primary studies - published RCT

Pilot study of amiloride inhalation in children with cystic fibrosis.

Code: PM1614182 **Year:** 1992 **Date:** 1992 **Author:** Riedler J

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

ontrolled, double blind crossover study

Participants

9 CF children

Interventions

twice daily inhaled amiloride (10(-3)M). Each treatment period (amiloride versus 0.9% saline) lasted for two months.

Outcome measures

sputum weight, consistency of sputum and lung function (FEF1, FVC, FEF50, FEF25, PEF)

Main results

Inhaled amiloride was able to increase mean sputum weight per day from 11.75 g (+/- 5.96) up to 18.5 g (+/- 10.34). This was equal to an increase of 57%. Some children felt that sputum expectoration lasted longer while using amiloride and that even for some hours after inhalation they expectorated a sputum-like fluid. We were able to detect, at least in some patients, that their sputum consisted of two parts, one showing more solid contents, the other more fluid-like contents. This was, however, not a consistent feature. No significant or clinical important differences were found for pulmonary function test data. There were no pulmonary or extra pulmonary side effects from treatment with amiloride.

Authors' conclusions

Further studies should be undertaken to assess the efficacy of longer lasting amiloride inhalation on the course of the disease in CF patients.

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See also

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Keywords

Adolescent; Amiloride; Child; Inhalation OR nebulised; pharmacological_intervention; Airway clearance drugs -expectorants- mucolytic-mucociliary-; ENaC antagonists - Sodium Channel Blockers; Respiratory System Agents;