

primary studies - published RCT

Controlled trial of ceftazidime vs. ticarcillin and tobramycin in the treatment of acute respiratory exacerbations in patients with cystic fibrosis.

Code: PM3885181

Year: 1985 **Date:** 1985

Author: Gold R

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

randomized controlled trial

Participants

CF patients with mild to moderate severity lung disease: 17 in the ceftazidime group and 13 in the ticarcillin/tobramycin group

Interventions

ceftazidime vs. the combination of ticarcillin and tobramycin

Outcome measures

efficacy and safety, symptom scores, vital signs, body weight and pulmonary function, sputum culture, antibiotic resistance, adverse events

Main results

The two antibiotic regimens were equally effective in terms of clinical improvement: 16 of 17 in the ceftazidime group and 11 of 13 in the ticarcillin/tobramycin group were judged to be improved by the patients and attending physicians and were observed to show improvement in symptom scores, vital signs, body weight and pulmonary function. Ceftazidime was more effective bacteriologically in reducing colony counts of *Pseudomonas aeruginosa* in the sputum. Neither regimen affected *Pseudomonas cepacia*. Resistance to multiple antibiotics developed in six of 12 isolates of nonmucoid *P. aeruginosa* in patients receiving ticarcillin/tobramycin, which was significantly more than occurred in the ceftazidime group. There was no correlation between clinical and bacteriologic outcomes in either treatment group. No clinically important adverse effects were observed.

<http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/509/CN-00037509/frame.html>

See also

Pediatr Infect Dis. 1985 Mar-Apr;4(2):172-7.

Keywords

Adolescent; Adult; Anti-Bacterial Agents; Bacterial Infections; Ceftazidime; Combined Modality Therapy; Infection; Penicillins; pharmacological_intervention; *Pseudomonas aeruginosa*; *Pseudomonas*; Respiratory Tract Diseases; Respiratory Tract Infections; Ticarcillin; Tobramycin; Exacerbation; Cephalosporins; Aminoglycosides;