

# 11<sup>TH</sup> EUROPEAN NUTRITION AND DIETETICS CONFERENCE

June 29-July 01, 2017 Madrid, Spain

## Rapid improvement in symptoms and quality of life among patients with inflammatory bowel disease following an autoimmune protocol diet

Shauna L Groven<sup>1</sup>, Crystal Sanchez, Susan Levy, James Lewis<sup>2</sup>, Caroline Diamant, Emily<sup>4</sup> Singh, Anita Chandrasekaran, Ali Torkamani and Gauree Konijeti<sup>4</sup>

<sup>1</sup>San Diego State University, USA

<sup>2</sup>Center for Clinical Epidemiology and Biostatistics, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA

<sup>3</sup>Division of Gastroenterology & Hepatology, Scripps Clinic, La Jolla, CA, USA

**Introduction:** Dietary modification can potentially improve clinical symptoms and quality of life in patients with Inflammatory Bowel Disease (IBD), including Crohn's Disease (CD) and Ulcerative Colitis (UC). In this study of the efficacy of an Autoimmune Protocol (AIP) diet in patients with IBD we examined the effect of the AIP diet on symptoms and quality of life, and compared the efficacy of the AIP diet between CD and UC.

**Methods:** We enrolled 18 adult patients with IBD with mild-moderate disease activity (HBI  $\geq$  5 or partial Mayo score  $\geq$  3) and objective evidence of active disease (endoscopy within 7 months and/or elevated fecal calprotectin within 1 month). Three patients withdrew prior to study start due to inability to commit to dietary modification. In the 11 week uncontrolled trial, patients transitioned to an AIP diet over six weeks, and then maintained the diet for five weeks. By week three, patients eliminated grains, alcohol, legumes, and nightshades. Patients prospectively completed health surveys prior to study start, and at weeks three, six, nine, and 11. Rating scale questions were analyzed by mixed design ANOVA using SPSS 24.0.

**Results:** Results showed that the final cohort included 15 patients (nine CD, six UC), with mean IBD duration of 19 years (SD 14.6) and active biologic use in seven patients. Nine patients have completed surveys at both baseline and week three. Compared to baseline, there were significant improvements in bowel movement frequency (36%,  $p=0.04$ ), state relaxation/free of tension (28%,  $p=0.01$ ), and performance of leisure/sport activities (29%,  $p=0.02$ ) at week three. Surveys indicated no significant improvements in fatigue (45%,  $p=0.07$ ) and energy (24%,  $p=0.14$ ), as well as no significant decrease in frequency of abdominal cramps (6%,  $p=0.53$ ), worry of surgery (5%,  $p=0.17$ ), fear of not finding a toilet (6%,  $p=0.39$ ), and irritable mood (18%,  $p=0.13$ ). Effects of the AIP diet were not significantly different between CD and UC patients, and yielded no significant interaction between time and IBD subtype.

**Discussion:** Based on prospective patient-reported health surveys, the AIP diet significantly improved clinical symptoms and quality of life of patients with active CD and UC within the first three weeks. Our data suggests dietary change as a feasible and efficacious adjunct to IBD therapy.

### Biography

Shauna L Groven is a Graduate student currently obtaining a Master of Science in Nutritional Science in San Diego State University, as well as completing an ACEND-Accredited Didactic Program of Dietetics in San Diego State University. She holds a Bachelor of Science in Biology from Oklahoma Christian University. In addition to her graduate studies, she is participating in a research internship at Scripps Clinic in San Diego, CA, where she is studying the effects of diet and nutrition on the clinical course and outcomes in patients with inflammatory bowel disease (IBD), including ulcerative colitis (UC) and Crohn's disease (CD). She also conducts research evaluating diet and vitamin repletion in patients diagnosed with IBD, and performs statistical analysis of patients' data.

sgroven@sdsu.edu

### Notes: