primary studies - published RCT

Effects of montelukast treatment on clinical and inflammatory variables in patients with cystic fibrosis.

Code: PM16279568 **Year:** 2005 **Date:** 2005 **Author:** Stelmach I

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

randomized, double-blind, placebo-controlled, crossover trial

Participants

26 CF patients aged 6 to 18 years

Interventions

Patients received montelukast or placebo for 8 weeks in addition to their regular CF treatment.

Outcome measures

evaluate the effect of anti-inflammatory treatment with montelukast sodium in patients with CF. Before and after treatment, findings from spirometry, whole-body plethysmography, and the clinical wheezing and cough scales were evaluated. At the same time, serum and sputum samples were obtained for the measurement of eosinophil cationic protein, interleukin 10 (IL-10), IL-8, and myeloperoxidase levels

Main results

Twenty-three patients completed the study. Compared with placebo use, montelukast treatment significantly improved forced expiratory volume in I second, peak expiratory flow, and forced expiratory flow between 25% and 75% and significantly decreased cough and wheezing scale scores (P

Authors' conclusions

Montelukast may have measurable anti-inflammatory properties in patients with CF.

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See also

Ann Allergy Asthma Immunol. 2005 Oct;95(4):372-80.

Keywords

Adolescent; Anti-Bacterial Agents; Anti-Inflammatory Agents; Child; non pharmacological intervention - diet; pharmacological_intervention; Supplementation; Montelukast; Leukotriene antagonists; Anti-Inflammatory Agents - excl Steroids;