primary studies - published RCT

The value of serum IgG titres against Pseudomonas aeruginosa in the management of early pseudomonal infection in cystic fibrosis.

Code: PM1417051 **Year:** 1992 **Date:** 1992 **Author:** Brett MM

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

1-year RCT, parallel design with 2 treatment arms.

Participants

19 participants with a modest increase in serum IgG titres against P. aeruginosa plus P. aeruginosa isolated from respiratory cultures. Participants were excluded if they had very high titres, corticosteroid treatment or nebulised anti-pseudomonal antibiotic treatment

Interventions

On entry to trial, combination 2-week course of IV antibiotic therapy repeated every 4 months until IgG titres returned to control range, versus standard treatment.

Outcome measures

On entry to trial and after 1 year, parameters measured were: Serum IgG titre; FEV1 (% predicted); white cell count; % neutrophils; serum IgG; % of cultures positive for mucoid and non-mucoid P. aeruginosa; and number of courses of anti-pseudomonal treatment per participant.

Main results

Patients enrolled had serum IgG titres against Pseudomonas aeruginosa above the control range. Assignment to the observation or treatment group was by minimisation. Significant signs or symptoms in any patient prompted antipseudomonal treatment. In addition, the treatment group received antipseudomonal treatment at intervals of four months until the serum IgG titre returned to the control range. P aeruginosa was isolated intermittently from patients in the main trial. Nineteen patients were enrolled (12 observation, seven treatment). After one year in the trial changes in parameters studied, including forced expiratory volume in one second, IgG titre, serum IgG concentrations, and frequency of P aeruginosa isolation had improved in the treated group and worsened in the observation group.

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See also

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Keywords

Adolescent; Adult; Bacterial Infections; Child; Immunization; Immunoglobulin G; Infection; pharmacological_intervention; Pseudomonas aeruginosa; Pseudomonas; Respiratory Tract Diseases; Respiratory Tract Infections; Immunoglobulins;