

primary studies - published RCT

N-acetylcysteine in cystic fibrosis and Pseudomonas aeruginosa infection: clinical score, spirometry and ciliary motility.

Code: PM2659383

Year: 1989 **Date:** 1994

Author: Stafanger G

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

Cross-over design.

Participants

Single centre. Italy. Inclusion criteria: 51 participants recruited, age range 8 - 32 years, median 14 years. 10 participants had abnormal liver enzymes and of these 2 had cirrhosis and varices and 8 had enlarged liver and fibrosis at ultrasound. 42 participants completed the study, 9 dropouts (5 in UDCA group, 4 in UDCA plus taurine group) not followed-up. diagnosis of CF as documented by raised sweat chloride values and clinical symptoms; evidence of malnutrition as documented by body mass percentile less than or equal to 90%; age over 6 years; good compliance with previous conventional treatment; no previous UDCA treatment.

Interventions

UDCA: 12 mg/kg/day for 6 months (see Methods for study design). Taurine: 18 - 22 mg/kg/day for 6 months. Control: placebo (glucose) for 6 months.

Outcome measures

weight, body mass percentile, triceps skinfold thickness, mid-arm-muscle circumference, albumin, aspartate transferase, alanine transferase, alkaline phosphatase, gamma glutamate transferase were measured at 6 months.

Main results

Nine patients dropped out before concluding the study. Liver function tests, nutritional status, and coefficients of fat absorption were determined at entry and after each 6 months of placebo or treatment. Nutritional status and fat absorption were not significantly modified by either treatment. Liver function tests improved after ursodeoxycholic acid administration only in patients with concomitant chronic liver disease.

Authors' conclusions

6 months of therapy with a medium dose of ursodeoxycholic acid, either alone or with taurine, does not improve the nutritional status of young malnourished CF patients. Higher doses given for longer periods might be worth investigating.

<http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/479/CN-00060479/frame.html>

See also

The European respiratory journal : official journal of the European Society for Clinical Respiratory Physiology YR: 1989 VL: 2 NO: 3

Keywords

Adolescent; Adult; Child; Cholagogues and Cholagogues; Gastrointestinal Diseases; Liver Diseases; non pharmacological intervention - diet; pharmacological_intervention; placebo; Supplementation; taurine; UDCA; Cholestasis; Malnutrition; Nutrition Disorders; Amino Acids; Proteins; Gastrointestinal Agents;