primary studies - published RCT

Effect of aerosolized rhDNase (Pulmozyme) on pulmonary colonization in patients with cystic fibrosis.

Code: PM16938752 **Year:** 2006 **Date:** 2006 **Author:** Frederiksen B

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

Randomised controlled parallel trial. Duration of one year.

Participants

2 participants excluded, one from treatment group, one as had been randomised twice (both times to no treatment group). 72 CF participants, age range 1.1 - 24.8 years. 34 males. Individuals with chronic lung infection excluded or if they had been treated with rhDNase in previous 2 months.

Interventions

Aerosolised rhDnase 2.5 mg once daily versus no rhDNase treatment.

Outcome measures

number of positive sputum cultures, FEV1.

Main results

Overall, the number of positive cultures was significantly higher in the untreated group (82%) compared with the treated group (72%) (p

Authors' conclusions

Long-term DNase treatment was beneficial to CF patients without chronic lower respiratory tract infection, leading to reduced demand for antibiotics and to improved lung function.

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See also

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Keywords

Adolescent; Adult; Anti-Bacterial Agents; Bacterial Infections; Child; Deoxyribonuclease; Airway clearance drugs -expectorants-mucolytic- mucociliary-; Infant; Infection; Inhalation OR nebulised; pharmacological_intervention; Pneumonia; Respiratory Tract Infections; colonization; Staphylococcus aureus; Respiratory System Agents; Respiratory Tract Diseases; Dornase alpha; Pulmozyme;