

Gut Feeling

Health Sciences Institute e-Alert

October 27, 2004

Dear Reader,

The next time you're at the store or in a theater or any crowded place, look around you and consider this: About one out of every five people may be having abdominal pain.

More specifically, about 20 percent of the population experiences irritable bowel syndrome (IBS), with irritating symptoms such as diarrhea, constipation, gas and bloating.

Hopefully you aren't one of those one-in-five. But if you are (or know someone who is), then you'll be interested to know that a long-time researcher of IBS believes that the last symptom on that list – bloating – may be the key to understanding one of the primary causes of IBS, which could lead to more effective treatment.

Uncomfortable expanding

Without knowing anything else about it, when you see the term "bacterial overgrowth," you know that something not very good is afoot.

Henry C. Lin, M.D., is a gastrointestinal specialist and an associate professor of medicine at the University of Southern California. For well over a decade, Dr. Lin has devoted his research efforts to finding a single factor that might tie together the symptoms of IBS. He now believes that bacterial overgrowth may be that factor. And the key is bloating.

Over the years, Dr. Lin noted that almost all of the IBS patients he treated reported post-meal bloating. This prompted him to focus his research on gas caused by gut bacteria that ferments food in the intestinal tract. Bacteria perform useful functions in the large intestine, but Dr. Lin suspected that the bacteria might be migrating to the small intestine, triggering gas, bloating and flu-

like symptoms that often accompany IBS.

After a breath-test study indicated that a large majority of IBS patients experienced small intestinal bacterial overgrowth (SIBO), an antibiotic trial helped confirm the results. In that trial, IBS patients received either an antibiotic or placebo. About 75 percent of the subjects who successfully eliminated SIBO with antibiotics reported a significant improvement in IBS symptoms.

Good guys vs. bad guys

The use of antibiotics in Dr. Lin's study may have been helpful in demonstrating how bacteria play an important role in prompting IBS symptoms, but that doesn't necessarily mean that the best course of treatment is antibiotics (which are already over-prescribed, making some of them ineffective against certain bacteria).

I asked HSI Panelist Allan Spreen, M.D., to take a look at Dr. Lin's study. He told me he wasn't aware of the theory that connected bacteria to IBS, but found it to be reasonable. In an e-mail he wrote: "I do feel there's something to the research; I just hope it doesn't mean a quickie, antibiotic-related 'cure' is coming. Antibiotics, of course, might help to immediately lower the 'bad guy' bacteria count, and therefore help a person feel better, while simultaneously killing 'good guys' and causing more trouble down the road."

In several e-Alerts, Dr. Spreen has written about the necessity of probiotic organisms. In a healthy individual, these beneficial bacteria inhabit the digestive tract in massive numbers, crowding out harmful bacteria, aiding digestion, and supporting immune function. This healthy "gut flora" produces valuable nutrients (including certain B vitamins and omega-3 fatty acids), digestive enzymes like lactase, and immune chemicals that fight harmful bacteria and even cancer cells.

But this critical ecosystem is fragile and easily disturbed. For instance, poor nutrition, steroid drugs, chemotherapy and some types of antibiotics can completely kill off the beneficial bacteria in the gut. And when the number or activity level of your good bacteria drops too low, it opens the door for harmful bacteria to proliferate, allowing the opportunity for diseases such as IBS to develop.

Striking the balance

I asked Dr. Spreen if Dr. Lin's research might indicate that probiotic supplements would be a good treatment for IBS, and he replied, "I absolutely would be giving probiotics for such a problem, along with any agents that might assist strengthening the intestinal wall, such as FOS (fructo-oligo-saccharides), which helps the 'good' bugs to reestablish, aloe juice, which has a long history of calming bowel problems, essential fatty acids, and digestive enzymes (which are usually underproduced in such situations)."

Just one question: Fructo-oligo-WHAT? This was a new one to me. But a little research revealed that FOS is simply a natural fruit and vegetable fiber that promotes the growth of beneficial bacteria.

Meanwhile, sufficient amounts of intestinal flora can be maintained through dietary sources such as cultured products (yogurt and kefir), and lignans (flaxseed, carrots, spinach, cauliflower, broccoli, millet and buckwheat). But while the digestive tract can be "re-colonized" by introducing enough good bacteria to overpower the bad bacteria, dietary sources alone can't provide organisms in the vast numbers required to correct a serious imbalance. For this, a high-potency probiotic nutritional supplement is necessary.

But one word of caution: Bacterial imbalances in the intestine should not be taken lightly. So talk to your doctor or a health care professional before using a probiotic supplement to address IBS or any other chronic digestive problems.

...and another thing

"Good riddance to a bad drug."

That was one prominent researcher's reaction when Vioxx was taken off the market last month. But now millions of Vioxx users are wondering where to turn for alternatives.

In several HSI Members Alerts and e-Alerts we've examined glucosamine; a widely used natural treatment for arthritis. In an e-Alert I sent you last year, I told you about a 12-week University of Western Australia study of 50 subjects with osteoarthritis. Ninety percent of the group that used glucosamine reported relief, while only 17 in the placebo group showed improvement.

These are encouraging results, but an HSI member named Pat has a question about a potential side effect. Pat writes: "I am a 60-ish year old woman who has type II diabetes and osteoarthritis especially in my knees. There are a lot of products out there that claim to help the joints, however, most contain glucosamine sulfate. Now, there are some reports that glucosamine is a sugar and aggravates blood sugar levels. OK! What do we do?"

Good question, Pat. Glucosamine is an amino sugar, and some studies suggest that it may interfere with the regulation of blood sugar levels, and could also play a role in insulin resistance. In two major studies, however, subjects showed little or no change in blood sugar levels.

So while there is a basis for concern, researchers advise glucosamine users who have diabetes to make more frequent checks of their blood sugar levels. And without question, Pat and others who are in a similar situation should consult their doctor or health care provider before using glucosamine.

And one more note: glucosamine is frequently extracted from shrimp, crab and lobster shells, so some individuals who are allergic to shellfish may have an adverse reaction. This is not always the case, but if you have that particular allergy, you should carefully watch for signs of a poor response when beginning a regimen of glucosamine supplements.