primary studies - published RCT

Population-based genetic screening for cystic fibrosis: attitudes and outcomes.

Code: PM20090299 **Year:** 2010 **Date:** 1980 **Author:** Ioannou L

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

randomized, double-blind trial

Participants

11 children given tobramycin and in seven of 11 given placebo. Two patients in the placebo group died.

Interventions

tobramycin and placebo

Outcome measures

pulmonary function, quantitative cultures of sputum, colonization

Main results

No patient given placebo had improved results on pulmonary function studies, whereas improvement of 15% or more occurred in four of the six patients given tobramycin who could cooperate with the testing. Quantitative cultures of sputum showed a decrease of 1 logarithm or greater in Pseudomonas sp concentrations in six of seven patients in the tobramycin group and in two of eight in the placebo group. No difference in staphylococcal colonization was found. Several features indicate that children with severer disease were randomly assigned to the placebo group

Authors' conclusions

the trend toward improved response in patients given tobramycin suggests that empirical therapy with antibiotics is beneficial for patients with acute pulmonary exacerbations in cystic fibrosis.

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See also

Public Health Genomics. 2010;13(7-8):449-56. Epub 2010 Jan 14.

Keywords

Adolescent; Anti-Bacterial Agents; Bacterial Infections; Child; Infection; pharmacological_intervention; placebo; Pseudomonas aeruginosa; Pseudomonas; Respiratory Tract Diseases; Respiratory Tract Infections; Staphylococcus aureus; Tobramycin; Exacerbation; Aminoglycosides;