primary studies - published RCT

Sinonasal inhalation of tobramycin vibrating aerosol in cystic fibrosis patients with upper airway Pseudomonas aeruginosa colonization: results of a randomized, double-blind, placebo-controlled pilot study.

Code: PM24596456 **Year:** 2014 **Date:** 2014 **Author:** Mainz JG

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

randomized controlled trial

Participants

Nine CF patients

Interventions

Patients were randomized to inhalation of tobramycin (80 mg/2 mL) or placebo (2 mL isotonic saline) once daily (4 minutes/nostril) with the PARI Sinus nebulizer over 28 days, with all patients eligible for a subsequent course of open-label inhalation of tobramycin for 28 days.

Outcome measures

Nasal lavage was obtained before starting and 2 days after the end of each treatment period by rinsing each nostril with 10 mL of isotonic saline. P. aeruginosa quantity. SNOT-20 score

Main results

Nine patients participated, six initially receiving tobramycin and three placebo. Sinonasal inhalation was well tolerated, with serum tobramycin

Authors' conclusions

Sinonasal inhalation of vibrating antibiotic aerosols appears promising for reducing pathogen colonization of paranasal sinuses and for control of symptoms in patients with CF.

http://dx.doi.org/10.2147/DDDT.S54064

See also

Drug Des Devel Ther. 2014 Feb 10;8:209-17. doi: 10.2147/DDDT.S54064. eCollection 2014.

Keywords

Anti-Bacterial Agents; Pseudomonas aeruginosa; Pseudomonas; Tobramycin; Bacterial Infections; Infection; Inhalation OR nebulised; nebuliser; non pharmacological intervention - devices OR physiotherapy; pharmacological_intervention; Respiratory Tract Diseases; Respiratory Tract Infections; Airway clearance technique; Vibration; Aminoglycosides;