primary studies - published RCT

Chest physiotherapy in cystic fibrosis: short-term effects of autogenic drainage preceded by wet inhalation of saline versus autogenic drainage preceded by intrapulmonary percussive ventilation with saline.

Code: PM18042976 **Year:** 2008 **Date:** 2008 **Author:** Van Ginderdeuren F

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

randomized crossover design

Participants

20 clinically stable CF patients with similar pulmonary function at baseline

Interventions

Patients received either 'saline(NEB) + AD' or 'saline(IPV) + AD' on 2 consecutive days.

Outcome measures

Transcutaneous oxygen saturation, heart rate, Borg dyspnea score and mucus wet weight were evaluated after 15 min of either saline(NEB) or saline(IPV), and after a subsequent 30 min of AD.

Main results

There were no significant changes in oxygen saturation, heart rate or Borg score at any point of either physiotherapy intervention. There was no significant difference in sputum wet weight recovered with either saline(NEB) (2.2 +/- 1.8 g, mean +/- SD) or saline(IPV) (1.7 +/- 1.9 g) alone. Subsequent AD did produce significantly greater amounts of sputum wet weight (p

Authors' conclusions

Recovered sputum weight is similar whether AD is preceded by saline(NEB) or saline(IPV). The much greater amount of mucus obtained during the AD period than during the saline delivery period warrants further investigation.

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See also

Respiration. 2008;76(2):175-80. Epub 2007 Nov 28.

Keywords

Adolescent; Adult; Airway clearance technique; Drainage; Inhalation OR nebulised; Intrapulmonary; non pharmacological intervention - devices OR physiotherapy; Percussion; pharmacological_intervention; Sodium Chloride; Ventilators; Intrapulmonary Percussive Ventilation; oscillating devices; Chest physiotherapy; Respiratory System Agents; Autogenic drainage;