primary studies - published RCT

Role of anticholinergic agents in the treatment of cystic fibrosis.

Code: PM7633556 **Year:** 1995 **Date:** 1995 **Author:** Sanchez I

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

RCT, crossover design

Participants

young CF patients

Interventions

1st study) inhaling salbutamol or ipratropium bromide (IB) or both drugs before spirometry; 2nd study) normal saline, salbutamol or ipratropium bromide before spirometry

Outcome measures

1st study) FEV1, static volumes and airway-resistance measurements; 2nd study) PC20, FEV1

Main results

1st study) In a group of young CF patients, we found on average a 7% increase in FEV1 after salbutamol and a 10% improvement after ipratropium bromide (IB). After inhaling both drugs, there was a 17% increase in FEV1 from baseline. There were also significant changes in static volumes and airway-resistance measurements when salbutamol and IB were administered in combination. 2nd study) They found an increase in PC20 without a change in baseline FEV1 following salbutamol and an even greater change after IB.

Authors' conclusions

These results suggest that the adrenergic agent altered the smooth muscle contractile mechanism, and that muscarinic pathway appears to be important in the pathogenesis of expiratory airflow obstruction in some CF patients. The mechanisms of this cholinergic sensitivity are unclear.

http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/787/CN-00116787/frame.html

See also

Archives de pédiatrie : organe officiel de la Société française de pédiatrie YR: 1995 VL: 2 Suppl 2

Keywords

Albuterol; Anticholinergic Agents; Bronchodilator Agents; Child; Combined Modality Therapy; Ipratropium; pharmacological_intervention; Inhalation OR nebulised; Salbutamol; Adrenergic beta-Agonists; Respiratory System Agents; Respiratory Tract Diseases;