

REVIEWER COMMENTS. Food challenge remains the gold standard for diagnosing food allergy. A marker that would alleviate the need for time-consuming and risky food challenges has yet to be found. CRD has allowed some patients to proceed with food challenges deemed to be lower risk. At this time, we still rely on our clinical judgment based on detailed clinical history, specific allergic sensitivity, and comorbid conditions when determining the risk-to-benefit profile, allowing patients to make an informed decision to pursue a food challenge.

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Use of Food Allergy Panels by Pediatric Care Providers Compared With Allergists

Strukus DR, Kempe E, Leber A, Thonrton D, Scherzer R. *Pediatrics*. 2016;138(6):e20161602

PURPOSE OF THE STUDY. To characterize and quantify the use of food-specific serum IgE (sIgE) panels by PCPs and allergists.

STUDY POPULATION. Clinicians (physicians, nurse practitioners, and physician assistants) who placed orders for food sIgEs at the outpatient laboratory at Nationwide Children's Hospital in Columbus, Ohio, were classified according to their primary area of clinical expertise, including allergy and immunology, PCP (including pediatricians, family medicine, and internal medicine), and gastroenterology.

METHODS. This was a retrospective review of all food sIgE tests (individual tests and panels) ordered in 2013.

RESULTS. In the 1-year study time period, 10 794 single-food sIgE tests and 3065 allergen panels containing at least 1 food sIgE were ordered by 447 clinicians. Allergists ordered the majority of single-food sIgE tests compared with PCPs. PCPs ordered the majority of the allergen panels, and 45.1% of all sIgE tests ordered by PCPs were panels, compared with only 1.2% of orders placed by allergists. PCPs in practice for ≤ 15 years ordered $\sim 50\%$ fewer sIgE panels, compared with PCPs in practice for ≥ 16 years. Allergists were much more likely to order single-food sIgE testing for one of the 8 most common food allergens (cow's milk, egg, wheat, soy, peanut, tree nuts, fish, and shellfish, which account for $>90\%$ of all IgE-mediated food allergies) than were PCPs, who ordered significantly more sIgE tests for foods associated with a low prevalence of IgE-mediated food allergy, such as strawberry, beef, corn, and tomato. During the study period, the average laboratory charge for each individual sIgE was \$26.92. The cost of each panel ranged from \$134.60 (for the 5-allergen panel) to \$619.16 (for the 23-allergen panel). The total cost of all sIgE tests ordered

per patient was approximately twice as expensive for PCPs, with the majority of the discrepancy due to ordering sIgE panels.

CONCLUSIONS. Compared with allergists, PCPs order significantly more food allergen panels, more single-food sIgE tests for foods that infrequently cause allergy in children, and generate higher costs per patient for sIgE testing.

REVIEWER COMMENTS. Accurate diagnosis of IgE-mediated food allergies is critical for management. The clinical history of an acute allergic reaction to a suspected trigger is the most important diagnostic tool. Percutaneous skin prick testing and sIgE assays confirm the suspected diagnosis. Oral food challenges are the gold standard in the diagnosis of a food allergy and can be conducted by a food allergy specialist if the diagnosis remains unclear. Clinical guidelines discourage indiscriminate use of sIgE panels, given the low positive predictive value of these tests when used arbitrarily. The Choosing Wisely campaign of the ABIM Foundation highlights this recommendation for allergy tests (<http://www.choosingwisely.org/patient-resources/allergy-tests/>). Food sIgE testing should not be performed without a history consistent with a potential IgE-mediated food allergy. Ordering a panel of tests for allergens does not reduce costs.

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Characteristics of Tree Nut Challenges in Tree Nut–Allergic and Tree Nut–Sensitized Individuals

Couch C, Franxman T, Greenhawt M. *Ann Allergy Asthma Immunol*. 2017;118(5):591–596.e3

PURPOSE OF THE STUDY. To show characteristics and outcomes of oral food challenges (OFCs) in patients with tree nut (TN) sensitization with or without documented tree nut allergy and to help understand the relation between tree nut sensitization (by skin prick testing [SPT] and specific immunoglobulin E [sIgE]) and OFC outcomes.

STUDY POPULATION. All open TN OFCs conducted at the University of Michigan Allergy and Immunology clinics between 2007 and 2015. Patients included in the study had a mean age of 4.5 years. Patients who had TN SPT and or TN sIgE testing before the challenge were included. Patients with a history of a non-IgE-mediated food allergy were excluded.

METHODS. Retrospective analysis was performed by using *International Classification of Diseases, Ninth Revision* and

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