## **EDITORIAL**

## DIAGNOSING FOOD ALLERGY: A TEST OF PATIENCE

Food-induced allergic reactions are one of the greatest problems faced by the clinician who in each case must establish whether the reaction is idiosyncratic, due to food poisoning, or anaphylactic. When the latter is suspected, allergists must arm themselves with patience to identify the food or the component of prepared food (spices or other condiments; additives) causing the reaction and must also be able to count on the patience of the patient who, more than ever, must bear with the clinician. The variety of foods, the lack of knowledge of the allergenic components of many of these foods, the modifications they may undergo during preparation (heating, boiling, maceration, etc.) are some of the reasons which make the identification of the causative agent of a suspected allergic reaction difficult. These difficulties are avoided only in lactating infants with hypersensitivity reactions to milk or egg, the most common and readily-suspected of allergic reactions.

What diagnostic tests are available? Firstly, skin tests, using the skin prick test. A positive result may guide diagnosis but this happens in only a small percentage of cases, less than 40%. This percentage may be higher when using milk- or egg-proteins. Although extracts of other foods are available, for many reasons they are not always of high quality (1). The prick-by-prick technique, may be useful with some foods. Majamaa et al (2) have reported a higher percentage of positive results when using a patch test in lactating infants to diagnose allergy to cow's milk.

Another technique is testing for specific IgE (RAST or CAP). As with skin tests, a positive result guarantees that the reaction is allergic. In certain cases this may be sufficient to make a diagnosis provided that the clinical manifestations support a diagnosis of allergic reaction, or the risk of severe reaction by the food challenge is high (3). As with skin tests, the quality of the extracts plays an important role in the result of the serum reagin evaluation and consequently the proportion of positive results is not very high. For the same reason, published estimations of the sensitivity and specificity of both tests are very variables.

When clinical symptomatology is prolonged (generally skin lesions), exclusion diets are a well-established diagnostic method that requires the close collaboration of the patient, or in the case of children, of the patient's parents. This method also demands a great deal of patience since the composition of all ingested foodstuffs must be closely monitored. Exclusion diets may be followed by open challenge with the suspected food, a positive result demonstrating that the food is responsible for the patient's symptomatology. After a period of exclusion, repetition of open challenge during follow-up may be

useful to test for possible long-term tolerance. In this edition of Allergologia et Immunopathologia, *Plaza et al. report their experience in this matter (4).* 

The double-blind placebo-controlled food challenge is considered the gold-standard and is recommended to confirm diagnosis. Like exclusion diets, this test confirms only food intolerance and not an immuno-allergic mechanism; consequently, it should be complemented by skin tests and tests for specific IgE in serum (5). Plaut (6) reported that only 30-40% of suspected food allergies were confirmed by this challenge test. Furthermore, this test is contraindicated in patients who have experienced serious manifestations, such as anaphylactic shock or other intense ractions (e.g. angioedema).

In addition to the above-mentioned points, doubt remains on how food allergy should be diagnosed in daily clinical practice. A study by Kaila et al (7) reported that several methods were used in 24 Finnish clinics; although skin tests and specific IgE tests were carried out in all patients, various criteria were used in the performance of challenges. These findings could reflect the situation in other countries. The authors concluded that protocols should be established to standardize diagnostic methodology and, by way of example, cited the work of Niggeman et al (8), which was based on oral challenge.

Given the frequency of allergic reactions to egg proteins in children, the Food Allergy Committee of the Spanish Society of Pediatric Clinical Immunolgy and Allergy have drawn up a position paper, which provides a practical review of the problems caused by sensitization to this common food, including diagnostic methodology and egg exclusion diets. This paper is published in the current edition of Allergologia et Immunopathologia (9).

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