OPINION OF THE NATIONAL ACADEMY OF PHARMACY

"Food allergies"
Thematic session of February 3rd, 2021

Adopted by the Board on March 18th, 2021.

Food allergy is defined as a set of abnormal immune reactions following exposure to a food protein of animal or vegetable origin. The mechanism is mainly immunological: IgE-dependent, resulting in an immediate hypersensitivity reaction. The prevalence of food allergy is currently between 2 and 3% in the European and North American adult population and between 5 and 8% in children. Food allergy is expressed differently according to age, with a relative preponderance of oral syndrome in adults and respiratory and digestive manifestations as well as urticaria in children.

Taking into account:

- Food allergies mainly affect children and over the last twenty years, epidemiological data suggest an increase in the prevalence of severe forms, especially in children (severe anaphylaxis, particularly in the 0-4 year-old age group);
- Severe forms are often associated with allergic multimorbidity phenotypes (eczema, asthma, and rhinitis);
- The impact of composition and interactions between nutrients as well as the food technological processes on the bioavailability of the different allergens is insufficiently documented and no relevant data are available about their involvement in the induction of IgE-dependent sensitization, nor in the appearance of food allergy symptoms;
- Food protein-induced enterocolitis syndrome (FIEAS) is an increasingly common "non-IgE mediated" food allergy, for which late diagnosis is probably related to a combination of chronic and acute forms, the delayed onset of manifestations, the absence of diagnostic testing and the fact that sometimes unusual foods are at the origin of the clinical signs
- Physicians are in the habit of prescribing a specialty based on self-administered adrenaline, which takes into account the particularities of the patient, the device itself and therapeutic education;
- Therapeutic education is essential in the management of children with a food allergy, both in the avoidance of food allergens and in the treatment, particularly of allergic emergencies
- The pharmacist is a privileged interlocutor with patients and a key player in therapeutic education;
- The European regulation n°1169/2011 Consumer Information requires manufacturers and distributors to label products with regard to their allergenic risk for 14 major food allergens, but its implementation is not standardized, making it difficult to implement eviction diets;

The National Academy of Pharmacy recommends

In terms of knowledge and research, developing:

- Epidemiological studies to understand food allergy in the pediatric population better, in France:
    - o record the evolution of its incidence and prevalence;
    - o study its natural history, determine the phenotypes most at risk of severe food allergy and detect emerging allergens;

- Translational research aimed at identifying biomarkers of reactivity and severity of food allergy phenotypes, in order to limit the use of certain oral provocation tests and to adapt therapeutic education of the patients and their families;

- Tests for the detection and characterization of allergens, including at the molecular level, in foods and processed products;

- Innovative therapies within the framework of personalized care: immunotherapy (monoclonal antibodies to food allergens), biotherapies;

In terms of management:

- Emphasize the need to increase the awareness of pediatricians to:
    - o The possibility of respiratory allergies complicating food allergy;
    - o SEIPA and the need to follow international recommendations for its early diagnosis, in order to avoid unnecessary examinations in search of differential diagnoses;

- Underline the important role of the pharmacist, in partnership with the physician, in :
    - o The identification of symptoms suggestive of food allergy;
    - o Training the patient with dummy devices, once the diagnosis has been made, in the use of both adrenaline auto-injector pens and bronchodilators and inhalation chambers
    - o Referral to patient associations;

- Request that pharmaceutical companies provide each pharmacy with dummy auto-injectors for demonstration purposes for each of the specialties concerned;

- Remind that prescribed adrenaline auto-injectors should not be substitutable, but in case of unavailability, information on the substitution device should always be delivered by the pharmacist;

In terms of training and information:

- Making it essential to improve the labeling of foods and processed products by standardizing it and specifying the quantities of allergens that they are likely to contain;

- Drawing attention to the need to make the use of self-administered intramuscular epinephrine devices less dramatic, so that they can be employed as quickly as possible in case of need, and to reassure the patient and his or her family that there are easy to use;

- Recommending the development of a simple educational tool for the pharmacist, to be given to the patient, the parents, or even the teachers of a child with a prescription for an adrenaline auto-injector; this tool could be developed by the competent learned societies in collaboration with the pharmacists and the patients' associations;

- Proposing that information on the clinical signs of anaphylaxis is made available to pharmacists and patients.

References:

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