



Synbiotic containing *Bacillus coagulans* and fructo-oligosaccharides for functional abdominal pain in children

Saneian H, Pourmoghaddas Z, Roohafza H, Gholamrezaei A. Synbiotic containing *Bacillus coagulans* and fructo-oligosaccharides for functional abdominal pain in children. *Gastroenterology and hepatology from bed to bench*. 2015;8(1):56.

Summary:

Aim:

The effectiveness of a synbiotic in the treatment of childhood functional abdominal pain (FAP) was evaluated.

Patients and methods:

Children with FAP, based on the Rome III criteria (n = 115, aged 6–18 years), were randomized to receive either synbiotic (*Bacillus coagulans*, Unique IS-2, 150 million spore plus FOS, 100 mg) twice daily or placebo for four weeks. Treatment response was defined as ≥ 2 -point reduction in the 6-point self-rated pain scale or “no pain”. Physician-rated global severity and improvement were also evaluated. Patients were followed for a total of 12 weeks.

Results:

Eighty-eight patients completed the trial (45 with synbiotic). Response rate was higher with synbiotic than placebo after medication (60% vs. 39.5%, $P = 0.044$), but was not different between the two groups at week 12 (64.4% vs. 53.4%, $P = 0.204$). Difference between the two groups regarding the physician-rated global severity over the study period was not statistically significant ($z = -1.87$, $P = 0.062$). There was no significant difference between the two groups in physician-rated global improvement (week 4, $P = 0.437$; week 12, $P = 0.111$). Receiving synbiotic (OR 2.608, 95% CI: 1.01–6.68) and baseline pain score (OR 2.21, 95% CI: 1.19–4.10) were predictors of treatment response after medication.

Conclusion:

The synbiotic containing *Bacillus coagulans* and FOS seems to be effective in the treatment of childhood FAP. Further trials are recommended in this regard.
