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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.

<http://dx.doi.org/10.1016/j.jcf.2003.12.005>

### 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;