

*primary studies - published RCT*

## Aerosol scintigraphy in the assessment of therapy for cystic fibrosis.

**Code:** PM1563189

**Year:** 1992 **Date:** 1992

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

RCT

### Participants

13 patients with cystic fibrosis (aged 11 to 32 years) who were hospitalized for exacerbation and who had sputum cultures positive for *Pseudomonas* organisms

### Interventions

4 days with bronchodilators and physiotherapy followed by the addition of antibiotic (14 days, n = 8) or placebo (14 days, n = 4; 7 days, n = 1).

### Outcome measures

Tc-99m DTPA aerosol scintigraphy was performed on the day before bronchodilators and physiotherapy, on the day before antibiotic or placebo, and on the day after completion of antibiotic or placebo therapy. Scintigrams were evaluated for change in the number of nonventilated segments and change in the number of bronchial deposits of aerosol.

### Main results

Sixty-nine percent of patients showed improvement after bronchodilators and physiotherapy alone. Sixty-two percent showed further improvement after antibiotic or placebo was added; this improvement was independent of whether antibiotic or placebo was administered (P greater than 0.1)

### Authors' conclusions

These aerosol scintigraphy results failed to demonstrate that the effectiveness of bronchodilators and physiotherapy is enhanced by antibiotics in the treatment of cystic fibrosis exacerbations.

<http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/248/CN-00083248/frame.html>

### See also

Clin Nucl Med. 1992 Feb;17(2):90-3.

### Keywords

Adult; Anti-Bacterial Agents; Bacterial Infections; Bronchodilator Agents; Combined Modality Therapy; Infection; Inhalation OR nebulised; pharmacological\_intervention; *Pseudomonas aeruginosa*; *Pseudomonas*; Respiratory Tract Diseases; Respiratory Tract Infections; Ticarcillin; Tobramycin; Exacerbation; Penicillins; Aminoglycosides;