

primary studies - published RCT

## **Relationships among nutritional status and skeletal and respiratory muscle function in cystic fibrosis: does early dietary supplementation make a difference?.**

**Code:** PM8460615

**Year:** 1993 **Date:** 1997

**Author:** Hanning RM

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

prospective, randomized, double blind study

### **Participants**

130 patients (ages 5 to 17 years)

### **Interventions**

i.v. ciprofloxacin 10 mg/kg every 8 h for 7 days followed by oral ciprofloxacin 20 mg/kg every 12 h for a minimum of 3 days or i.v. ceftazidime 50 mg/kg every 8 h plus i.v. tobramycin 3 mg/kg every 8 h for a minimum of 10 days.

### **Outcome measures**

Clinical, bacteriologic and safety responses were assessed throughout the study.

### **Main results**

All 84 patients (median age, 11 years; range, 5 to 17 years) valid for efficacy in both treatment groups demonstrated clinical improvement. Five patients experienced clinical relapses (3 ciprofloxacin, 2 ceftazidime/tobramycin) by the 2- to 4-week follow-up. Intent-to-treat analysis demonstrated similar clinical findings between the two treatment groups at both the end of therapy and follow-up. Clinical improvement correlated with improvement in pulmonary function studies and the acute clinical scoring system but not with bacteriologic eradication of *Pseudomonas*. DNA profiles demonstrated that irrespective of colony morphology, usually one clonal strain was associated with each patient's pulmonary exacerbation. Treatment-associated musculoskeletal events occurred with equal frequency (22% vs. 21%) in both study drug groups (n = 129), and arthralgias were within the range of rates for cystic fibrosis arthropathy. None of these events required study drug discontinuation.

### **Authors' conclusions**

Sequential i.v./oral ciprofloxacin monotherapy offers a safe and efficacious alternative to standard parenteral therapy for acute pulmonary exacerbations in pediatric cystic fibrosis patients.

<http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/036/CN-00092036/frame.html>

### **See also**

Am J Clin Nutr. 1993 Apr;57(4):580-7.

### **Keywords**

Adolescent; Anti-Bacterial Agents; Bacterial Infections; Ceftazidime; Child; Ciprofloxacin; Combined Modality Therapy; Infection; pharmacological\_intervention; Pneumonia; *Pseudomonas aeruginosa*; *Pseudomonas*; Respiratory Tract Diseases; Respiratory Tract Infections; Tobramycin; Exacerbation; Oral; Cephalosporins; Quinolones; Aminoglycosides;