

primary studies - published RCT

Comparative trial between two pancreatine in enteric coated microspheres preparations in children with cystic fibrosis and steatorrhoea.

Code: CN-00269033

Year: 1990 **Date:** 1995

Author: Lazaro A

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

double-blind study, cross-over design

Participants

27 cystic fibrosis children; 17 healthy children living in the same area were also investigated as control subjects.

Interventions

selenium supplementation (2.8 micrograms of sodium selenite per kg per day) or placebo control and inversion of treatment periods.

Outcome measures

selenium status, plasma lipid peroxidation markers. Thiobarbituric acid reactants (TBARs), organic hydroperoxide concentrations

Main results

Before any treatment whatsoever and despite a selenium status close to those of control subjects, cystic fibrosis patients showed significant increase in plasma lipid peroxidation markers. Thiobarbituric acid reactants (TBARs) were normalized after the first treatment period of 5 months in both cystic fibrosis groups receiving either selenium supplementation or placebo. In this latter group, TBARs were reduced despite a significant decrease in plasma selenium concentrations as compared with the control group. Organic hydroperoxide concentrations were also simultaneously normalized in both cystic fibrosis groups at the end of the second treatment period.

Authors' conclusions

These results showed that improvement of lipid peroxidation markers was not related to the selenium supplementation. Nevertheless, oxidative stress sustained by cystic fibrosis children must be taken into account so that it does not aggravate the prognosis of the disease.

<http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/033/CN-00269033/frame.html>

See also

Boletín de la Sociedad de Pediatría de Aragón, La Rioja y Soria YR: 1990 VL: 20 DE: RCT

Keywords

Adolescent; Adult; Child; pharmacological_intervention; Selenium; Supplementation; Minerals;