

Development, Mealtime Dynamics & Nutrition: Making the Case for Neocate Nutra

Patient History

7-month old boy with history of intolerance to several milk- and soy-based formulas had symptoms including vomiting, poor growth, poor feeding transition to solids (refusing to eat them), asthma and eczema. Food allergy testing revealed an allergic response to peanut, dairy, soy, wheat, tree nut, cantaloupe, banana and rice. Esophageal biopsies revealed 45 to 50 eosinophils per high power field (hpf) proximally and distally with noted inflammation in the esophagus. A diagnosis of eosinophilic esophagitis (EE) was established.

Nutritional/Medical Management

The child was treated with proton pump inhibition secondary to inflammation, topical steroids, and transitioned to Neocate Infant, an amino acid-based formula. His parents were highly anxious regarding growth and the struggle to feed their child, resulting in stressful feeding dynamics and difficult transition to Neocate Infant formula. His pediatrician/gastroenterologist in concert with his dietitian also recommended Neocate Nutra, an amino acid-based semi-solid medical food, for additional calories (secondary to formula refusal) and the developmental opportunity to acquire oral motor and oral sensory skills for successful spoon feeding. Neocate Nutra was presented to the child twice daily, with one presentation of Neocate Nutra thinned with Neocate Infant to promote formula acceptance. With direction from the child's allergist, Neocate Nutra was also slowly mixed with apple, sweet potato and white potato to promote increased acceptance and variety as well as exposure to flavor profiles as would be developmentally appropriate.

Results

The introduction of Neocate Nutra provided additional calories when acceptance of Neocate Infant was low, supported and promoted typical development, provided satisfying feeding opportunities for caregivers and reduced family stress surrounding growth and mealtimes. Follow-up biopsies revealed significantly reduced eosinophilla (7 to 8 per hpf). The patient successfully transitioned to full volumes of Neocate Infant formula supplemented with Neocate Nutra mixed with infant purees two to three times daily by 12 months of age.

Patient History

4-year old girl with a history of severe eczema, multiple food allergies, asthma and allergic rhinitis. This patient was placed on Neocate Infant, an amino acid-based formula, at 4 months of age. This decreased allergic symptoms, but the patient experienced several episodes of anaphylaxis with the introduction of foods in the first two years of life. A limited diet (self-limited secondary to learned feeding aversions) caused the patient to refuse allowed foods. The patient was transitioned to Neocate One+ formula, consuming enough calories for slow but sub-optimal growth. Mealtimes were highly frustrating for the family, who was now allowing the child to walk around the house and sip formula from a straw cup all day. This grazing resulted in less intake overall, as the cup was often set aside in favor of more interesting activities.

Nutritional/Medical Management

The patient was followed by a dietitian and feeding specialist who worked in concert with child and caregivers to increase intake of Neocate One+ formula utilizing Neocate flavor straws. E028 Splash (a ready-to-feed amino acid-based formula) was introduced as an additional calorie source that was developmentally appropriate and “cool for preschool.” The family established a mealtime schedule and routine, and initiated cooking activities using Neocate Nutra, an amino acid-based semi-solid medical food, in recipes such as banana maple pudding, chocolate pudding and apple popsicles. All of the aforementioned resulted in additional calories and improved growth of the patient, and provided developmentally appropriate recipes and packaging for increased acceptance of the diet.

Results

The patient’s improved intake of Neocate One+ formula, E028 Splash and Neocate Nutra resulted in improved growth, decreased stress and anxiety surrounding mealtimes, and improved behavioral flexibility secondary to variety and control which led to increased acceptance of allowed foods.

