primary studies - published RCT

Costs of Bronchoalveolar Lavage-Directed Therapy in the First 5 Years of Life for Children with Cystic Fibrosis.

Code: PM24996984 **Year:** 2014 **Date:** 2018 **Author:** Moodie M

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

Multicenter, randomized, double-blind, controlled trial

Participants

73 pancreatic insufficient CF subjects 10 years of age and older with an FEV1 between 40-100% predicted

Interventions

Patients were randomized to 16 weeks of an antioxidant-enriched multivitamin or control multivitamin without antioxidant enrichment.

Outcome measures

Systemic antioxidant concentrations, markers of inflammation and oxidative stress, clinical outcomes (pulmonary exacerbations, anthropometric measures, pulmonary function), safety and tolerability.

Main results

Change in sputum myeloperoxidase concentration over 16 weeks, the primary efficacy endpoint, was not significantly different between the treated and control groups. Systemic antioxidant concentrations (beta-carotene, CoQ10, gamma-tocopherol, lutein) significantly increased in the antioxidant treated group (p

Authors' conclusions

Antioxidant supplementation was safe and well tolerated, resulting in increased systemic antioxidant concentrations and modest reductions in systemic inflammation after 4 weeks. Antioxidant treatment was also associated with a lower risk of first pulmonary exacerbation.

http://dx.doi.org/10.1016/j.jpeds.2014.05.031

See also

J Pediatr. 2014 Jul 1. pii: S0022-3476(14)00458-2. doi: 10.1016/j.jpeds.2014.05.031.

Keywords

Vitamin A; Vitamin D; Vitamin E; Vitamin K; Vitamins; pharmacological_intervention; Supplementation; Antioxidants;