primary studies - published RCT

Pulmonary deposition of nebulised amiloride in cystic fibrosis: comparison of two nebulisers.

Code: PM1750018 **Year:** 1991 **Date:** 1991 **Author:** Thomas SH

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

Randomised, cross-over study.

Participants

8 patients with cystic fibrosis

Interventions

nebulised amiloride (1 mg in 3 ml saline) given via a jet (System 22 with CR 60 compressor) and an ultrasonic (Fisoneb) nebuliser

Outcome measures

Pulmonary amiloride deposition Oropharangeal and gastrointestinal deposition of amiloride FEV1, FVC and PEF Adverse events Patient preference

Main results

Amiloride inhalation caused no side effects or changes in spirometric indices. The mean (SD) total pulmonary amiloride deposition was 57 (24) micrograms with the System 22 and 103 (53) micrograms with the Fisoneb nebuliser. Pulmonary deposition was completed more rapidly with the Fisoneb (4-5 minutes) than with the System 22 nebuliser (7-8 minutes) and the Fisoneb was preferred by the patients.

Authors' conclusions

Both nebulisers appeared to deliver adequate amounts of amiloride to the lungs, but treatment with the Fisoneb nebuliser was quicker, more efficient, and more acceptable to the patients. Of the two nebulisers assessed, the Fisoneb would be preferred for clinical trials.

http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/189/CN-00080189/frame.html

See also

Thorax YR: 1991 VL: 46 NO: 10

Keywords

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