primary studies - published RCT

Controlled trial of oral N-acetylcysteine in cystic fibrosis.

Code: PM7049146 **Year:** 1982 **Date:** 1982 **Author:** Mitchell EA

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

Randomized, double-blind, placebo-controlled, cross-over study design.

Participants

20 children (10 male) with CF. Stable mild to moderate pulmonary disease (mean (SD) Schwachman score 76 (10)). Aerosolized mucolytic therapy was stopped during the trial period. Mean (SD) age 10.8 (5.9) years.

Interventions

Initial 2-week training period where all participants took placebo. Duration 6 months (3 months in each limb, with a 2-week training period and a 2-week wash out period when all participants took placebo). 3 months on oral placebo and 3 months on 200 mg oral NAC tid.

Outcome measures

Clinical assessment, body weight, CXR score, daily best-of-three PEF, antibiotic usage, cough frequency (scale of 0 - 3), and self-assessed sputum viscosity (scale of 0 - 3).

Main results

No significant difference between the 3 month treatment periods with NAC and placebo were detected on daily peak expiratory flow rates (PEFR), subjective sputum viscosity, and cough frequency scores. Neither was there any statistically significant difference in weight gain, antibiotic usage or chest radiograph (CXR) scores.

See also

Aust Paediatr J. 1982 Mar;18(1):40-2.

Keywords

Acetylcysteine; Airway clearance drugs -expectorants- mucolytic- mucociliary-; N Acetylcysteine; Oral; pharmacological_intervention; placebo; thiols; Respiratory System Agents; Nacystelyn;