

# Probiotic May Reduce Irritable Bowel Symptoms

BY KATE JOHNSON  
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MONTREAL — Daily ingestion of a probiotic preparation containing a bifidobacterium strain can significantly reduce symptoms and normalize the immune response in patients with irritable bowel syndrome, according to two studies presented as posters at the 13th World Congress of Gastroenterology.

A multicenter study which randomized 362 women with irritable bowel syndrome (IBS) to one of three strengths of an investigational probiotic *Bifidobacterium infantis* 35624 or placebo daily for 4 weeks showed significant improvement in abdominal pain and discomfort, as

well as all other measured symptoms in those taking the medium-strength probiotic formulation.

"The very high dose didn't have an effect because it didn't disperse out of the capsule," commented lead investigator Peter Whorwell, M.D., a professor of medicine and gastroenterology at the University of Manchester (England). He went on to explain that the effective delivery of probiotic formulations remains a challenge.

"A lot of probiotic preparations are not necessarily bioavailable because they may not be alive, or they may be in a media where they are not dispersing well. So it raises a whole issue about quality. If you just go into a supermarket you don't

know what you're getting," he said in an interview.

In another pilot study, 13 IBS patients and 10 healthy controls received milk containing *B. infantis* 35624 every day for 3 weeks. Peripheral blood mononuclear cells collected at baseline and after each feeding were cultured for 3 days, either alone or with a stimulant, and cytokine levels were analyzed.

The study found that at baseline, spontaneous production of cytokines from the IBS subjects was no different from healthy subjects, while in vitro stimulation of their peripheral blood mononuclear cells produced a significantly higher level of proinflammatory cytokines and a lower level of anti-inflammatory cytokines.

However, probiotic feeding normalized this proinflammatory immune response in the IBS subjects.

Similar work by the same group comparing treatment with *B. infantis* 35624 or lactobacillus demonstrated symptom relief and a similar normalization of the proinflammatory response with bifidobacterium but not lactobacillus (*Gastroenterology* 2005;128:541-51).

This response is suggestive of "an immune-modulating role for this organism, in this disorder," concluded Liam O'Mahony, Ph.D., lead author, of University College Cork (Ireland).

Both studies were sponsored by Procter & Gamble, which is investigating *B. infantis* 35624. ■

## In IBS, Nongastrointestinal Symptoms Are Common

BY BOB BABINSKI  
Contributing Writer

MONTREAL — The presence of symptoms outside the gastrointestinal tract can help distinguish irritable bowel syndrome from inflammatory bowel disease, Noel B. Hershfield, M.D., said at the 13th World Congress of Gastroenterology.

Patients with irritable bowel syndrome (IBS) are more likely than patients with inflammatory bowel disease (IBD) to present with fatigue, depression/anxiety, and headache, as well as sleep loss for reasons not related to intestinal discomfort, Dr. Hershfield reported.

He reached these conclusions based on his survey of about 400 patients who came to his outpatient clinic. All of the patients were younger than 50 years old.

Of the 200 patients with IBS, almost three-quarters had chronic fatigue syndrome, compared with one-quarter of the similar number of patients with IBD.

Nearly half of the IBS patients reported headaches, compared with less than a quarter of the patients with IBD.

More than 40% of IBS patients had depression or anxiety; that figure was

less than 10% for the IBD group, said Dr. Hershfield, a gastroenterologist at the University of Calgary (Alta.).

Among the IBS patients, 156 reported sleep disturbance not due to GI symptoms, compared with only 12 of the IBD patients. Conversely, only 2 IBS patients reported sleep disturbance due to GI pain, compared with 179 of the IBD patients (*Can. J. Gastroenterol.* 2005;19:231-4).

"The object of this paper was to get physicians to take a better history, so they wouldn't have to do so many tests to prove IBS," he said. "If you spend some time with them, you don't have to do very many tests to know that they have irritable bowel—you don't have to colonoscope them, or x-ray them, or all that stuff. It costs a fortune to do that."

