Pelvic Floor Dysfunction May Mimic IBS

BY TIMOTHY F. KIRN
Sacramento Bureau

CHICAGO — Many individuals diagnosed with irritable bowel syndrome could actually have pelvic floor dysfunction, a condition that can be much more remediable, according to a study conducted at the Mayo Clinic.

Considerable overlap exists in the symptoms of pelvic floor dysfunction and irritable bowel syndrome (IBS), particularly constipation-predominant irritable bowel syndrome, even though the Rome diagnostic criteria for functional bowel disorders considers the two distinctly separate entities, Christopher N. Andrews, M.D., the main investigator of the study, said in a poster presentation at the annual Digestive Disease Week.

The study showed that few patients who present with symptoms of straining, lumpy or hard stools, or a sensation of incomplete evacuation get a pelvic floor work-up as they should, because those with pelvic floor dysfunction probably could be helped by biofeedback training of the pelvic floor muscles, Dr. Andrews said in an interview.

The study included 450 patients being seen at the Mayo Clinic, Rochester; 77% of participants were women. The patients either had diagnosed IBS or were undergoing a scintigraphic GI transit study.

The patients filled out a symptom questionnaire to help the investigators determine whether they had symptoms the Rome criteria listed in conjunction with pelvic floor dysfunction. Study investigators reviewed the patients' medical records to see if the subjects had been given any anorectal defecation testing.

A total of 194 of the patients had at least two symptoms of pelvic floor dysfunction as outlined by the Rome criteria. But only 50 patients (11%) had undergone pelvic floor dysfunction testing, usually balloon-expulsion manometry. Of those 50 patients, 13 (26%) had an abnormal test result.

Patients with constipation-predominant IBS were more likely to get testing, but they were also more likely to have overlapping symptoms and an abnormal test result.

Of the 78 patients with constipation-predominant IBS, 76 had at least two symptoms of pelvic floor dysfunction. Of those patients, 24 (32%) underwent testing, and among those tested, 8 (33%) had an abnormal test result.

Anorectal defecation testing of patients with IBS-type symptoms is thought to have become more common at highly specialized centers in recent years, Dr. Andrews said in the interview. But if the rate of testing is so low at the Mayo Clinic, then it is probably not done often enough anywhere.

One problem that may discourage testing is that there are different tests but no real standards concerning which to use, he added.

The Rome criteria symptoms used to define pelvic floor dysfunction include straining when defecating more than 25% of the time, lumpy or hard stools more than 25% of the time, incomplete evacuation more than 25% of the time, sensation of anorectal blocking more than 25% of the time, manual maneuvers to facilitate defecation more than 25% of the time, or one or fewer defecations per week. ■

Cortical Pain Response Differs in IBS Patients

Significant differences were found in the cortical pain responses of patients with irritable bowel syndrome, compared with healthy controls, in a small study by Canadian researchers.

C.L. Kwan of the Institute of Medical Science, University of Toronto, and associates used functional MRI to evaluate the responses of 9 IBS patients and 11 controls during rectal distensions that elicited either pain or a moderate urge to defecate. They noted specific differences between the two groups' responses in the insular cortex, where visceral and somatosensory input are known to be integrated. Regardless of distension level, the dorsal pole of the right anterior insula was activated in controls but not in IBS patients, suggesting a "ceiling" effect from the chronic pain state in IBS (Neurology 2005;65:1268-77).

This contrasted with findings of urge-related responses in the primary sensory cortex and pain-related responses in the medial thalamus and hippocampus in the IBS patients that were absent in the controls. The authors noted that interpreting brain activation during rectal distension combined both conscious responses and unconscious processing, through which the IBS patients were found to be abnormally conscious of the brain-gut relationship.

—Randall Frey

Probiotic Significantly Improves Irritable Bowel Symptoms

BY KATE JOHNSON
Montreal Bureau

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.

'A lot of probiotic preparations are not necessarily bioavailable because they may not be alive, or they may be in a medium where they are not dispersing well.'

"The very high dose didn't have an effect because it didn't disperse out of the capsule," said lead investigator Peter Whorwell, M.D., professor of medicine and gastroenterology at the University of Manchester (England).

He explained 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 medium 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*. ■

Severe Bowel Syndrome Tied to Concurrent Psychosocial Issues

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 said in an interview. "Even more important than that, it gives you the whole package of what's going on, both physically and psychologically."

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 vs. 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 vs. 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 vs. 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.

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DR. DROSSMAN

Studies suggest that 5%-40% of IBS patients have severe symptoms, and 25%-50% have moderate symptoms. "If you are in a primary care setting, your severe group will be much smaller—maybe 5%—but if you're in a major referral center, you are going to see 50%-60% severe patients," he said.

The precise relationship between functional bowel disorders and psychosocial disorders is unclear, Dr. Drossman said. Some theories are that 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 brain's pain modulation center. ■