primary studies - published RCT

Comparison of efficacy of salbutamol and sodium cromoglycate in the prevention of ticarcillin-induced bronchoconstriction.

Code: PM8255636 **Year:** 1993 **Date:** 1993 **Author:** Chua HL

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

randomized, double-blind, placebo-controlled design.

Participants

15 children with CF

Interventions

pretreatments of saline, SCG, or salbutamol, in random order, one on each day.

Outcome measures

Baseline lung function was measured before and after pretreatment, and after ticarcillin nebulization.

Main results

On the control day (saline pretreatment), ticarcillin caused a reduction in forced expiratory volume in one second (FEV1), which was maximal 10 minutes after receiving the aerosol and persisted for 120 minutes. The mean maximal fall in FEV1 was 9%. Pretreatment with salbutamol abolished the fall in FEV1 seen with ticarcillin at all time points. Pretreatment with SCG diminished the maximal fall in FEV1 at 10 minutes (mean, 4%) and resulted in the FEV1 returning to baseline within 120 minutes.

Authors' conclusions

These data suggest that pretreatment with salbutamol is more effective in preventing ticarcillin-induced bronchoconstriction in the doses used in routine clinical practice, than it is with SCG.

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See also

Pediatr Pulmonol. 1993 Nov;16(5):311-5.

Keywords

Adolescent; Albuterol; Anti-Bacterial Agents; Bronchodilator Agents; Child; Cromolyn Sodium; pharmacological_intervention; prevention; Salbutamol; Ticarcillin; Bacterial Infections; Respiratory Tract Infections; Infection; Adrenergic beta-Agonists; Respiratory System Agents; Penicillins; Respiratory Tract Diseases;