

ACUPUNCTURE TREATMENT FOR DIABETIC GASTROPARESIS

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Introduction

The aim of this study was to compare the effectiveness acupuncture for the treatment of diabetic gastroparesis (DG). Acupuncture may improve gastrointestinal symptoms in patients with various disorders, but its efficacy in diabetic gastroparesis is unclear.

Objectives

We have studied 23 subjects with type 2 DM with the duration of 14.2 ± 3.1 years, with longstanding and uncontrolled carbohydrate metabolism (mean value of HbA_{1c} was $8.6 \pm 1.3\%$) and symptoms of gastroparesis.

Methods

All patients divided into 2 groups: diabetic with symptoms of gastroparesis (consisted of 11 participants (4 male/7 female), mean age was 46.8 ± 7.4 years, mean body mass index was 25.2 ± 1.2 kg/m²) received Itopride hydrochloride (daily doses -50 mg) for 3 weeks and second group patients with confirmed diagnosis of DG (12 patients (5 male/7 female), mean age was 45.9 ± 6.5 years, mean body mass index was 27.4 ± 4.6 kg/m²) assigned to biweekly acupuncture treatments during 21 days. Gastric emptying rate, glucose and glycated haemoglobin (HbA_{1c}) levels were measured at start and end of each treatment period. The patients completed the Gastroparesis Cardinal Symptom Index (GCSI). No subjects studied have had the signs of other disorders of dysfunction in gastrointestinal motility.

Results

In the first group was no change in any of the outcome parameters after 3 weeks of the treatment with Itopride hydrochloride. Acupuncture was associated with a decrease in scores for almost all cardinal symptoms of the GCSI and associated with significantly greater reductions in gastric retention with help of ¹³C-octanoic breast test (¹³C-OBT) ($-6.1 \pm 7.0\%$; 95% CI -13.3% to -6.1 ; $p < 0.01$). There were no significant differences in fasting blood glucose levels between symptomatic therapy (Itopride hydrochloride) and acupuncture treatments.

Conclusions

In patients with DG, 3 weeks of acupuncture reduces gastric retention and improves gastroparesis symptoms. It appears that this effect may be due to non-specific mechanisms.

References

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