primary studies - published RCT

Efficacy of high dose phylloquinone in correcting vitamin K deficiency in cystic fibrosis.

Code: PM18511355 **Year:** 2008 **Date:** 2008 **Author:** Drury D

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

Randomised control trial over 1-month period. Montreal Children's Hospital Cystic Fibrosis Clinic, Canada. Date not specified.

Participants

N = 14; 8 to 18 years, gender unspecified. Inclusion criteria CF with pancreatic insufficiency. Method of CF diagnosis unreported known liver disease (diagnosed by ultrasound, liver function tests and/or hepatomegaly) Exclusion criteria: supplemental therapeutic vitamin K to treat coagulopathies Withdrawal or loss to follow-up: missing data (1) from 5 mg group at final assessment.

Interventions

oral administration of injectable formulation of vitamin K1 phytonadione (Sandoz Canada, Boucherville, Qc) diluted 1 mg/1 ml. Dose 1 mg/day for 1 month. Control: identical but dose 5 mg/day for 1 month.

Outcome measures

Primary outcomes: none reported Secondary outcomes plasma vitamin K1 levels Measured at the beginning of the trial and at the end of 1 month. serum undercarboxylated osteocalcin levels

Main results

Of the 50% of subjects who were below the optimal serum vitamin K1 at baseline, all rose into the normal range with supplementation. Supplementation also significantly reduced the overall %Glu-OC from a median of 46.8 to 29.1% (p

Authors' conclusions

Both 1 mg and 5 mg of vitamin K1, given over a one-month period in pancreatic insufficient pediatric cystic fibrosis patients improve vitamin K status.

http://dx.doi.org/10.1016/j.jcf.2008.04.001

See also

J Cyst Fibros. 2008 Sep;7(5):457-9. Epub 2008 May 29.

Keywords

adolescent; Child; pharmacological_intervention; vitamins; Vitamin K; Vitamins; High-Dose;