

primary studies - published RCT

**Parry MF, Neu HC, Merlino M, Gaerlan PF, Ores CN, Denning CR.
Treatment of pulmonary infections in patients with cystic fibrosis:
a comparative study of ticarcillin and gentamicin. Journal of
Pediatrics 1977;90(1):144-8.**

Code: PM401521

Year: 1977 Date: 1990

Author: Parry MF

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

Randomised, single-blind, placebo-controlled cross over

Participants

11 participants (8 males), age range 8 - 29 years, mean (SEM) age 18.1 (2.0) years. Normal nutritional status. Schwachman score ranged from 53 to 97. Other medication discontinued before study commenced

Interventions

2 ml placebo (0.9 % hypertonic saline solution) or 2 ml ipratropium bromide solution (Atrovent[®] = 250 µg in 1 ml hypertonic saline solution) on different days in the space of 2 weeks

Outcome measures

Lung function (FEV1, FEF25-75%, RV, TLC) measured before, then 30, 60 and 120 min after inhalation

Main results

The mean figures for the changes in FEV1.0, FEF25-75%, RV and TLC after inhalation of IB and placebo did not differ significantly. However, FEV1.0 and FEF25-75% after administration of IB increased in 4 out of 11 patients, and decreased in one. The lung volumes changed significantly in only a single case.

Authors' conclusions

This variable effect of inhaled IB in CF patients is in agreement with findings that have been observed for other substances with a "bronchodilatory" effect in patients with CF.

See also

J Pediatr. 1977 Jan;90(1):144-8.

Keywords

Adolescent; Adult; Anticholinergic Agents; Atropine; Biomarker; Bronchodilator Agents; Child; Inhalation OR nebulised; Ipratropium; non pharmacological intervention - diagn; pharmacological_intervention; Respiratory System Agents;