Crohn's disease and ulcerative colitis

Crohn's disease and ulcerative colitis are the two most most severe digestive afflictions. They cause life-impairing symptoms, necessitate long-term dependence on powerful drugs, and often result in debilitating surgery and even death. Tens of thousands of Americans are affected. Both diseases are classified under the medical rubric of inflammatory bowel disease (IBD).

The incidence of IBD has risen with the tide of civilization. Once thought of as a psychosomatic illness arising in individuals with "passive personalities with a tendency to suppress personal conflicts," the cause of IBD remains elusive. One theory holds that modern measles virus, improperly cleared from the body, results in low grade, chronic inflammation of the intestinal lymphoid tissue; other hypotheses posit a relationship to contemporary diet. Indeed intake of sugar and "junk food" has been correlated in many studies with susceptibility to both forms of IBD. Some researches have even suggested that the abrasive "polishers" found in modern toothpastes set up inflammatory reactions in the gut. A higher incidence of IBD has even been reported after tonsillectomy. Oral contraceptive users also have an increased risk.

The most common early symptoms of ulcerative colitis are constipation with passage of blood or mucus in the stools. The patient may have the urge to defecate with only a scanty bowel movement. Several months or years may pass before diarrhea develops with abdominal pain. The patient may then develop severe fatigue, weight loss, loss of appetite, fever and occasionally painful joints.

Ulcerative colitis is usually diagnosed by means of sigmoidoscopy using a flexible viewing tube that enables the examining physician to directly visualize the inflamed intestinal lining. Alternatively a barium enema with an x-ray may show characteristic changes in the outline of the intestines.

Treatment of ulcerative colitis is usually via a drug called Azulfidine or its newer chemical cousins. Severe cases require prednisone, a drug with devastating side effects including diabetes, osteoporosis, cataracts and depression. Newer pharmacological approaches rely on immunosuppressive agents such as Imuran, 6-MP or cyclosporin. These medications reduce reliance on prednisone but create their own impressive array of problems. The ultimate fate of some sufferers of ulcerative colitis is to have their entire colon removed. This is totally curative but leaves the patient with an ileostomy—an abdominal opening with a disposable bag for stool collection.

In contrast to ulcerative colitis, Crohn's disease may affect the small intestine as well as the large intestine. While isolated cases were recognized as early as the 1800s, it was not until 1932 that a Dr. B.B. Crohn described a new disease, which he called "regional ileitis." By the 1960s, Crohn's colitis was pervasive enough to earn itself a distinction from ulcerative colitis in the taxonomy of colonic afflictions.

Unlike ulcerative colitis, the onset of Crohn's disease may be insidious, with gnawing abdominal pain, weight loss and "failure to thrive" in children. Rarely is there obvious bloody diarrhea. The heralding acute crisis of Crohn's disease is sometimes an intestinal obstruction with vomiting or the appearance of a fistulous tract between the intestine and the bladder, allowing stool to pass into the urine.

Therapy for Crohn's disease is even trickier than for ulcerative colitis. While most of the same drugs are used, surgery is far from a definitive fallback plan. Eighty-

five percent of Crohn's disease patients who have surgery have reoccurrence within three years.

Curiously, the role of diet therapy for IBD is minimized by the gastroenterology establishment. One authoritative text, after devoting 20 pages to minute details of IBD diagnosis and drug and surgical treatments, notes tersely: "In mild to moderate ulcerative colitis, there is no need to impose general dietary restrictions."

This might sound, at the very least, counterintuitive to an informed layperson, who would question the dissociation between what a person eats and the condition of the selfsame alimentary canal through which food passes. The situation is analogous to that of a hydraulic engineer who makes no allowance for pipe corrosion susceptibility based on the acidity or chemical characteristics of the fluid the pipe conducts.

Ignoring diet in IBD also flies in the face of much evidence linking poor diets, especially those high in sugar and starches such as bread and potatoes, to ulcerative colitis and Crohn's disease incidences. Historical documents date back to Greek and Roman times with references to detoxifying protocols that prompted remission in intestinal diseases.

Remission of Crohn's disease may be maintained for long periods when foods to which patients are intolerant are identified and eliminated from the patient's diet, according to researchers from Cambridge, England, as reported in *Drug Therapy* (January 1986).

