primary studies - published RCT

The effect of a first-generation antihistamine on sputum viscoelasticity in cystic fibrosis.

Code: PM17388752 **Year:** 2007 **Date:** 2011 **Author:** Homnick DN

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

RCT crossover

Participants

5 CF patients

Interventions

patients were randomised to inhale either dornase alfa or 0.9% NaCl for 28 days and, after a wash-out period of 28 days, crossed over to the alternative treatment.

Outcome measures

Primary outcome parameters assessed were the Sino-Nasal Outcome Test (SNOT-20, a disease-specific quality of life assessment tool) and ventilated volume as measured by magnetic resonance imaging.

Main results

Whereas normal saline was not associated with relevant changes in SNOT-20 scores, dornase alfa improved quality of life (p=0.043). MRI results showed no definite trend.

Authors' conclusions

This first clinical study with the novel device gives promising results for the new therapeutic concept of sinonasal inhalation with vibrating aerosols in regard to further analysis involving larger collectives.

http://dx.doi.org/10.1089/jam.2006.0593

See also

J Aerosol Med. 2007 Spring;20(1):45-9.

Keywords

Adolescent; Adult; Bacterial Infections; Child; Deoxyribonuclease; Infection; Inhalation OR nebulised; nebuliser; non pharmacological intervention - devices OR physiotherapy; pharmacological_intervention; Recombinant Proteins; Respiratory Tract Infections; Sinusitis; Airway clearance drugs -expectorants- mucolytic- mucociliary-; Respiratory System Agents; Respiratory Tract Diseases; Dornase alpha; Pulmozyme;