

EDITORIAL



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Evidence-based Approaches to Food Allergy Diagnosis

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The prevalence of food allergy has increased in the past decades. However, most studies are based on self-reported clinical history of food allergy rather than food challenge-confirmed ones; these may overestimate the prevalence of food allergy.

Food allergy has been identified as one of the most common causes of anaphylaxis, especially among children. Like other studies, the study by Rosero et al., published in this issue, identified that food is the most common trigger for anaphylaxis among pediatric patients admitted to a tertiary hospital.¹ The incidence of food-induced anaphylaxis in children worldwide is varied, with a range of 1 to 77 per 100,000 person-years.² Moreover, almost half of all patients with food allergies experienced anaphylaxis in any previous reaction (46%, 2556/5587), based on the Food Allergy Research & Education (FARE) Patient Registry.³ The most common food triggers causing anaphylaxis in adults are crustaceans and eggs, cow's milk, nuts, wheat, and shellfish among children.^{4,5}

A detailed allergy-focused clinical history is the first step in the diagnostic work-up among patients suspected to have food allergies. The allergy-focused history will serve as a guide to the allergy tests that will be done. Skin prick tests (SPT) to allergen extracts and fresh food, serum-specific IgE (sIgE) to allergen extracts and individual allergen components, and basophil activation test (BAT) are recommended tests to support the diagnosis of IgE-mediated allergy.⁶ These tests have high to moderate sensitivity (negative result rules out FA) and specificity (positive result rules in FA) to a variety of food.⁷ BAT is suggested to support the diagnosis of food allergy among

those with an equivocal diagnosis of IgE-mediated allergy to peanut and sesame. The gold standard for diagnosing food allergy is the oral food challenge (OFC). However, the OFC is resource-intensive and may pose severe allergic reactions. In the EAAAI guidelines on diagnosing IgE-mediated FA, OFC is the recommended reference diagnostic procedure to confirm or exclude FA.⁶ Based on the same guidelines, the double-blind placebo-controlled food challenge is suggested if an open OFC outcome is indeterminate and in research studies.

There are tests available in laboratories that lack evidence of diagnostic validity and do not show a correlation with food allergy. Patients will seek physicians' opinions regarding these tests or will come to the clinic with the results of these tests marketed as food allergy or food intolerance tests. Society guidelines and practice parameters do not recommend unvalidated tests to diagnose food allergy.^{6,8-10} These tests, such as IgG or IgG4 antibody level, hair analysis, electrodermal testing, antigen leukocyte antibody test, mediator release test, and kinesiology.¹¹ The Philippine Society of Allergy, Asthma, and Immunology does not recommend food-specific IgG testing to identify or predict adverse reactions to food.⁹ The production of food-specific IgG or IgG4 is a normal immunologic response linked to the development of tolerance, not food allergy or intolerance.

Identifying the food trigger through an allergy-focused clinical history and validated diagnostic tests is essential to prevent future adverse reactions, eliminate unnecessary food elimination, prevent nutritional deficiencies, and improve quality of life.



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