primary studies - published RCT

Efficacy and safety of acarbose in patients with cystic fibrosis and impaired glucose tolerance.

Code: PM10378391 **Year:** 1999 **Date:** 1999 **Author:** Kentrup H

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

double-blinded, randomized crossover trial.

Participants

12 CF patients with IGT

Interventions

During a 2-week inpatient period for treatment of Pseudomonas infection each patient received acarbose (50 mg t.i.d.) for 5 days and placebo for 5 days (days 3-8 and days 10-14, respectively).

Outcome measures

Glucose, insulin and C-peptide responses to a standardized nutritional load were measured at baseline and at the end of each study period (Days 2, 8 and 14).

Main results

Treatment with acarbose was associated with significant reductions in the mean value, mean peak values and the area under the curve of plasma glucose, insulin and C-peptide, compared to respective baseline values and placebo. Gastro-intestinal disturbances were recorded in 67% of patients during therapy with acarbose

Authors' conclusions

Acarbose has a positive therapeutic effect on glucose tolerance in cystic fibrosis patients, as shown by attenuation of postprandial plasma glucose increase and a significant decrease in insulin secretion response. However, acarbose treatment was associated with adverse gastro-intestinal effects that may prevent patients from accepting long-term therapy.

http://dx.doi.org/10.1007/s004310051119

See also

Eur J Pediatr. 1999 Jun;158(6):455-9.

Keywords

Acarbose; Adolescent; Adult; Child; Hypoglycemic Agents; non pharmacological intervention - diet; pharmacological_intervention; Supplementation; Pseudomonas aeruginosa; Pseudomonas; Respiratory Tract Diseases; Respiratory Tract Infections; Infection; Glucose Intolerance; Pancreatic Diseases; Gastrointestinal Diseases;