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Editorial Vaccination: Just do it!

The ongoing coronavirus disease 2019 (COVID-19) pandemic has thrust vaccination to the forefront as the intervention that has been able to curb the pervasive increase in worldwide cases, to decrease the death toll, and to decrease the strain placed on health care systems. Yet, vaccination has become a topic of daily discussion, not just in caring for our patients, but in the mainstream (and nonmainstream) media and political realms as well. Fake news has been entangling real news. This issue of the Annals of Allergy, Asthma & Immunology takes an important focus on hot topics in vaccination. The need for clear, evidence-based information regarding adverse reactions relating to vaccination is paramount. This issue focuses on gaps in vaccination policy, criteria for diagnosing vaccine-associated anaphylaxis, and the utility of skin testing for excipient allergy as a cause of allergic reactions to vaccines and updates the readership regarding on how to address adverse reactions to COVID-19 vaccines.

Kelso¹ has a review that acts as a long-overdue supplement to highlight key knowledge gaps in the current adverse reactions to vaccine practice parameter, which have been acutely highlighted during this current pandemic. Key points reviewed include an emphasis on prompt referral to an allergist for evaluation of a vaccine allergy rather than the patient being labeled as "allergic," that egg allergy is no longer a necessary concern for safe influenza vaccination, that caution is needed before labeling COVID-19 vaccination reactions as anaphylactic, and the risk-to-benefit ratio of withholding a vaccine because of risk of allergy, without considering the benefit of protection the vaccine provides against the infectious disease. Copaescu et al² provide a comprehensive review of the reported adverse reactions to COVID-19 vaccines, inclusive of immediate and delayed reactions, the epidemiology of COVID-19 vaccine reactions, and a perspective on the approach to evaluating patients presenting with such reactions. This highlights the uncertainty of what allergens may cause these reactions, the limitations of skin testing, and an approach to vaccine challenge, with the details of monoclonal antibody treatments available for individuals who may not be able to be vaccinated.

The issue also features pro-con debates to delve into hot topic issues with special focus in exploring issues in a dynamic fashion with opposing and at times complementary views that cannot be attained in a review article. In the first pro-con article, Hourihane and Hurley³ and Blumenthal and Banerji⁴ debate the issue of the adequacy of the Brighton Collaboration Criteria for vaccine-associated anaphylaxis in a pro-con debate highlighting the benefits of the present classification system while also detailing multiple aspects where the criteria could evolve moving forward, and how these criteria differ from the World Allergy Organization or National Institutes of Allergy and Infectious Diseases anaphylaxis criteria. In the second pro-con article, Shrestha and Stone⁵ and Greenhawt⁶ tackle the merit and utility of skin testing to vaccine excipients in the evaluation of an individual with reported vaccine allergy, noting the contrast between situations where vaccine excipients have played a key role in mediating allergic reactions, situations where sensitization to a vaccine excipient is clinically irrelevant, and the value that excipient testing plays in assessing if someone should be vaccinated.

The articles and pro-con debates provide important tools that can be used to approach patients in need of vaccination. The allergist plays a key role in promoting immunity against infectious disease through supporting vaccination and through providing mechanistic understanding of allergic reactions to vaccines to ensure that everyone can safely receive vaccination and maintain robust protection against communicable diseases.

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Disclosures: Dr Greenhawt is a consultant for Aquestive; a member of physician/medical advisory boards for DBV Technologies, Sanofi/Regeneron, Genentech, Nutricia, Novartis, Acquestive, Allergy Therapeutics, AstraZeneca, ALK-Abello, Pfizer, US World Meds, Allergenis, Aravax, and Prota, all unrelated to vaccines/vaccine development or coronavirus disease 2019 treatment: is an unpaid member of the scientific advisory council for the National Peanut Board and medical advisory board of the International Food Protein Induced Enterocolitis Syndrome Association; is a member of the Brighton Collaboration Criteria Vaccine Anaphylaxis 2.0 working group; is the senior associate editor for the Annals of Allergy, Asthma, and Immunology; is a member of the Joint Taskforce on Allergy Practice Parameters; has received honorarium for lectures from ImSci, RMEI, MedLearningGroup, and multiple state/local allergy societies; and has received past research support ending in 2020 from the Agency for Healthcare Quality and Research (K08-HS024599). Dr Castells is an UpToDate author; serves on BluePrintPI PIONEER and HARBOR Clinical Trials; a member of The Mastocytosis Society Medical Advisory Board, American Academy of Allergy, Asthma & Immunology Foundation Board of Directors, ABAI Board of Directors, and Annals of Allergy Asthma and Immunology Editorial Board; and serves on the National Institutes of Health DSMB Allergy Clinical Trials and the National Institutes of Health Coronavirus Disease 2019 Vaccine Study. Funding: The authors have no funding sources to report.

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