primary studies - published RCT

Safety and efficacy of prolonged levofloxacin inhalation solution (APT-1026) treatment for cystic fibrosis and chronic Pseudomonas aeruginosa airway infection.

Code: PM26935334 **Year:** 2016 **Date:** 1984 **Author:** Elborn JS

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

prospective, randomized double-blind study

Participants

38 children with cystic fibrosis (CF) Compared with age-matched healthy children

Interventions

The treatment consisted of cimetidine or placebo, 600 mg/msup 2 body surface/day, over a 4-mo period.

Outcome measures

Clinical state, weight, height, skinfold thickness, lung function tests, para-aminobenzoic acid (PABA) peptide test, and plasma lipid and lipoprotein determinations were performed before and after the treatment period.

Main results

patients showed decreased cholesterol (150.2 + or - 31.2 mg/dl, mean + or - SD), decreased high density lipoprotein cholesterol (44.1 + or - 11.8 mg/dl), and decreased low density lipoprotein cholesterol (84.1 + or - 25.5 mg/dl) whereas the triglycerides and the very low density lipoprotein triglycerides were slightly elevated (18.2 + or - 33.0 mg/dl and 60.5 + or - 17.5 mg/dl, respectively). Apoprotein B and A1 were slightly reduced and Apoprotein AII was in the normal range. After the 4-mo treatment no significant change in clinical condition, weight, or lipoprotein patterns could be detected between the two groups. The total PABA recovery in urine also did not change significantly (36.6 + or - 19.4% of the dosage given before versus 28.7 + or - 12.9% after 4 mo in the cimetidine group). Cimetidine gave rise to bronchoconstriction as shown by an increase in airway resistance (mean increase 14.8%) whereas the placebo group had a decreased Raw with a mean of 8.3%. Patients with CF have a dyslipoproteinemia that was not influenced by cimetidine.

Authors' conclusions

imetidine does not improve fat absorption and has, therefore, no place and no benefit in the treatment of children with CF.

http://dx.doi.org/10.1016/j.jcf.2016.01.005

See also

J Cyst Fibros. 2016 Sep;15(5):634-40. doi: 10.1016/j.jcf.2016.01.005. Epub 2016 Feb 28.

Keywords

Child; Cimetidine; Gastrointestinal Agents; pharmacological_intervention; placebo; Histamine H2 Antagonists;