Enteral Nutrition Therapy

P33 - Improved GI Tolerance, Nutrition Provision, and Weight Maintenance in an Adult Patient With Cerebral Palsy, Secondary Dysphagia, and Gastroparesis Using a Standard Plant-Based Enteral Formula

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Background: This case study assessed tolerance and weight maintenance of an adult Cerebral Palsy (CP) patient with secondary dysphagia, G-tube dependence, and gastroparesis consuming a standard plant-based enteral formula (PBEF) at a single adult gastroenterology center.

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

Results: Patient was a 26-year-old male with a past medical history of CP with dysphagia, spastic quadriplegia, G-tube dependence, gastroparesis, and Nissen fundoplication. The patient presented with enteral intolerances to a polymeric fiber containing formula and a semi-elemental formula, both dairy-based. On his initial visit, patient was receiving <75% estimated needs due to retching, abdominal distention, discomfort, and hiccups. The patient was placed on a standard PBEF (1.4 kcal/mL) with a protein modular at a goal rate of 50ml/h over 10 hours to meet 100% of his estimated caloric and protein needs via G-tube. Refill requests confirmed compliance over the 3-month study period. The patient demonstrated weight maintenance within the desired weight goal range of 34-36 kg. The nutritional tolerance questionnaire revealed improvement in stool consistency and regularity, hiccups, abdominal distention, and retching after switching to PBEF.

Conclusion: Desired maintenance of anthropometrics, self-reported outcomes of improved gastrointestinal tolerance, and increased nutrient provision were observed, retrospectively, in this patient consuming a standard PBEF at a single adult gastroenterology center. 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 CP patients with gastroparesis.

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