primary studies - published RCT

Prevention of chronic Pseudomonas aeruginosa colonisation in cystic fibrosis by early treatment.

Code: PM1679870 **Year:** 1991 **Date:** 1991 **Author:** Valerius NH

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

Randomised, placebo-controlled, parallel, single centre trial.

Participants

26 participants aged 2 - 9 years (males: females = 13:13) with a recent positive culture who have never received anti-pseudomonal therapy.

Interventions

Oral ciprofloxacin (250 - 750 mg) twice-daily and inhaled colistin (1 mill. IU) for 3 weeks at entry and each time P. aeruginosa isolated or no anti-pseudomonas chemotherapy. Length of trial: 27 months.

Outcome measures

Time to chronic colonisation with P. aeruginosa (defined as the presence of P. aeruginosa in monthly routine sputum specimens for 6 consecutive months and/or the development of precipitating serum antibodies against P. aeruginosa).

Main results

During the 27 months of the trial, infection with Ps aeruginosa became chronic in significantly fewer treated than untreated subjects (2 [14%] vs 7 [58%]; p less than 0.05) and there were significantly fewer Ps aeruginosa isolates in routine sputum cultures in the treated group (49/214 [23%] vs 64/158 [41%]; p = 0.0006).

Authors' conclusions

chronic colonisation with Ps aeruginosa can be prevented in cystic fibrosis by early institution of anti-pseudomonas chemotherapy.

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See also

Lancet. 1991 Sep 21;338(8769):725-6.

Keywords

Anti-Bacterial Agents; Bacterial Infections; Child; Ciprofloxacin; Colistin; Combined Modality Therapy; Infant; Infection; pharmacological_intervention; prevention; Pseudomonas aeruginosa; Pseudomonas; Respiratory Tract Diseases; Respiratory Tract Infections; Inhalation OR nebulised; Oral; Quinolones; other anti-bacterial agents;