primary studies - published RCT

Effects of standard and high doses of salmeterol on lung function of hospitalized patients with cystic fibrosis.

Code: PM10023791 **Year:** 1999 **Date:** 1999 **Author:** Hordvik NL

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

3-way cross-over trial over 3 days

Participants

20 participants (7 males), age range 13 - 36 years NIH score 43 - 85

Interventions

Day 1: 2 puffs of albuterol MDI (180 mcg prior to 4 sessions of CPT) Day 2: 2 puffs of salmeterol (42 mcg) before first and last sessions of CPT and placebo before sessions 2 and 3 Day 3: 2 puffs of placebo. CPT sessions at 0700 hours, 1100 hours, 1500 hours and 2100 hours

Outcome measures

Changes in spirometry (FEV1, FVC, FEF25-75)measured pre- and 45 minutes post 0700 hours and 1500 hours, pre- 1900 hours and pre- 0700 hours next morning.

Main results

Eighteen patients in the low-dose group and 10 of the same 18 patients in the high-dose group completed the 3 consecutive days of testing and received either salmeterol, albuterol, or placebo with each of four chest physiotherapy sessions given at 7 AM, 11 AM, 3 PM, and 7 PM. At standard doses (2 puffs), the mean percent changes in FEV1 pre- to post-7 AM therapy for salmeterol (5.5%) and albuterol (9.9%) were significantly greater than with placebo (-1.2%) (P

Authors' conclusions

We recommend the use of high-dose salmeterol in hospitalized patients with FVC values of 40% of predicted or greater, starting with 2 and increasing to 4 puffs BID as tolerated.

3.0.CO;2-E" target="_blank">http://dx.doi.org/10.1002/(SICI)1099-0496(199901)27:1<43::AID-PPUL9>3.0.CO;2-E

See also

Pediatr Pulmonol. 1999 Jan;27(1):43-53.

Keywords

Adolescent; Adrenergic beta-Agonists; Adult; Albuterol; Artificial Ventilation; Bronchodilator Agents; Hospitalization; Hospital care; Inhalation OR nebulised; non pharmacological intervention - devices OR physiotherapy; non pharmacological intervention - psyco-soc-edu-org; pharmacological_intervention; salmeterol; Ventilators; High-Dose; Respiratory System Agents; Organization;