In their controlled study, seven out of 10 patients with remitted Crohn's disease who excluded specific foods remained in remission for six months (*Lancet* 1985;2:177-180). In contrast, none of the 10 similar patients who consumed an unrefined carbohydrate, fiber-rich diet were able to stay in remission for this length of time.

In a subsequent uncontrolled trial, the exclusion of certain foods enabled 51 out of 77 patients to remain in remission for up to 51 months; the average annual relapse rate in these patients was less that 10 percent .

The investigators noted that this approach demanded a great deal of cooperation on the part of the patient. However, they added that most of their patients were so pleased with their improvement that they were willing to comply.

In my experience, the most significant breakthroughs for my patients with IBD have taken place with the "Specific Carbohydrate Diet" advocated by Elaine Gottschall in her book Breaking the Vicious Cycle. (Its foreword written by yours truly.) Ms. Gottschall formulated the diet based on personal experience with her daughter, who at age 8 was stricken with debilitating ulcerative colitis. Faced with the imminent prospect of surgery to remove her daughter's colon, Gottschall, then a young biochemist, sought out the advice of an elderly physician trained in turn-of-the-century Germany. His approach hearkened back to an early naturopathic tradition that recognized "pathogenic fermentation" as the root cause of gastrointestinal ailments. Gottschall's use of diet cured her daughter's colitis and out of this experience was born the Specific Carbohydrate Diet (SCD).

The basic theory underlying the SCD is that disease-producing bacteria and fungus spread their toxic humors in the intestines when a natural balance has been disrupted. This can arise several ways:

• Inadequate breast-feeding

- Overreliance on antacids
- Use of antibiotics
- A diet high in sugar or starch
- Parasites or harmful bacteria or yeast from food or water
- Immunosuppression from disease, malnutrition or stress
- Toxic chemicals in food or water
- Natural aging of the GI tract
- Use of aspirin and aspirin-like pain-killers (NSAIDs) that inflame the intestinal lining.

In a "vicious cycle," harmful bugs proliferate, irritate the intestine, disrupt digestion, impair immunity and foster fermentative degradation of certain hard-to-digest foods. The main dietary culprits: two-sugar and other enzymatically resistant carbohydrates found in grains, certain starchy vegetables, certain fruits, table sugar and lactose-rich dairy products.

Gottschall's Specific Carbohydrate Diet is a balanced, varied program consisting of meat, fish, eggs and poultry with most vegetables, nuts, and some fruits and sugars allowed. Lactose-free dairy products are permitted, as are certain ingeniously formulated grain-free breads, cookies and pastries consisting of nut meal. Beans usually are able to be reintroduced within three months.

Patients with IBD often note significant improvement in their symptoms within three weeks of starting the Gottschall diet. By 12 weeks, the majority are recovering definitively. One 20-year-old patient of mine with ulcerative colitis took a full year to become symptom-free. She now maintains her remission with a modified version of the SCD that allows her occasional rice-based grain products. Another patient with ulcerative proctitis affecting the rectum had daily bloody diarrhea despite medications for years until initiating the Gottschall diet. After 18 months, he is completely symptom-free without the aid of medications. Elaine Gottschall herself is a frequent recipient of letters of gratitude from patients relieved of devastating symptoms.

While the SCD is the best-kept secret of IBD management, adjunctive therapies help speed resolution of symptoms and improve the margin of success. It has long been noted in the conventional management of IBD that antibiotics such as Flagyl have value in ameliorating pain, diarrhea and bleeding. For the same reason, herbs with natural antimicrobial effects are used to advantage in Crohn's disease and ulcerative colitis. These include grapefruit seed extract, goldenseal, artemisia, sanguinaria, gentian and garlic. These substances can be used to reduce proliferation of harmful intestinal bugs including Staph, Klebsiella and Proteus. Progress of therapy can be monitored with stool tests such as the Comprehensive Digestive Stool Analysis from Great Smokies Diagnostic Laboratory.

Some studies suggest that IBD is a form of exaggerated allergic response to the presence of intestinal bugs that healthier individuals—or those less genetically susceptible—tolerate with ease. Innovative modern allergy desensitization techniques are being pioneered in colitis and Crohn's. They are aimed at rapidly reducing hypersensitivity to bad bugs and candida—an intestinal fungus that may wreak havoc in the GI tract.

Indeed, the yeast connection is an important one in IBD. Some studies have shown increased sensitivity to brewer's and baker's yeasts in colitis and Crohn's sufferers. Avoidance of yeast and sugars with the Candida Diet, as well as the use

of anti-fungal herbs and medications, often speeds resolution of IBD.

Certain herbs and nutrients have anti-inflammatory effects in the intestines. **Ginkgo** biloba, known for its circulatory-enhancing effects, has demonstrated anti-disease activity in some studies of IBD. Herbs such as licorice and the bioflavonoid quercetin have soothing effects on the intestinal wall. Aloe vera can help to heal ulceration. Chinese herb formulations containing, among other things, extract of cinnamon and angelica, relieve spasm and inflammation and dissipate pathological heat.

The amino acid L-Glutamine has been shown to possess healing affects on gastrointestinal mucosa. Fish oil, containing the vital omega-3 polyunsaturated fatty acid EPA, can help break the inflammatory cycle in colitis as it does in rheumatoid arthritis and psoriasis. Shark cartilage also has been touted in IBD. Some studies support the use of bromelain as an anti-inflammatory, and, surprisingly, certain properties of red-hot capsaicin from cayenne peppers have led to research in its application to IBD. Certain short-chain fatty acids, especially butyrate, work well in colitis when administered orally or via enema.

Many vitamins and minerals play a supportive role in GI tissue repair, but since IBD impairs digestion and absorption, a vicious cycle of nutritional decline easily can perpetuate itself. A very high percentage of IBD sufferers are malnourished. Statistics show many to be protein-calorie deficient. Many have fat intolerance, which results in essential fatty acid and fat-soluble vitamin deficiencies. Many suffer from bleeding, which leaves them iron-deficient. Diarrhea promotes depletion of water-soluble vitamins and essential minerals including zinc and magnesium.

Table 1:

Percentage Of IBD Sufferers Deficient in Key Nutrients Crohn's disease, ulcerative colitis Folic Acid 54-67 percent, 36 percent B12 48 percent, 5 percent Iron 39 percent, 81 percent D 75 percent, N/A Zinc 50 percent, N/A

Research shows that some of the damage in IBD is caused by free radicals. Antioxidants can offer protection, but studies show many IBD sufferers to be deficient in critical free-radical scavengers such as beta-carotene, C, E, zinc and selenium.

Folic acid poses a particular problem in IBD because drugs commonly used to treat the disease, such as Azulfidine, deplete folate. This is of particular concern since folic acid helps regenerate tissue and prevents transformation of chronically inflamed tissue to cancer. As many as 10 percent of ulcerative colitis sufferers ultimately develop colon cancer. High-dose folate can act as a preventative.

Difficulties arise, too, from overzealous supplementation even though patients may be lacking critical nutrients. High doses of C and minerals such as zinc and magnesium can irritate the intestines and worsen diarrhea. Iron often is poorly tolerated, and its direct introduction into the intestines may paradoxically worsen disease by promoting free radicals locally.

The solution is a slow, gradual repletion of nutrients by mouth, sometimes with a boost from intravenous "drips" of C, magnesium, B vitamins, zinc, selenium and glutathione. Energy can thus be rapidly restored and healing can be facilitated by

bypassing impaired intestinal absorption.

Putting "good" bacteria back into the intestines also can enhance recovery. Supplements of acidophilus, bifidus and Saccharomyces boulardii (a digestive flora frequently used in Europe) can restore bowel function to normal. Experimental work is now underway with medically administered specific "inoculations" of beneficial flora via enema.

In conjunction with traditional Chinese herbs, acupuncture sometimes is administered for intestinal diseases. Some of my patients report this is most helpful for alleviating symptoms of exhaustion, pain and spasm and for marshalling the body's own healing forces.

External treatments such as castor oil packs were often advocated by Edgar Cayce in his readings on Crohn's disease and ulcerative colitis. Castor oil also is known as Palma Christi or, literally, "the hand of Christ," because of its superb healing properties.

Many patients with IBD are adrenally suppressed due to frequent treatments with prednisone with the result that they are chronically fatigued and vulnerable to stress, infection and allergy. Partial alleviation can be accomplished with a prescription of DHEA, an adrenal hormone often found to be deficient in IBS sufferers.

Recent research indicates that regeneration of damaged intestinal mucosa can be hastened with a substance called epithelial-derived growth factor (EDGF). Bioengineered EDGF eventually may be prescribed for Crohn's disease and ulcerative colitis, but present-day sufferers may gain access to its benefits in natural form with over-the-counter "glandulars" rich in duodenal extract from animal sources. For more information on this subject:

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