primary studies - published RCT

Short-term effects of three chest physiotherapy regimens in patients hospitalized for pulmonary exacerbations of cystic fibrosis: a cross-over randomized study.

Code: PM7675553 **Year:** 1995 **Date:** 1995 **Author:** Braggion C

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

RCT crossover

Participants

16 patients with CF, 8 males, 8 females, aged 15-27 years (mean, 20.3 +/- 4), met the inclusion criteria: 1) age over 14 years; 2) mild or moderate airway obstruction; 3) sputum volume > 30 mL/day; 4) being proficient in PD and PEP CPT. Patients at admission had (mean +/- SD) forced volume in 1 second (FEV1) 52.2 +/- 21.9 percent predicted; Shwachman-Kulczycki clinical score 65.1 +/- 11 points; Chrispin-Norman chest radiography score 18.6 +/- 4.3 points.

Interventions

The three CPT regimens and a control-treatment (CONT) were administered in a random sequence, each patient receiving each treatment twice a day (in 50 minute sessions) for 2 consecutive days. During CONT and for 30 minutes after each session only spontaneous coughing was allowed.

Outcome measures

Wet and dry weight of sputum were recorded during the 50-minute sessions and 30 minutes afterward. Lung function was measured before and 30 minutes after each session. For each treatment a score was given by the patient for efficacy, and by both the patient and the physiotherapist for tolerance.

Main results

Wet and dry weights of sputum collected during the sessions were greater for all CPT regimens than for CONT (P

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See also

Pediatr Pulmonol. 1995 Jan;19(1):16-22.

Keywords

Adolescent; Adult; Airway clearance technique; Anti-Bacterial Agents; Bacterial Infections; Drainage; Infection; non pharmacological intervention - devices OR physiotherapy; pharmacological_intervention; Pneumonia; Postural Drainage; Respiratory Tract Diseases; Respiratory Tract Infections; Positive-Pressure Respiration- PEP- pep mask; Exacerbation; Chest physiotherapy;