primary studies - published RCT

Effect of nebulized colistin sulphate and colistin sulphomethate on lung function in patients with cystic fibrosis: a pilot study.

Code: PM15463883 **Year:** 2004 **Date:** 2004 **Author:** Westerman EM

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

double blind, randomized cross over study.

Participants

9 CF-patients chronically infected with P. aeruginosa

Interventions

On two visits to the outpatient clinic, patients were submitted to either nebulized colistin sulphate or colistin sulphomethate solution.

Outcome measures

Lung function tests were performed immediately before and 15 and 30 min after nebulization.

Main results

Nebulization of colistin sulphate caused a significant larger mean decrease in lung function compared to nebulized colistin sulphomethate. A significant decrease in mean changes (SD) in FEV1 at 30 min and FVC at 15 and 30 min after nebulization compared to baseline of -7.3% (8.6%), -5.7% (7.3%) and -8.4% (7.5%) respectively was seen after colistin sulphate nebulization compared to colistin sulphomethate (P

Authors' conclusions

Based on these results it was concluded that inhalation with nebulized colistin sulphate is not suitable for treatment of CF patients chronically infected with P. aeruginosa. Colistin sulphomethate is the drug of choice for pulmonary administration of colistin.

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See also

J Cyst Fibros. 2004 Mar;3(1):23-8.

Keywords

Adult; Anti-Bacterial Agents; Colistin; Drug Administration Schedule; Inhalation OR nebulised; nebuliser; non pharmacological intervention - devices OR physiotherapy; pharmacological_intervention; Bacterial Infections; Respiratory Tract Infections; Respiratory Tract Diseases; Infection; Pseudomonas aeruginosa; Pseudomonas; other anti-bacterial agents;