primary studies - published RCT

Efficacy and safety of short-term administration of aerosolised recombinant human DNase I in adults with stable stage cystic fibrosis.

Code: PM8100928 **Year:** 1993 **Date:** 1997 **Author:** Ranasinha C

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

randomized, crossover double-blind pilot study

Participants

5 young adult patients with CF

Interventions

120 mg of a lipid-extracted bovine surfactant (Alveofact) or placebo was aerosolized topatients over a period of 30 min for five consecutive days.

Outcome measures

aerosolized particles diamter, inhalation tolerability, serum antibody titres against the surfactant proteins-B and -C (SP-B/SP-C), FEV1, FVC

Main results

The sample size had the power of 90% to detect an increase in forced expiratory volume in one second (FEV1) of 15% (p

Authors' conclusions

This pilot study shows no acute or short-term benefits of surfactant inhalation in young adults with cystic fibrosis. However, a beneficial effect of exogenous surfactant cannot be excluded before other reasons for a lack of effect, such as insufficient quantity delivered, inhomogeneous distribution or inhibition of the surfactant in the lungs, have been completely ruled out.

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See also

Lancet. 1993 Jul 24;342(8865):199-202.

Keywords

Adult; Artificial Ventilation; Inhalation OR nebulised; non pharmacological intervention - devices OR physiotherapy; pharmacological_intervention; Respiratory System Agents; surfactant; Ventilators; Airway clearance drugs -expectorants- mucolytic-mucociliary-;