

primary studies - published RCT

Antibiotic prophylaxis in infants and young children with cystic fibrosis: a randomized controlled trial.

Code: PM11953726

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

Randomised controlled trial.

Participants

Children under 2 years. 209 enrolled, 90 withdrew and 119 completed the study (68 prophylaxis, 51 'as required'). Mean age at enrolment (prophylaxis = 14.1 months, 'as required' = 12.7 months). Followed up for between 5 and 7 years. Data collected at yearly intervals from year 1.

Interventions

Continuous cephalixin versus placebo.

Outcome measures

Primary outcome: Lung function. Secondary outcomes: 1. Growth 2. Inpatient days 3. Courses of 'as required' oral antibiotics 4. Participants with isolates of common pathogens 5. *P. aeruginosa*

Main results

Of 209 children enrolled, 119 completed a 5- to 7-year course of therapy. Mean age at enrollment was 15.6 and 14.1 months in the cephalixin and placebo groups, respectively. Respiratory cultures from children treated with cephalixin were significantly less likely to be positive for *S aureus* (6.0% vs 30.4%; *P*

Authors' conclusions

Although long-term prophylaxis with cephalixin successfully delayed the acquisition of *S aureus*, it enhanced colonization with *P aeruginosa* and did not lead to clinically significant improvement in major health outcomes. These data do not support routine antistaphylococcal prophylaxis in otherwise healthy infants and young children with CF.

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See also

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Keywords

Anti-Bacterial Agents; Bacterial Infections; Cephalixin; Child; Cyclosporin; Immunosuppressive Agents; Infant; Infection; pharmacological_intervention; Pneumonia; *Pseudomonas aeruginosa*; *Pseudomonas*; Respiratory Tract Diseases; Respiratory Tract Infections; *Staphylococcus aureus*; Continuous; Cephalosporins;