primary studies - published RCT

Effects of glutamine and recombinant human growth hormone on protein metabolism in prepubertal children with cystic fibrosis.

Code: PM15001600 **Year:** 2004 **Date:** 2007

Author: Darmaun D

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

prospective, randomized, placebo-controlled, cross-over study

Participants

19 CF children

Interventions

LGG for 6 months and then shifted to oral rehydration solution (ORS) for 6 months. In parallel 19 received ORS and then shifted to LGG.

Outcome measures

incidence of pulmonary exacerbations and of hospital admissions, forced expiratory volume (FEV1), and modifications of body weight.

Main results

Patients treated with LGG showed a reduction of pulmonary exacerbations (Median 1 vs. 2 , range 4 vs. 4, median difference 1, CI 95% 0.5-1.5; p=0.0035) and of hospital admissions (Median 0 vs. 1, range 3 vs. 2, median difference 1, CI 95% 1.0-1.5; p=0.001) compared to patients treated with ORS. LGG resulted in a greater increase in FEV1 (3.6% +/- 5.2 vs. 0.9% +/- 5; p=0.02) and body weight (1.5 kg +/- 1.8 vs. 0.7 kg +/- 1.8; p=0.02).

Authors' conclusions

LGG reduces pulmonary exacerbations and hospital admissions in patients with CF. These suggest that probiotics may delay respiratory impairment and that a relationship exists between intestinal and pulmonary inflammation.

http://dx.doi.org/10.1210/jc.2003-031409

See also

The Journal of clinical endocrinology and metabolism YR: 2004 VL: 89 NO: 3

Keywords

Adolescent; Child; Hospitalization; Hospital care; Lactobacillus; Probiotics; Supplementation; Exacerbation; Respiratory Tract Infections; Respiratory Tract Diseases; Infection; Bacterial Infections; Oral; Immunoregulatory; pharmacological_intervention;