primary studies - published RCT

Pilot study of vitamin D supplementation in adults with cystic fibrosis pulmonary exacerbation: A randomized, controlled trial.

Code: PM22928076 **Year:** 2012 **Date:** 2012 **Author:** Grossmann RE

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

Randomized, placebo-controlled, double-blinded pilot study

Participants

Thirty adults with CF (hospital admission for a pulmonary exacerbation)

Interventions

250,000 IU cholecalciferol or placebo within 48 h of hospital admission for a pulmonary exacerbation.

Outcome measures

Concentrations of 25-hydroxyvitamin D (25(OH)D), clinical outcomes and potential adverse events were assessed up to one year after randomization. Survival.

Main results

Data from all subjects was analyzed. Serum 25(OH)D concentrations increased from a mean of 30.6 +/- 3.2 ng/mL to 58.1 +/- 3.5 ng/mL (p

Authors' conclusions

In this pilot study, a single, oral bolus of cholecalciferol increased serum 25(OH)D concentrations and was associated with a trend toward improved clinical outcomes in CF subjects hospitalized for a pulmonary exacerbation. Further investigation is needed into the clinical impact of improved vitamin D status in patients with CF.

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See also

Dermatoendocrinol. 2012 Apr 1;4(2):191-7.

Keywords

Bacterial Infections; Exacerbation; Infection; Inpatient; non pharmacological intervention - diet; Respiratory Tract Diseases; Respiratory Tract Infections; Virus; Vitamin D; Vitamins; High-Dose; Adult; pharmacological_intervention;