

Annals of Allergy, Asthma & Immunology

Measurement of IgE to pollen allergen components is helpful in selecting patients for immunotherapy

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ARTICLE INFO

Article history:

Received for publication April 24, 2013.

Received in revised form June 19, 2013.

Accepted for publication July 4, 2013.

ABSTRACT

Background: Pollen allergy still represents an important cause of allergic morbidity worldwide. Accurate diagnostic methods are important to determine the disease-causing allergen.

Objective: To describe the sensitization patterns of patients with spring pollinosis and to make a real-life evaluation of the usefulness of a predetermined IgE molecular profile compared with other sensitization methods for choosing the composition of immunotherapy.

Methods: One hundred seventy-five patients with a diagnosis of spring pollinosis completed a skin prick test study with *Olea europaea*, *Phleum pratense*, palm profilin, and peach peel and an in vitro study of the application of a specific recombinant IgE protocol (nOle e1, rPhl p1-5b, rPhl p12, rPhl p7, and rPru p3). Immunotherapy using the 2 methods was compared.

Results: A high sensitization to nOle e1 and rPhl p1-5b was found. Profilin, polcalcin, and lipid transfer proteins seemed irrelevant for the differential diagnosis of olea and grass pollen sensitization in the most southern area of the Iberian Peninsula. Application of the component resolved the diagnosis, and the choice of immunotherapy was changed in more than 50% of patients.

Conclusion: These results support the necessity of the habitual use of this kind of protocol in routine allergologic practice.

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