primary studies - published RCT

Efficacy of aerosolized tobramycin in patients with cystic fibrosis.

Code: PM8497284 **Year:** 1993 **Date:** 1993 **Author:** Ramsey BW

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

randomized crossover study.

Participants

71 patients with CF and P. aeruginosa infections in stable pulmonary status were recruited

Interventions

7 U.S. centers for the treatment of cystic fibrosis. patients were randomly assigned to one of two crossover regimens. Group 1 received 600 mg of aerosolized tobramycin for 28 days, followed by half-strength physiologic saline (placebo) for two 28-day period. Group 2 received placebo for 28 days, followed by tobramycin for two 28-day periods.

Outcome measures

Pulmonary function, the density of P. aeruginosa in sputum, ototoxicity, nephrotoxicity, and the emergence of tobramycin-resistant P. aeruginosa were monitored.

Main results

In the first 28-day period, treatment with tobramycin was associated with an increase in the percentage of the value predicted for forced expiratory volume in one second (9.7 percentage points higher than the value for placebo; P

Authors' conclusions

The short-term aerosol administration of a high dose of tobramycin in patients with clinically stable cystic fibrosis is an efficacious and safe treatment for endobronchial infection with P. aeruginosa.

http://dx.doi.org/10.1056/NEJM199306173282403

See also

The New England journal of medicine YR: 1993 VL: 328 NO: 24

Keywords

Adolescent; Anti-Bacterial Agents; Artificial Ventilation; Bacterial Infections; Infection; Inhalation OR nebulised; non pharmacological intervention - devices OR physiotherapy; pharmacological_intervention; Pseudomonas aeruginosa; Pseudomonas; Respiratory Tract Diseases; Respiratory Tract Infections; Tobramycin; Ventilators; Aminoglycosides;