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primary studies - published RCT

## Effect of treatment with dornase alpha on airway inflammation in patients with cystic fibrosis.

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

Randomised parallel-control trial. Participants were evaluated clinically every 3 months during the 3-year period.

### Participants

A total of 105 patients with CF (> or =5 years of age) having normal lung function were randomized to receive rhDNase (2.5 mg/day) or no rhDNase. Patients with a normal percentage of neutrophils in BAL fluid at baseline were not randomized and served as the control group.

### Interventions

rhDNase (2.5 mg/day) or no rhDNase

### Outcome measures

neutrophils in BAL fluid

### Main results

The percentage of neutrophils in the pooled BAL sample was similar in both randomized groups at baseline. A significant increase in neutrophils was observed over the 3-year study period in both untreated patients and control subjects, whereas neutrophils remained unchanged in patients treated with rhDNase. Elastase activities and interleukin-8 concentrations also increased in untreated patients and remained stable in patients on rhDNase.

### Authors' conclusions

in patients with CF, an increase in neutrophilic airway inflammation is found that is positively influenced by rhDNase treatment.

<http://dx.doi.org/10.1164/rccm.200307-959OC>

### See also

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### Keywords

Adolescent; Adult; Bacterial Infections; Child; Deoxyribonuclease; Airway clearance drugs -expectorants- mucolytic- mucociliary-; Infection; pharmacological\_intervention; Pneumonia; Recombinant Proteins; Respiratory Tract Infections; Respiratory System Agents; Respiratory Tract Diseases; Dornase alpha; Pulmozyme; Inhalation OR nebulised; nebuliser;