primary studies - published RCT

Effects of pentoxifylline on sputum neutrophil elastase and pulmonary function in patients with cystic fibrosis: preliminary observations.

Code: PM7996376 **Year:** 1994 **Date:** 1994 **Author:** Aronoff SC

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

randomized, placebo-controlled, double-blind trial

Participants

patients with CF who had chronic Pseudomonas bronchitis. Subjects older than 11 years. N=16

Interventions

placebo (n=7) or pentoxifylline (1600 mg/day) (n=9) orally for 6 months

Outcome measures

Pulmonary function and sputum elastase concentrations were determined before therapy and bimonthly during therapy; compliance was determined by measuring serum drug concentrations.

Main results

Of the 16 patients who completed the study, 9 received pentoxifylline. The sputum elastase concentrations among placebo recipients were significantly increased from baseline at 4 and 6 months (F = 3.44; p

Authors' conclusions

These findings support the hypothesis that polymorphonuclear neutrophil elastase is a factor in the evolution of CF lung disease; further studies are needed to define the role of pentoxifylline in the treatment of CF.

http://dx.doi.org/10.1016/S0022-3476(05)82022-0

See also

J Pediatr. 1994 Dec;125(6 Pt 1):992-7.

Keywords

Adolescent; Adult; Bacterial Infections; Bronchodilator Agents; Child; Infection; Oral; Pentoxifylline; pharmacological_intervention; Pseudomonas aeruginosa; Pseudomonas; Respiratory Tract Infections; Xanthines; Respiratory System Agents; Respiratory Tract Diseases;