primary studies - published RCT

Improved antioxidant and fatty acid status of patients with cystic fibrosis after antioxidant supplementation is linked to improved lung function.

Code: PM12499335 **Year:** 2003 **Date:** 2006 **Author:** Wood LG

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

multicenter, randomized, controlled, crossover trial

Participants

Sixty-one prepubertal subjects (

Interventions

daily rhGH treatment or no treatment groups for 1 yr. In yr 2, treatments were crossed over.

Outcome measures

Outcome measures included serial standardized height and weight, number of hospitalizations and antibiotic courses, random blood glucose levels, lean mass, bone mineral content, pulmonary function, nutritional intake, and CF quality of life questionnaires.

Main results

Groups were similar at baseline and prepubertal during the entire study. After 1 yr, GH showed significantly greater gain in height, weight, lean mass, and bone mineral content. Gain in height was similar regardless of baseline. There were fewer hospitalizations in the rhGH-treated group and improvement in CF quality of life questionnaires measures of weight and body image. There was no difference in pulmonary function between groups. Results were similar in those treated with rhGH the second year. After cessation of rhGH treatment, there was sustained effect for increased height and weight velocity, as well as accrual of bone mineral.

Authors' conclusions

rhGH therapy improves height and weight, decreases the number of hospitalizations, and improves quality of life in prepubertal children with CF. These effects are sustained after rhGH is discontinued.

http://ajcn.nutrition.org/content/77/1/150.full.pdf

See also

Am J Clin Nutr. 2003 Jan;77(1):150-9.

Keywords

Child; Growth Hormone; Hormones; Hospitalization; Hospital care; non pharmacological intervention - psyco-soc-edu-org; pharmacological_intervention; rhGH; Organization;