primary studies - published RCT

Oral protein energy supplements for children with cystic fibrosis: CALICO multicentre randomised controlled trial.

Code: PM16467348 **Year:** 2006 **Date:** 2010 **Author:** Poustie VJ

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

RCT

Participants

23 participants with cystic fibrosis (CF) with a median age of 12 years (range 7-18 years), who were admitted to hospital for a respiratory exacerbation

Interventions

participants were randomised to either the PEP mask or Acapella treatment group. Both groups completed two treatment sessions each day (10 sets of 10 breaths in sitting) over a 10-day period.

Outcome measures

Outcome measures were change in lung function (FEV1, FVC, FEF(25-75), and PEF) and exercise performance (modified 10-metre shuttle). In addition, total sputum production during treatment (wet weight) and patient satisfaction were assessed over the 10-day period.

Main results

At the end of 10 days there were no statistically significant differences between the groups for any of the outcome measures. Participants were highly satisfied with both devices.

Authors' conclusions

The results suggest that there is no statistically significant difference between the Acapella device and the PEP mask for use in CF during an acute exacerbation. Larger studies are required to determine whether differences between PEP mask and Acapella noted in this trial are clinically worthwhile.

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See also

BMJ. 2006 Mar 18;332(7542):632-6. Epub 2006 Feb 8.

Keywords

Acapella; Adolescent; Anti-Bacterial Agents; Child; Hospitalization; Hospital care; non pharmacological intervention - devices OR physiotherapy; mask; pharmacological_intervention; Airway clearance technique; Positive-Pressure Respiration- PEP- pep mask; Airway clearance drugs -expectorants- mucolytic- mucociliary-; Bacterial Infections; Respiratory Tract Infections; Respiratory Tract Diseases; Infection; Exacerbation; oscillating devices; Chest physiotherapy; Organization;