management of food protein-induced enterocolitis syndrome (FPIES).

STUDY POPULATION. The study included 470 members of the American Academy of Allergy, Asthma, and Immunology (AAAAI) who responded to a survey monkey sent by the AAAAI to its 4370 members, both domestic and international. Of the members, 87.8% were US citizens, 53.4% were board certified in pediatrics, and 61.1% were in private practice.

METHODS. A 23-question online survey was developed by various AAAAI committees, including the Adverse Reaction to Foods Committee, the Needs Assessment Committee, and the Board of Directors. Demographic information pertaining to residence, type, and location of practice; date of training completion; board certification; and most recent AAAAI conference attended for all respondents was obtained from the AAAAI data bank.

RESULTS. A total of 64% of respondents indicated full understanding of FPIES, whereas <6% were unaware or unsure of FPIES presentation, diagnosis, and management. In clinical vignettes, 80.4% correctly identified FPIES. There were multiple significant associations with management trends. The odds of prescribing epinephrine were lower among those reporting full understanding of FPIES (odds ratio [OR]: 0.41). Academic providers had higher odds of providing an emergency action plan (OR: 2.4) and of performing diagnostic oral food challenges (OR: 1.99) but not of correctly identifying cow milk–FPIES substitutes or having a preferred timing for food reintroduction. More years in practice were associated with lower odds of reporting full understanding of FPIES (OR: 0.96).

CONCLUSIONS. Nearly one-third of allergy specialists surveyed reported poor familiarity with the diagnosis and management of FPIES. Furthermore, considerable variation exists in the use of diagnostic tests, symptom management, and nutrition guidance, clearly highlighting the need for FPIES practice guidelines.

REVIEWER COMMENTS. The incidence of FPIES appears to be rising, although epidemiological data are lacking. Lack of understanding of FPIES as a non-immunoglobulin E-mediated adverse reaction to food likely contributes to the high rate of epinephrine prescription and poor use of food challenges among allergists. There is a clear need for FPIES practice guidelines and for reinforcing the role of allergists and immunologists in the diagnosis and management of non-immunoglobulin E-mediated food allergies. In this regard, the reader is referred to the “International consensus guidelines for the diagnosis and management of food protein-induced enterocolitis syndrome: Executive summary-Workgroup Report of the Adverse Reactions to Foods Committee, American Academy of Allergy, Asthma & Immunology” published in the Journal of Allergy & Clinical Immunology (2017;139[4]:1111–1126).

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Allergic Proctocolitis Is a Risk Factor for Functional Gastrointestinal Disorders in Children

PURPOSE OF THE STUDY. To prospectively evaluate the long-term effect of allergic proctocolitis on the development of functional gastrointestinal disorders (FGIDs), defined as gastrointestinal symptoms that cannot be attributed to another medical condition.

STUDY POPULATION. The study included 80 Italian children consecutively diagnosed with allergic proctocolitis, in addition to 80 matched controls.

METHODS. Patients presenting to the Pediatric Gastroenterology Unit of Sapienza, University of Rome, with newly diagnosed allergic proctocolitis were recruited for participation in the study. Each subject underwent an anal inspection, stool culture, fecal calprotectin, and rectosigmoidoscopy with mucosal biopsies obtained from the left colon and rectum. Serum-specific immunoglobulin E and skin-prick testing (cow’s milk, soy, rice, wheat, and egg) were also performed. Subjects were managed with a stepwise protocol progressing from cow’s milk protein maternal avoidance, then extensively hydrolyzed formula, and then amino acid-based formula. For the control group, each subject was matched with either a sibling or a child of similar age and sex who presented to the hospital emergency department for mild trauma in the absence of previous chronic gastrointestinal symptoms. Subjects had monthly clinic follow-up until remission of symptoms, followed by telephone interview every 12 months until the age of 4 years. After subjects turned 4 years old, parents were mailed the parental Questionnaire on Pediatric Gastrointestinal Symptoms, Rome III version, a validated questionnaire for the diagnosis of FGIDs.

