## **EDITORIAL**

## NOMENCLATURE: TERMINOLOGY ON THE LINE

In the daily use of the terms designating diseases, it is taken for granted that those using these terms are aware of their definition, which, after all, refers to a diagnosis. In scientific publications, whatever their content (clinical or experimental), the criteria on which a term is based, that is, the criteria underlying the diagnosis, must be made explicit, which sometimes requires the addition of an adjective or expression defining the pathologic process referred to with greater precision. Thus, the terms "asthma", "allergic asthma" or "non-IgE mediated asthma" can simply be used, depending on the need for precision in each case. This terminology is included in the recently revised recommendations of the WAO/EAACI for allergic and related reactions<sup>1,2</sup>. As stated in this document, one of the reasons for proposing a revised nomenclature is the lack of precision with which non-specialist physicians and sometimes patients themselves use the term "allergy", giving rise to the risk of incorrect or confusing diagnoses and inappropriate treatments.

The report is based on three concepts which are well known but which the authors redefine: hypersensitivity, atopy and allergy. The aim is to differentiate between processes produced by an altered immune response and those provoking similar symptoms but without involvement of an altered immune response.

Atopy, defined as a personal or familial tendency to produce IgE antibodies in response to common allergens giving rise to the development of asthma, rhinoconjunctivitis or eczema/dermatitis, is a classical concept, based on genetic predisposition.

The term allergy is defined as a hypersensitivity reaction initiated by immunologic mechanisms. Allergy can be IgE-mediated, even in non-atopic individuals due to diverse causes (overexposure, etc.) or IgG-mediated in certain diseases (extrinsic alveolitis), or cell-mediated as in contact dermatitis.

Based on these two terms and using well-defined criteria, processes with clinical characteristics similar to the various allergic disorders (respiratory, cutaneous) or those provoked by allergic reactions or other types of reaction (to food, drugs, insect venom) as well as anaphylaxis are briefly discussed.

In general terms, allergic reactions are distinguished from non-allergic reactions. Allergic reactions are divided into "IgE-mediated" and "non-IgE mediated". An objection could be made to the exclusion of aspirin-induced asthma in the concept of "non-IgE mediated asthma", given that its pathogenesis involves alterations of phospholipid metabolism of

mastocyte and eosinophil membranes, cells which are involved in the mechanisms of allergia hypersensitivity<sup>3</sup>. Difficult to classify are the distinct processes included under the term "dermatitis", which, in the most recent review<sup>2</sup>, includes eczema and contact dermatitis; both these disorders are divided into atopic/allergic and non-allergic and, in addition, are distinguished from other forms of dermatitis not included in these concepts. Greater problems are posed by the classification of other processes (urticaria, food or drug allergy, insect venom, anaphylaxis), which are incompletely understood, although at present they are described in a similar way to the other processes.

The term hypersensitivity deserves a separate mention. The classification of the distinct mechanisms proposed in 1963 by Gell and Coombs<sup>4</sup> continues to be used, despite the subsequent increased knowledge of immunologic mechanisms. The utility of this nomenclature is undoubted. It is based on a simple classification, without excluding the possibility that in any reaction, more than one of these mechanisms might simultaneously or progressively be involved, as occurs in the possible initiation of an IgE-mediated process and subsequent specific lymphocyte sensitization, giving rise to late reactions<sup>2</sup>. IgE-mediated allergic reactions (type I), some drug reactions (type II) and other reactions such as serum sickness (type III) still require classification to elucidate their mechanisms. The most recent knowledge of the variety and function of lymphocytes has contributed to a greater understanding of type IV reactions, by distinguishing Th1 (macrophage activation), Th2 (eosinophil activation) and T cytotoxic reactions<sup>5</sup>.

Noteworthy is that the proposed nomenclature includes processes not defined in the text and in which an immunologic mechanism has not been demonstrated under the term hypersensitivity, although these reactions might be produced by contact with substances that are generally well tolerated. With these criteria, the term, as used by the authors, is employed as an "umbrella" term that takes in a whole series of processes with immunologic and non-immunologic etiology.

In summary, the proposal to standardize terminology is commendable as long as there is unanimity regarding the criteria, which can be modified according to improved knowledge of the mechanisms involved in immunity.

F. Muñoz-López

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