GI and Other Nutrition and Metabolic-Related Topics

P34 - Improved GI Tolerance, Quality of Life, and Weight Gain in an Adult Ulcerative Colitis, Renal Transplant Patient Using a Plant-Based Diabetes Specific Enteral Formula

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Background: This case study assessed tolerance, weight gain, and quality of life (QoL) in an adult Ulcerative Colitis (UC) patient status post renal transplant consuming a plant-based, fiber-containing diabetes specific enteral formula (PBDF) orally at a single adult gastroenterology center.

Methods: A retrospective chart review was conducted. Age, anthropometrics, medical history, formula administration method, nutritional regimen, QoL questionnaire scores, and standardized nutrition intake responses were collected from the patient's records.

Results: Patient was a 57-year-old female, with a past medical history of renal transplant in 1997 with secondary diabetes diagnosis, multiple food allergies to eggs, gluten, milk protein, shellfish, and tree nuts, and moderately active ulcerative colitis. After trialing other formulas without success, the patient was placed on a PBDF (1.2 kcal/mL) twice daily to meet 41% of caloric needs and 66% of protein needs by mouth, in addition to a low fiber diet. Refill requests confirmed compliance during the 4-month period. The patient demonstrated intentional weight gain of 1.2 kg with a desirable change in BMI status by +0.5 kg/m2 over the study period. The nutritional tolerance questionnaire revealed improvement in post-prandial bloating and pain, stool consistency, and reported energy level. In the clinical QoL questionnaire, the patient notably reported improvement in anxiety/depression scoring. Of note, glycemic control and renal indices, per the patient's blood glucose log and review of metabolic panels, were without significant change in the setting of the PBDF's phytonutrient blend and the patient's overall increased energy intake.

Conclusion: In this retrospective case study, this patient had improved weight and BMI, gastrointestinal tolerance, and QoL parameters, without evidence of decline in glycemic control or renal indices while consuming a PBDF. This demonstrates the use of PBDF as a viable option in this patient population. The retrospective design and use of a single patient measure are limitations to this study; however, this supports the need to expand upon these initial observations, with a larger prospective trial in UC patients with co-morbidities.

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