primary studies - published RCT

Randomized study of two dosage regimens of ciprofloxacin for treating chronic bronchopulmonary infection in patients with cystic fibrosis.

Code: PM3555035 **Year:** 1987 **Date:** 1987 **Author:** Shalit I

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

randomized trial

Participants

29 adult patients with cystic fibrosis who had chronic bronchopulmonary infection

Interventions

750 or 1,000 mg of oral ciprofloxacin every 12 hours for two weeks.

Outcome measures

Assessments for efficacy and safety were made on treatment Days 7 and 14 and one week following completion of therapy, and pharmacokinetic data were collected on Days 1, 7, and 14.

Main results

Fifteen of 28 evaluable patients showed clinical improvement, and none had clinical deterioration. The higher dosage of ciprofloxacin did not enhance the clinical response. Statistically significant, stepwise changes in clinical scores, pulmonary function, and sputum concentrations of Pseudomonas aeruginosa and Staphylococcus aureus were noted, but regression toward initial values occurred by one week after treatment. Although all P. aeruginosa isolates were initially inhibited by 2 mg/liter of ciprofloxacin or less, 45 and 35 percent of isolates were resistant after 14 days of therapy and one week later, respectively.

Authors' conclusions

Outpatient oral ciprofloxacin therapy was commonly associated with clinical improvement in adult patients with cystic fibrosis who have chronic bronchopulmonary infection, regardless of the emergence of resistant P. aeruginosa, and adverse reactions were infrequent. Further studies must delineate the long-term consequences of the frequent emergence of bacterial resistance.

http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/924/CN-00047924/frame.html

See also

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Keywords

Adolescent; Adult; Anti-Bacterial Agents; Bacterial Infections; Ciprofloxacin; Haemophilus influenzae; Infection; pharmacological_intervention; Pneumonia; Pseudomonas aeruginosa; Pseudomonas; Respiratory Tract Diseases; Respiratory Tract Infections; Staphylococcus aureus; Oral; Quinolones;