



Synbiotic for Prevention of Antibiotic-Associated Diarrhea in Children: A Randomized Clinical Trial

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Introduction:

Antibiotic-associated diarrhea is a common problem in pediatric population. There is growing interest in probiotics, prebiotics and synbiotics for prevention of this complication because of their worldwide availability as dietary supplements. The aim of this study was to assess the efficacy of a synbiotic mixture in prevention of antibiotic-associated diarrhea.

Materials and Methods:

In this randomized controlled trial, 218 patients (111 in the synbiotic and 107 in the placebo group) aged 6 months to 14 years with respiratory tract infection and/ or otitis media who needed antibiotic treatment in outpatient setting, were enrolled. They received 1 billion Colony Forming Unit of seven probiotics species plus Fructooligosaccharide in form of powder or placebo (matched for size, shape, and volume) for 7 days. Amoxicillin, Amoxicillin-clavulanic acid, cefixim and Azithromycin were the most common drugs used by physicians. Mothers recorded stool frequency and consistency daily for 7 days.

Results:

We found no significant difference ($P > 0.05$) in occurrence of diarrhea between synbiotic and placebo groups.

Conclusion:

This synbiotic mixture did not appear to reduce antibiotic-associated diarrhea in children. Further studies are needed to investigate the potential benefits of Synbiotics in prevention of this disease.

Keywords:

Antibiotic-Associated Diarrhea, Prevention, Synbiotic.

Poster Presentation, N 61

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