

A decade of progress in prevention and management of food allergy and anaphylaxis

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This issue of the *Journal of Food Allergy* covers topics ranging from prevention of food allergy and burden of illness to food allergy diagnosis and management. Conway *et al.*¹ provide a thoughtful and comprehensive overview of the evolution of food allergy prevention strategies. The authors highlight the significant changes that have occurred in prevention guidance over the past few decades. It is fascinating to think of the very early recommendations of “strict maternal and infant dietary restrictions” and how this has progressed over time to reach our current “early allergenic food introduction” guidance, a complete reversal of the initial medical advice. The authors nicely outline how a “no-screening” early introduction approach to food allergy prevention is both cost-effective and beneficial to patient quality of life.

Sansweet *et al.*² investigate the burden of food allergy by evaluating the frequency of food allergy-related school absences and how such absences may affect psychosocial burden. Their survey revealed that 37% of children with food allergy who attended school in the past 12 months reportedly had more than one food allergy-related absence.² Hispanic children, those with multiple food allergies, a history of epinephrine use, and anaphylaxis in the past 12 months had greater odds of reported food allergy-related school absences.² Report of such absences was also associated with greater food allergy-related psychosocial burden for the families studied.

In moving to diagnosis, Wasserman³ nicely outline a practical diagnostic approach to immunoglobulin E (IgE) mediated food allergy, with an emphasis on the

patient’s history. Multiple testing modalities are currently available, such as skin-prick testing, *in vitro* specific IgE testing, component resolved testing, epitope threshold testing, and basophil activation testing, which may assist the practicing clinician in the diagnostic process. The author strongly recommends that the choice of any food allergy testing modality should be informed by the reaction history and testing goals, including confirmation of the diagnosis of food allergy or guidance of passive (avoidance) or active (allergen immunotherapy) management. Multiple factors should be taken into consideration, such as the predictive value of the test used, the goal of the evaluation, the family’s anxiety, and the overall cost.

If you ever wondered how thresholds for different foods may be used in food allergy management, Lieberman⁴ provides important insight into this area of practice. Establishing levels at which the vast majority of patients do not react can have both public health ramifications, such as altering labeling laws. At the individual patient level, personal threshold levels may be used to determine avoidance strategies, affect quality of life, and alter treatment decisions, *e.g.*, oral immunotherapy starting doses.

For those of us who have tried to navigate the ever-confusing world of a multitude of anaphylaxis definitions and criteria, Shaker⁵ provides us with a valuable review. Anaphylaxis diagnostic criteria seem to have more in common than that which sets them apart, and approaches of the National Institute of Allergy and Infectious Disease, World Allergy Organization, and Brighton Collaborative add granularity and perspective to patient management. Severity of anaphylaxis is also discussed, especially within the context of how it impacts management. Shared decision-making is key in all management decisions because the patient’s perspective is leveraged to inform individual preferences and values together with clinician expertise with the goal to achieve bespoke patient care.

Wang *et al.*⁶ address the controversial question of who, how many, and when to use epinephrine auto-injectors in anaphylaxis. Decisions with regard to

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who should be prescribed epinephrine autoinjectors are complex and will depend on the type of allergy, comorbidities, and other factors that can increase a patient's risk for poor outcomes. Shared decision-making is essential in this area of practice too, especially when developing guidance with regard to postepinephrine management. It is noted that regular patient and family education during routine follow-up visits can reinforce knowledge and skills for successfully managing food allergy reactions.

We are wrapping up this issue with an examination of the current classification and epidemiology of non-IgE-mediated food allergy, and the latest immunologic mechanisms that underlie the three most commonly cited non-IgE food allergy conditions, *viz.*, eosinophilic esophagitis, food protein-induced enterocolitis, and food protein-induced allergic proctocolitis. Bellanti *et al.*,⁷ review current evidence that supports the view that immune dysregulation and cytokine-induced inflammation are the fundamental bases for both IgE- and non-IgE-mediated food allergy.

We hope that you will enjoy this dive into preventative, diagnostic, management, and mechanistic areas of the ever-changing field of food allergy, and we look

forward to your feedback on our published issue. Happy summer to all!

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