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Specific Carbohydrate Diet in Treatment of Inflammatory Bowel Disease

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Over the years, there have been numerous studies examining diet and Inflammatory Bowel Disease (IBD). Six decades ago, prior to the identification of gluten as the principal offending agent, S.V. Haas successfully developed the Specific Carbohydrate Diet (SCD) for the treatment of celiac disease. The SCD has as its basis a strict grain-free, sugar-free, and complex carbohydrate-free dietary regimen. In theory, it is similar to an elemental diet, the thought being that foods easily absorbed provide bowel rest. The SCD, however, strives to use readily available foods such as fruits, meats, nuts, eggs, and vegetables. In addition, it is thought the SCD may alter gut flora and thus remove bacterial antigens thought to be responsible for the immune hypersensitivity seen in IBD.

After reviewing two cases in which individuals adhering to a strict SCD showed a positive outcome, it was decided to conduct an Internet survey to ascertain whether there were other cases to support such findings.

Case One. A 51-year-old white woman with chronic ulcerative colitis of 10 years’ duration had progressed from distal proctitis to near universal colitis on her last colonoscopy. Despite 5-ASA therapy several times a year, she experienced flare-ups that were controlled with prednisone. Her symptoms included abdominal cramps, diarrhea, urgency, and chronic bleeding with iron deficiency. She was becoming steroid-resistant and had a flare-up while on a prednisone taper. The patient tried the SCD and reported symptom improvement after two weeks. She discontinued 5-ASA and continued solely on the SCD. One month later the chronic rectal bleeding ceased. Her symptoms continued to improve and she remained off all medications. Twelve months after beginning the diet, routine follow-up colonoscopy showed no abnormalities. She has remained in remission for 24 months on diet alone.

Case Two. A 24-year-old woman was diagnosed with Crohn’s disease. She had a six to seven year history of intermittent abdominal pain, diarrhea, and chronic bleeding with iron deficiency anemia. Colonoscopy revealed moderate to severe ileocecal Crohn’s disease. She was also started on 5-ASA therapy, but experienced no improvement and likewise, on her last prednisone taper, experienced a flare-up. She was encouraged to start immunosuppressive therapy with azathioprine, but instead she began the SCD. She had symptom improvement within one week and within one month was able to taper off steroids. In addition, objective findings such as anemia and elevated ESR were improved. Subsequently, she discontinued the 5-ASA and has remained in remission without any medications for three years. Follow-up colonoscopy two years after starting the diet revealed no abnormalities.

INTERNET SURVEY

Individuals successfully using the SCD were asked to complete a survey questionnaire on their illness, diagnosis, and treatment. The following results are as reported by the patients with no medical record analysis being performed:

(1) 51 responded and all were reviewed, including 31 Crohn’s disease and 20 ulcerative colitis cases. Most patients were chronically ill, with 88% sick longer than two years.

(2) Using the diet, 84% of patients reported they were in remission (>75% improvement of symptoms). 54% of patients were in remission one year or longer, with the average greater than three years. Many of these patients maintained long-term remissions using SCD alone.

(3) 61% of the respondents were off all medications. 7 (14%) were currently on steroids. 39% continued to take 5-ASA, orally or topically.

(4) Many patients had no follow-up studies after improvement; however, 12 of 16 follow-up colonoscopies were normal, 3 improved, and 1 unchanged. Those with only x-ray studies were normal in two instances and one was unchanged. Two patients reported long-term healing of fistulas on no medication.

DISCUSSION

Other than occasional food intolerance, patients with IBD are usually advised that diet therapy had little if any impact on the course of the disease. The self-reported success of these cases suggests that this diet may have a significant role in inducing and maintaining remission for some patients. Although this diet regimen is strict and requires commitment, these successful long-term cases demonstrate the feasibility of this approach. Most of the respondents remained fervent about the SCD. Proper randomized clinical trials are warranted to investigate the merits of this treatment.

References

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