primary studies - published RCT

Zinc Supplementation for One Year Among Children with Cystic Fibrosis Does Not Decrease Pulmonary Infection.

Code: PM26443019 **Year:** 2015 **Date:** 2015 **Author:** Sharma G

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

Double-blind randomized placebo-controlled trial

Participants

children with cystic fibrosis (age 5-15 y)

Interventions

The children received either 30-mg zinc tablets or similar looking placebo tablets daily in addition to standard care.

Outcome measures

Patients were followed up every month for a period of 12 months and whenever they had pulmonary exacerbations. Their serum zinc was estimated at baseline and at 12 months of enrollment. During each visit, the children underwent a pulmonary function test and sputum culture.

Main results

Of a total of 43 children screened, 40 were enrolled, and of them, 37 completed the study. The median (interquartile range) number of days of the administration of antibiotics over 12 months of follow-up among the children receiving zinc was 42 (14-97) d. In the placebo group, it was 38 (15-70) d (P = .79). There were no significant differences in the percent-of-predicted FEV1 or change in FEV1 values at 12 months (P = .44). The number of children in whose respiratory specimens Pseudomonas was isolated was similar for the 2 groups at different time intervals. The adverse events reported were similar in the 2 groups.

Authors' conclusions

Authors did not find any significant difference in the need for antibiotics, pulmonary function tests, hospitalization, colonization with Pseudomonas, or the need for antibiotics for children with cystic fibrosis receiving zinc supplementation of 30 mg/d.

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See also

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Keywords

Adolescent; Child; Infection; Minerals; Respiratory Tract Diseases; Respiratory Tract Infections; Supplementation; Zinc; pharmacological_intervention;