

## Probiotics Significantly Reduce Symptoms of IBS, Ulcerative Colitis

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May 21, 2003 (Orlando) — Probiotic therapy, primarily in the form of *Lactobacillus acidophilus* and *Bifidobacteria infantis*, significantly improves symptoms and quality of life in patients with irritable bowel syndrome (IBS) and other bowel disorders, researchers reported in a number of presentations here at Digestive Disease Week 2003.

In a study designed to assess the efficacy of probiotics alone or in combination with antibiotics in patients with IBS, Stephen M. Faber, MD, from Albemarle Gastroenterology Associates, PC, in Elizabeth City, North Carolina, evaluated treatment in 44 patients with IBS. Twenty patients received probiotics alone and 24 received ciprofloxacin 500 mg twice daily for one week and two probiotic formulations, *Lactobacillus* (NCFM) 10 billion/g and *Bifidobacteria infantis* (Bifdo), 10 billion/g for four weeks.

Patients completed the IBS-Quality of Life (IBS-QOL) questionnaire and the Symptom Frequency Index (SFI) before and after treatment. For the study group as a whole, IBS-QOL scores averaged 66.2 before treatment and 84.6 after treatment. SFI scores before treatment averaged 38, decreasing to 18 after treatment.

In patients who received both probiotics and antibiotics, IBS-QOL scores averaged 67.6 before and 87.8 after treatment. SFI scores averaged 35 at baseline, decreasing to 18 after treatment.

In the probiotic-only group, baseline IBS-QOL scores were 69.3, increasing to 86.4 after treatment. SFI scores were 39 at baseline and 17 after treatment.

Differences in IBS-QOL and SFI scores between probiotic plus antibiotic treatment and probiotic-only treatment were statistically insignificant, Dr. Faber reported.

A retrospective look at IBS patients treated with probiotics indicates that there is a deficiency of *Lactobacillus* in the gut flora in patients with IBS, Dr. Faber noted, "but we're not ready to call IBS an infectious disease."

Probiotic therapy also improved symptoms of ulcerative colitis (UC) in a separate study presented by Richard N. Fedorak, MD, professor of medicine and director of the division of gastroenterology at the University of Alberta in Edmonton, Canada.

In a safety and efficacy study of the probiotic formulation VSL3 (VSL Pharmaceuticals, Inc., Ft. Lauderdale, FL), which contains eight lactic acid bacterial species, Dr. Fedorak and colleagues evaluated 30 patients with active mild-to-moderate UC with recent flares. Patients continued with previous treatment that included mesalamine, corticosteroids, and/or azathioprine, as long as the treatment regimen was stable prior to the study.

Patients took two VSL3 sachets twice a day for six weeks. Ulcerative Colitis Clinical Scores were measured and sigmoidoscopy performed at baseline and after the six-week treatment period.

Dr. Fedorak reported that remission occurred in 63% (19 patients) and there was a clinical response in an additional 23% (seven patients). There was no response in 13% (four patients). Worsening of symptoms occurred in one patient.

Dr. Fedorak said that probiotic therapy was not associated with any adverse clinical or biochemical events.

"I haven't heard of getting into trouble with probiotics," Dr. Faber told Medscape. "These are organisms that are supposed to be in the gut. The body knows how to control them, so it doesn't seem that you can overtreat."

While probiotics have been recognized as beneficial components of food, Dr. Fedorak pointed out that "we don't use it as a food product anymore but as a treatment.

"Infantile diarrhea can be shortened by about a day from the usual three- to four-day course. That is very important in infants. Probiotics are effective with rotavirus symptoms, with antibiotic-induced diarrhea, in pseudomembranous colitis, and perhaps in radiation-induced diarrhea," he said.

But Dr. Fedorak cautioned that "we don't know how they work. They appear to strengthen the mucosal barrier of the bowel and improve immune function. And we don't know which probiotics to use or in what combination."

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*Reviewed by Gary D. Vogin, MD*