primary studies - published RCT

The effects of the inhaled corticosteroid budesonide on lung function and bronchial hyperresponsiveness in adult patients with cystic fibrosis.

Code: PM7746914 **Year:** 1995 **Date:** 1995 **Author:** van Haren EH

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

randomized, double-blind, cross-over study

Participants

12 CF patients

Interventions

1600 micrograms day-1, and with placebo during two periods of 6 weeks

Outcome measures

Drug effects were assessed with regard to bronchial hyperresponsiveness to histamine, spirometry and clinical symptom scores.

Main results

After treatment with budesonide, no significant differences in spirometry were seen, however, bronchial hyperresponsiveness to histamine significantly improved as compared to baseline. Fifty-eight percent of the patients showed at least one doubling-dose increase in PC20 histamine. Daily symptom scores showed small, but statistically significant, improvements in dyspnoea and cough after budesonide treatment. There is increasing evidence suggesting that excessive inflammatory responses contribute to the pulmonary damage that characterizes CF. Treatment with oral corticosteroids improved the clinical course of selected CF patients, but was associated with unacceptable adverse effects.

Authors' conclusions

daily inhalation of 1600 micrograms day-1 budesonide for 6 weeks induced a small, but significant, improvement in bronchial hyperresponsiveness to histamine, and symptoms of cough and dyspnoea in adult CF patients. Longer observations are needed to establish whether inhaled corticosteroids improve the long term outcome of CF.

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See also

Respir Med. 1995 Mar;89(3):209-14.

Keywords

Adolescent; Adult; Budesonide; Hormones; Inhalation OR nebulised; pharmacological_intervention; Pregnenediones; Respiratory Tract Diseases; Steroids; Anti-Inflammatory Agents;