primary studies - published RCT

Lung Clearance Index and Structural Lung Disease on Computed Tomography in Early Cystic Fibrosis.

Code: PM26359952 **Year:** 2016 **Date:** 1983 **Author:** Ramsey KA

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

controlled, double-blind study

Participants

29 patients with cystic fibrosis. Group I: 12; group II: 14.

Interventions

azlocillin (group I) at mean dosage of 252 mg/kg/day for a mean duration of 13.2 days of treatment and carbenicillin (group II) at mean dosage of 505 mg/kg/day for a median duration of 12.6 days

Outcome measures

sputum culture. Therapeutic efficacy was evaluated according to our scoring system of ten clinical factors, five radiological and five pulmonary function factors with 5 points each and 100 points total if perfect. Azlocillin tolerability and safety

Main results

Except for one patient of group I who had Staphylococcus aureus in sputum culture, the remaining patients all had Pseudomonas aeruginosa of mucoid colonial morphology with or without the same organism of rough variety in their sputum culture. The percentage of patients who improved by 20% or greater in clinical scores was found in 91.7% of patients in group I and 64.3% of patients in group II, which was statistically significantly different. The percentage of patients who improved by 20% or greater in total scores was found in 80% of group I and 45.5% of group II patients, which was less significant than the evaluation of clinical scores alone. Azlocillin was well tolerated and safe in the dosage employed. Its optimal dosage for patients with cystic fibrosis should be established.

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See also

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Keywords

Adolescent; Adult; Anti-Bacterial Agents; Azlocillin; Bacterial Infections; carbenicillin; Child; Infection; Penicillins; pharmacological_intervention; Piperacillin; Respiratory Tract Diseases; Respiratory Tract Infections; Exacerbation; Pseudomonas aeruginosa; Pseudomonas;