primary studies - published RCT

The effect of cimetidine on meal-stimulated gastric function and exogenous pancreatic enzymes in cystic fibrosis.

Code: PM6925576 **Year:** 1982 **Date:** 1982 **Author:** Cameron DJ

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

double-blind controlled trial

Participants

4 CF children

Interventions

cimetidine by a marker perfusion technique

Outcome measures

gastric function and exogenous pancreatic enzymes

Main results

Gastric acid secretion was higher in CF patients than in controls (P less than 0.005) and was reduced significantly by oral cimetidine (P less than 0.02). Rapid inactivation of exogenous trypsin and lipase occurred when gastric pH fell to less than 4.5. There was no loss of enzyme activity during treatment with cimetidine when gastric pH remained above 5.5. Activity of lipase and trypsin in the jejunum improved in all subjects. Fat and nitrogen absorption assessed by a balance technique during the study period showed a small improvement in fat absorption while on cimetidine.

Authors' conclusions

some CF patients have a high meal-stimulated gastric acid output which causes inactivation of trypsin and lipase. Cimetidine was effective in reducing acid secretion in such patients and led to small improvements in fat absorption.

http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/302/CN-00030302/frame.html

See also

Hum Nutr Clin Nutr. 1982;36(6):475-81.

Keywords

Adolescent; Child; Cimetidine; Gastrointestinal Agents; Infant; pharmacological_intervention; Pancreatic Enzyme Replacement Therapy; Trypsin Inhibitors; Pancreas insufficiency; Pancreatic Diseases; Gastrointestinal Diseases; Malabsorption; Nutrition Disorders; Histamine H2 Antagonists;