RESULTS. There were 80 subjects in each of the allergic proctocolitis and control groups, with no significant differences in demographics of the 2 groups. Throughout the course of the study, none of the allergic proctocolitis patients had a change in their diagnosis, and none in the control group developed an organic disorder. In the allergic proctocolitis group, 12 subjects (15%) met FGID criteria compared with 4 subjects in the control group (5%) (P = .035). For the allergic proctocolitis group,
adjusting for age and sex, the odds for developing an FGID was odds ratio 4.39 (95% confidence interval, 1.03–18.68). There was no correlation between FGIDs and family history of atopy, positive allergy testing results, fecal calprotectin, endoscopic score, histologic score, or eosinophil score. In the allergic proctocolitis group, the only variable that was statistically significant for development of an FGID was duration of hematochezia (odds ratio 3.14; 95% confidence interval, 1.72–5.74).

CONCLUSIONS. Allergic proctocolitis is a risk factor for the development of FGID in children, further supporting that both transient infectious and noninfectious inflammatory triggers can contribute to the development of FGIDs.

REVIEWER COMMENTS. The authors of this study prospectively identify allergic proctocolitis as a risk factor for the development of FGIDs, describing long-term morbidity with what is considered a self-limiting, relatively mild disease. This supports the idea that prolonged inflammation, in the absence of infection, can lead to the development of FGIDs. Interestingly, the duration of hematochezia was associated with an increasing rate of developing FGIDs, which suggests that prompt treatment could have an impact on this associated morbidity.

Effects of Allergen Sensitization on Response to Therapy in Children With Eosinophilic Esophagitis

PURPOSE OF THE STUDY. To assess the impact of environmental allergen sensitization on therapeutic outcomes in pediatric patients with eosinophilic esophagitis (EoE).

STUDY POPULATION. Included in the study were patients ages 2 to 18 years at Arkansas Children’s Hospital multi-specialty Eosinophilic Gastrointestinal Disorders Clinic in Little Rock, Arkansas.

METHODS. A prospective, longitudinal cohort study enrolling patients diagnosed with EoE from January 2012 to January 2016 was conducted. Data were collected regarding clinical symptoms; allergy sensitization profiles; medical, family, and diet history; and response to treatment. Sensitization to aeroallergens was determined via skin prick testing and/or serum-specific immunoglobulin E testing. Testing for environmental allergens was specific for seasonal allergens in the southeastern region of the United States. Patients with EoE were categorized as either complete or nonresponders to various forms of treatment, including swallowed oral steroids, proton pump inhibitors (PPIs), and changes in diet. Those categorized as PPI nonresponsive with at least 1 follow-up endoscopy were analyzed for demographics, medical history, clinical symptoms, allergen sensitization, and response to management.

RESULTS. Of the 223 enrolled subjects, 182 had allergy testing and an endoscopy while taking a PPI. Twenty-nine of the 182 individuals were categorized as PPI responsive (with <15 eosinophils per high-power field) versus gastroesophageal reflux and were excluded from additional analysis. A total of 152 patients were determined to be PPI nonresponsive because they had >15 eosinophils per high-power field. Of the nonresponders, 29 patients did not have a follow-up endoscopy, and 123 had at least 1 follow-up endoscopy. Analysis of the 123 nonresponders revealed they were more likely to be sensitized to perennial allergens (P = .02). However, with regard to sensitization to seasonal allergens, there was no significant difference in treatment response. Patients were more likely to fail combination diet and swallowed corticosteroid therapy if sensitized to mold or cockroach allergy (P = .02 and P = .002).

CONCLUSIONS. Sensitization to mold and perennial allergens may negatively affect response to therapy in patients with EoE. More information is needed regarding the role of environmental allergies in the management of patients with EoE.

REVIEWER COMMENTS. The authors of this and other studies suggest that environmental factors should be considered for patients with EoE. Additional studies in which researchers explore these associations are required to further understand not only EoE management but EoE disease as a whole. For the time being, this study can be used to aid in raising provider awareness of the potential contribution of aeroallergen sensitization in the treatment response of patients with EoE. It would be of interest to explore if improved control of perennial and/or mold allergens would improve EoE treatment outcomes.

Using Serum IgE Antibodies to Predict Esophageal Eosinophilia in Children

PURPOSE OF THE STUDY. This study was designed to develop a model to use food-specific serum immunoglobulin E
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