primary studies - published RCT

Comparison of effects of an intrapulmonary percussive ventilator to standard aerosol and chest physiotherapy in treatment of cystic fibrosis.

Code: PM7478782 **Year:** 1995 **Date:** 1995 **Author:** Homnick DN

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

Randomised controlled trial. Parallel design.

Participants

20 participants, of which 16 completed. Ages: 5-24 years. CCPT: Mean (range) 10 years (5-18 years); IPV: 12 years (5-24 years).

Interventions

CCPT versus IPV.

Outcome measures

FVC, FEV1, FEF25-75, BMI, patient log/preference, hospital admissions, intravenous antibiotic courses

Main results

No significant differences in spirometric measures, numbers of hospitalizations, use of oral or IV antibiotics, or anthropometric measurements were detected between the standard aerosol/chest physiotherapy group and the IPV group over the duration of the trial. Patient acceptance, as determined by participant survey, was good. The device appeared to be safe and durable.

Authors' conclusions

the IPV is as effective as standard aerosol and chest physiotherapy in preserving lung function and anthropometric measures, and there was no difference in the use of antibiotics and hospitalizations.

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See also

Pediatr Pulmonol. 1995 Jul;20(1):50-5.

Keywords

Adolescent; Adult; Airway clearance technique; Artificial Ventilation; Child; Cromolyn Sodium; Drainage; Inhalation OR nebulised; Intrapulmonary; non pharmacological intervention - devices OR physiotherapy; Percussion; pharmacological_intervention; Postural Drainage; Ventilators; Ventilators- Mechanical; Adrenergic beta-Agonists; Respiratory System Agents; Chest physiotherapy; Intrapulmonary Percussive Ventilation; oscillating devices;