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primary studies - published RCT

## **Sinonasal inhalation of dornase alfa administered by vibrating aerosol to cystic fibrosis patients: A double-blind placebo-controlled cross-over trial.**

**Code:** PM24594542

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

double-blind placebo-controlled crossover-trial.

### **Participants**

23 CF patients with chronic rhinosinusitis

### **Interventions**

patients were randomised to inhale either dornase alfa or isotonic saline for 28 days with the Pari-Sinus and after 28 days (wash-out) crossed over to the alternative treatment.

### **Outcome measures**

The primary outcome parameter was primary nasal symptom score in the disease-specific quality of life Sino-Nasal Outcome-Test-20 (SNOT-20: nasal obstruction/sneezing/runny nose/thick nasal discharge/reduced smelling).

### **Main results**

Primary nasal symptoms improved significantly with dornase alfa compared with no treatment, while small improvements with isotonic saline did not reach significance. SNOT-20 overall scores improved significantly after dornase alfa compared with isotonic saline ( $p=0.017$ ). Additionally, sinonasal dornase alfa but not isotonic saline significantly improved pulmonary function (FEF75-25:  $p=0.021$ ).

### **Authors' conclusions**

Vibrating sinonasal inhalation of dornase alfa reduces rhinosinusitis symptoms in CF.

<http://dx.doi.org/10.1016/j.jcf.2014.02.005>

### **See also**

J Cyst Fibros. 2014 Mar 1. pii: S1569-1993(14)00045-9. doi: 10.1016/j.jcf.2014.02.005.

### **Keywords**

Bacterial Infections; Deoxyribonuclease; Infection; Inhalation OR nebulised; nebuliser; non pharmacological intervention - devices OR physiotherapy; pharmacological\_intervention; Recombinant Proteins; Respiratory Tract Infections; Sinusitis; Airway clearance drugs -expectorants- mucolytic- mucociliary-; Respiratory System Agents; Respiratory Tract Diseases; Dornase alpha; Pulmozyme; vibration;