
primary studies - published RCT

Comparison of 6 and 8 hourly tobramycin dosing intervals in treatment of pulmonary exacerbations in cystic fibrosis patients.

Code: PM1906161

Year: 1991 **Date:** 1991

Author: Winnie GB

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

randomized trial

Participants

CF patients ages 13 to 30 years received 34 treatment courses

Interventions

tobramycin administered either every 6 or 8 hours. Peak serum concentrations were adjusted to 8 to 10 micrograms/ml; thus a larger total daily dosage was administered to patients receiving tobramycin every 6 hours.

Outcome measures

pulmonary function, time to next hospital admission for a pulmonary exacerbation, clinical score, sputum carriage of *P. aeruginosa*, toxicity or necessary length of hospitalization.

Main results

The shorter dosing interval was associated with better pulmonary function at follow-up and significantly longer time before next hospital admission for a pulmonary exacerbation. During the study hospitalization there were no differences in pulmonary function tests, clinical score, sputum carriage of *P. aeruginosa*, toxicity or necessary length of hospitalization.

Authors' conclusions

A 6-hour tobramycin dosing interval was more efficacious than an 8-hour dosing interval in the treatment of cystic fibrosis patients.

<http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/630/CN-00076630/frame.html>

See also

Pediatr Infect Dis J. 1991 May;10(5):381-6.

Keywords

Adolescent; Adult; Anti-Bacterial Agents; Bacterial Infections; Drug Administration Schedule; Infection; pharmacological_intervention; Pneumonia; Pseudomonas aeruginosa; Pseudomonas; Respiratory Tract Diseases; Respiratory Tract Infections; Tobramycin; Exacerbation; Aminoglycosides;