primary studies - published RCT

Vitamin D for glycemic control: A multicenter, double-blind, randomized, placebo-controlled trial in adults with cystic fibrosis.

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

Secondary analysis of a multicenter, double-blind, randomized, placebo-controlled study.

Participants

Adults with CF hospitalized for an acute pulmonary exacerbation (APE).

Interventions

A high-dose bolus of cholecalciferol (vitamin D (3). Within 72 hours of hospital admission, participants were randomly assigned to a single dose of oral vitamin D (3) (250,000 IU) or placebo, and subsequently, received 50,000 IU of vitamin D (3) or placebo every other week, beginning at month 3 and ending on month 12.

Outcome measures

Glycemic control was assessed by hemoglobin A1c (HbA1c) and fasting blood glucose levels before and 12 months after the study intervention.

Main results

Fifty of the 91 participants in the parent study were eligible for the secondary analysis. There were no differences in 12-month changes in HbA1c or fasting blood glucose in patients randomized to vitamin D or placebo.

Authors' conclusions

A high-dose bolus of vitamin D (3) followed by maintenance vitamin D (3) supplementation did not improve glycemic control in patients with CF.

http://dx.doi.org/10.1101/2024.01.04.24300862

See also

medRxiv. 2024 Jan 5:2024.01.04.24300862. doi: 10.1101/2024.01.04.24300862. Preprint.

Keywords

Adult; Bone Density Conservation Agents; Bone Diseases; Calcitriol; Child; Gastrointestinal Diseases; non pharmacological intervention - diet; Nutrition Disorders; Pancreas insufficiency; Pancreatic Diseases; pharmacological_intervention; Supplementation; vitamins; Vitamin D; Vitamin D Deficiency; Vitamin deficiencies; Vitamins; Malabsorption;