

primary studies - published RCT

Nebulization of a bovine surfactant in cystic fibrosis: a pilot study.

Code: PM9311490 Year: 1997 Date: 1997

Author: Griese M

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

Eur Respir J. 1997 Sep;10(9):1989-94.

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-;