primary studies - published RCT

No added benefit from nebulized amiloride in patients with cystic fibrosis.

Code: PM8287938 **Year:** 1993 **Date:** 1993 **Author:** Graham A

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

RCT. Cross-over design.

Participants

23 CF participants recruited, data given for 14 who completed the study. 12 males; mean (SEM) age 24 years (2); range 9 - 47 years. Inclusion criteria: FVC equal to or greater than 40% predicted.

Interventions

Treatment group: nebulised amiloride hydrochloride 1mg/ml in 0.13% NaCl, 4.5 ml 4x daily for 6 months. Control group: nebulised saline, 4x daily for 6 months.

Outcome measures

FEV1; FVC; sputum rheology; mucociliary clearance.

Main results

Fourteen patients completed the study. No significant changes occurred in forced expiratory volume in one second, forced vital capacity, oxygen saturation, body weight, sputum volume, culture and rheology, serum urea, and electrolytes, white cell count and erythrocyte sedimentation rate during either treatment period. The frequency of infective exacerbations was also not different in either treatment period.

Authors' conclusions

We were thus unable to confirm the benefit shown in the only other clinical trial of nebulized amiloride in cystic fibrosis and conclude that, in the presence of established treatment for cystic fibrosis lung disease, nebulized amiloride offers no additional clinical benefit.

http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/395/CN-00098395/frame.html

See also

Eur Respir J. 1993 Oct;6(9):1243-8.

Keywords

Adolescent; Adult; Amiloride; Child; Inhalation OR nebulised; Intranasal; nebuliser; non pharmacological intervention - devices OR physiotherapy; pharmacological_intervention; Airway clearance drugs -expectorants- mucolytic- mucociliary-; ENaC antagonists - Sodium Channel Blockers; Respiratory System Agents;