



Editorial

The key role of allergists-immunologists in the management of eosinophilic esophagitis



As articles presented in this issue of the *Annals* make clear, our knowledge of eosinophilic esophagitis (EoE) is rapidly changing. Patients with EoE may already be present in our clinic or be referred to an allergist-immunologist from a gastroenterologist or other specialist for comanagement. It is critical that allergists-immunologists play a key role in the diagnosis and management of EoE.

Patients with EoE can present having as asthma with recurring abdominal pain or as having allergic rhinitis with new-onset food impaction.¹ An additional scenario encountered in the allergist's office is a patient who has outgrown food allergy symptoms and then returns 2 years later with abdominal pain. He or she should also be considered to have EoE because it is a continuation of the atopic march.² These patients should usually be referred to a gastroenterologist for workup and diagnostic endoscopy with biopsy.

These patients will also need to be monitored for progression of their disease by both symptoms and histologic findings. Symptoms include food impaction, overchewing, taking water to swallow food, or persistent reflux or abdominal pain. The allergist-immunologist will play a more active role as noninvasive monitoring becomes available, as highlighted by Godwin et al.³ Whether the monitoring is performed via a transnasal endoscopy, string test, or blood test, we as allergist-immunologists will be able to direct therapy by assessing responses to medications and diet.

In addition, therapies for EoE are evolving to include biologics that target interleukin (IL) 4, IL-5, and IL-13 as well as siglec-8 (as highlighted by Pesek and Gupta⁴) beyond current, commonly used diet and medication approaches.⁵ These monoclonal antibodies are also being used and approved in other common atopic diseases, including asthma and atopic dermatitis. The allergist-immunologist will play a key role in determining what monoclonal antibody might be ideal for each patient and lead to more personalized therapy for the atopic patient with EoE based on the profile of their asthma, atopic dermatitis, or even IgE-mediated food allergy.

Oral immunotherapy (OIT) for foods, which will likely be approved by the US Food and Drug Administration in the near future, is currently being used in many allergy practices.⁶ Recent reports indicate that food OIT can induce EoE in 5% to 20% of treated patients.⁷ We as allergist-immunologists will need to monitor these patients for symptoms and adjust therapy by stopping the dose or adding medications (swallowed steroids or potential biologics). In

addition, novel ways to induce desensitization, such as epicutaneous immunotherapy, has shown some promise in EoE and may work for both IgE- and EoE-based food disorders.^{4,8}

Matching the right patient with the correct biologic and determining which patient might respond to OIT are both part of personalized medicine, which contributes to delineating endotypes and phenotypes of EoE, as highlighted by Ruffner and Cianferoni.⁹ As is true in asthma therapy, we must develop distinct treatment algorithms for mild vs severe disease. However, for EoE, we must first develop definitions for phenotypes and key individual patient characteristics that determine endotypes so we can pursue personalized therapeutic approaches.

A critical role for the allergist-immunologist exists in the treatment of patients with EoE whose symptoms and histologic findings are exacerbated by inhalant allergens.¹⁰ We can potentially treat the seasonal exacerbation of EoE with allergen immunotherapy for inhalant allergens.¹¹

Finally, there are many unanswered questions that remain for EoE, as highlighted by Nhu and Aceves,¹² including what are the best clinical end points, whether all untreated patients develop strictures, and whether we need to treat the asymptomatic patients with active histologic disease.^{13,14} These questions and the development of new therapies indicate much more research is still needed. It is these questions and more that will be answered for individual patients by a clinical team of different specialists, including allergists-immunologists. Therefore, the disease and its management remain a partnership among allergists-immunologists, gastroenterologists, dieticians, and pathologists.

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