Night sweats, sleep disturbance due to diarrhea and abdominal pain, and weight loss are symptoms of organic bowel disease. "People with IBD often have tremendous weight loss. They show up with problems related to poor nutrition, they can't eat, they don't absorb food properly, so they lose weight and all the things that go with that," Dr. Hershfield said. ■

## Link Found Between Severe IBS Symptoms, Psychosocial Disorders

BY BOB BABINSKI  
Contributing Writer

MONTREAL — Comorbid psychosocial disorders are an important consideration in patients presenting with severe symptoms of irritable bowel syndrome, Douglas A. Drossman, M.D., said at the 13th World Congress of Gastroenterology.

Such factors "should be looked at in the first visit because in some cases it might prevent you from doing unnecessary tests" in patients with IBS, he told this newspaper. "Even more important than that, it gives you the whole package of what's going on, both physically and psychologically. That can affect your diagnostic and treatment approach," he added.

In a study of 211 patients with moderate and severe functional bowel syndrome, Dr. Drossman found that major depression was more pronounced in patients with severe symptoms than in those with moderate symptoms (12.5 versus 9.3 on the Beck Depression Inventory).

Poor coping responses like "catastrophizing" were more common in patients with severe symptoms, compared with patients with moderate symptoms (12.9

versus 8.2 on the Coping Strategies Questionnaire) (*Am. J. Gastroenterol.* 2000;95:974-80).

The study also showed that compared with patients with milder symptoms, those with more severe symptoms felt that they had less control of their symptoms (2.2 versus 2.6 on the Coping Strategies Questionnaire) and reported having a significantly poorer quality of life (58.5 versus 69.3 overall score on the IBS Quality of Life questionnaire).

"There is also a higher frequency of sexual, physical, or emotional abuse in those with more severe symptoms," said Dr. Drossman, codirector of the University of North Carolina Center for Functional GI and Motility Disorders, Chapel Hill.

The precise relationship between functional bowel disorders and psychosocial disorders is unclear, he said.

Comorbid psychosocial factors may affect perception of physical experiences. Stress can lower the pain threshold and produce other GI symptoms, and psychosocial disturbances may increase pain perception via functional changes in the cingulate cortex, the brain's pain modulation center. ■

## Weight Reduction Before Gastric Banding May Cut Complication Risk

SAN DIEGO — The risk of pouch dilatation may be lowered if weight is lost before surgery, according to a study of morbidly obese patients in the Netherlands, Karlijn J.P. van Wessel, M.D., said at an international congress of the Society of Laparoendoscopic Surgeons.

An intensive preoperative weight loss program reduced mean body mass index (BMI) in 47 patients before laparoscopic banding, and only 1 patient (2%) developed pouch dilatation 10 months after surgery, said Dr. van Wessel of Reinier de Graff Hospital, Delft, the Netherlands. Complication rates of 6%-21% have been reported in the literature, she added.

A physician supervised patients with a

mean BMI greater than 40 kg/m<sup>2</sup> in a weight management program for a mean of 10 months before laparoscopic banding surgery. It included a mildly energy-restricted diet, 30 minutes of exercise a day, and treatment with fluoxetine, an appetite inhibitor (60 mg/day).

Mean BMI was reduced from an initial 45 kg/m<sup>2</sup> to 41 kg/m<sup>2</sup> at the time of surgery. Significant improvements were seen in both sexes. By 6 weeks after laparoscopic banding,



the mean BMI showed another significant decrease to 39 kg/m<sup>2</sup> for the group as a whole, but the progress came only from weight loss in the women, not in men, Dr. van Wessel said.

**The results question whether gastric banding is appropriate for all, or whether tighter selection should exclude some.**

DR. VAN WESSEL

stayed relatively high, especially in men, the study's results raise questions about

whether gastric banding is appropriate for all patients or whether tighter selection should exclude some, such as men, she said.

Complications developed in seven patients (15%), a rate comparable with those reported in the literature. Three developed gastric obstructions due to misplacement of the band. The cases were among the first 15 patients, so the problems might be attributed to the learning curve, she said. The bands were repositioned laparoscopically.

A port-site leakage was repaired in one patient. Two did not lose weight despite maximum filling of the band. Their bands were removed, and they'll undergo gastric bypass surgery later, Dr. van Wessel said.

—Sherry Boschert