

#### primary studies - published RCT

# Small airway deposition of dornase alfa during exacerbations in cystic fibrosis; A randomized controlled clinical trial.

Code: PM23913868 Year: 2014 Date: 2014

Author: Bakker EM

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

Multi-center, double-blind, randomized controlled trial

# **Participants**

CF patients hospitalized for a respiratory tract exacerbations (RTE)

#### Interventions

Patients hospitalized for a RTE and on maintenance treatment with dornase alfa were switched to a smart nebulizer. Patients were randomized to small airway deposition (n = 19) or large airway deposition (n = 19) of dornase alfa for at least 7 days.

### **Outcome measures**

Primary endpoint was forced expiratory flow at 75% of forced vital capacity (FEF75).

## Main results

Spirometry parameters improved significantly during admission, but the difference in mean change in FEF75 between treatment groups was not significant: 0.7 SD, P = 0.30. FEF25-75, FEV1, nocturnal oxygen saturation and diary symptom scores also did not differ between groups.

# Authors' conclusions

This study did not detect a difference if inhaled dornase alfa was targeted to small versus large airways during a RTE. However, the 95% confidence interval for the change in FEF75 was wide. Further studies are needed to improve the effectiveness of RTE treatment in CF.

http://dx.doi.org/10.1002/ppul.22800

#### See also

Pediatr Pulmonol. 2014 Feb;49(2):154-61.

## Keywords

Deoxyribonuclease; Airway clearance drugs -expectorants- mucolytic- mucociliary-; Inhalation OR nebulised; pharmacological\_intervention; nebuliser; non pharmacological intervention - devices OR physiotherapy; Respiratory System Agents; Dornase alpha; Pulmozyme;