successfully incorporated into treatment protocols. Further studies are needed to assess the long-term benefits of MI-E in patients with CF.

http://dx.doi.org/10.1002/ppul.25020

See also

Pediatr Pulmonol. 2020 Nov;55(11):3046-3052. doi: 10.1002/ppul.25020. Epub 2020 Aug 24.

Keywords

Adolescent; Airway clearance technique; Child; Drainage; non pharmacological intervention - devices OR physiotherapy; pharmacological_intervention; Airway clearance drugs -expectorants- mucolytic- mucociliary-; Exacerbation; Respiratory Tract Infections; Respiratory Tract Diseases; Infection; Bacterial Infections; Postural Drainage; percussion; Chest physiotherapy; Autogenic Drainage;