Clinical trial: the effects of a trans-galactooligosaccharide prebiotic on faecal microbiota and symptoms in irritable bowel syndrome.

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Source
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Abstract

BACKGROUND:
Gut microflora-mucosal interactions may be involved in the pathogenesis of irritable bowel syndrome (IBS).

AIM:
To investigate the efficacy of a novel prebiotic trans-galactooligosaccharide in changing the colonic microflora and improve the symptoms in IBS sufferers.

METHODS:
In all, 44 patients with Rome II positive IBS completed a 12-week single centre parallel crossover controlled clinical trial. Patients were randomized to receive either 3.5 g/d prebiotic, 7 g/d prebiotic or 7 g/d placebo. IBS symptoms were monitored weekly and scored according to a 7-point Likert scale. Changes in faecal microflora, stool frequency and form (Bristol stool scale) subjective global assessment (SGA), anxiety and depression and QOL scores were also monitored.

RESULTS:
The prebiotic significantly enhanced faecal bifidobacteria (3.5 g/d $P < 0.005$; 7 g/d $P < 0.001$). Placebo was without effect on the clinical parameters monitored, while the prebiotic at 3.5 g/d significantly changed stool consistency ($P < 0.05$), improved flatulence ($P < 0.05$) bloating ($P < 0.05$), composite score of symptoms ($P < 0.05$) and SGA ($P < 0.05$). The prebiotic at 7 g/d significantly improved SGA ($P < 0.05$) and anxiety scores ($P < 0.05$).

CONCLUSION:
The galactooligosaccharide acted as a prebiotic in specifically stimulating gut bifidobacteria in IBS patients and is effective in alleviating symptoms. These findings suggest that the prebiotic has potential as a therapeutic agent in IBS.

Comment in

- Prebiotics for irritable bowel syndrome. [Expert Rev Gastroenterol Hepatol. 2009]