



Editorial

Cutaneous allergy: control that itch-scratch cycle!



Recent publications in *The Annals of Allergy, Asthma and Immunology* have documented the pain and suffering associated with cutaneous allergy.^{1,2} In the current issue of *The Annals*, Jonathan Silverberg reviews a number of comorbid health problems associated with atopic dermatitis (AD). Of greatest interest to allergists, AD predisposes to a higher risk of food allergy, eosinophilic esophagitis, and respiratory allergy.³ The systemic effects of AD are also manifested by a higher risk for infectious and cardiovascular risk. These data reinforce the notion that management of AD should encompass more than the skin rash.

The severe pruritus and scratching that results from the itch and impaired skin barrier has recently been highlighted as a contributing factor to the tight relationship between atopic dermatitis and food allergy.⁴ Indeed, mechanical injury to the skin has been found to induce mast cell hyperplasia and enhanced food-induced anaphylaxis.⁵ In the current issue of *The Annals*, Fowler and Yosipovitch⁶ review new developments in chronic itch management and explore the immune and neural elements of itch. Although the control of itching is challenging, new systemic and topical treatments are being developed based on new insights into mechanisms of itch sensation.

During the past decade, major advances in the management of AD have occurred. This was recently reviewed in the ACAAI AD yardstick by Boguniewicz et al.⁷ We are now fully in the age of biologics, with new drugs targeting polarized immune pathways in AD. Studies now demonstrate that even the nonlesional skin in AD has evidence of subclinical inflammation and is associated with skin barrier dysfunction. Importantly, Brunner reviews his latest studies of immune changes early in the course of AD.⁷ These studies demonstrate a more polarized type 2 immune response in early pediatric AD, whereas chronic lesions in adults show mixed type 1 and type 2 cytokine responses. These observations have strong implications for differences in immune-directed therapies that is age dependent. Interventions to improve the skin barrier at the beginning of the atopic march have also been postulated to alter its

natural history and potentially prevent the progression from AD to food allergy and asthma.⁸

Given that resources in medicine are finite, inevitably third-party payers will push back on the expense of these new drugs. In the current issue of *Annals*, Shaker and Greenhawt provide a primer on the use of decision analysis and cost-effectiveness for the practicing allergist.⁹ Integrating the weight of evidence supporting use of a new drug in the management of chronic disease with the costs of new drugs and their effect on burden of illness will increasingly influence decision-making by practicing allergists.

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Disclosures: None.

Funding Sources: National Jewish Health, Edelstein Family Chair of Pediatric Allergy.

<https://doi.org/10.1016/j.anai.2019.05.016>

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