TO THE EDITOR

Urticaria in the emergency department: the view of allergy and immunology specialists

Visión inmunoalérgica del abordaje de la urticaria en urgencias

To the editor:

We have read the recently published Consensus Document by Silvestre et al.[1]. We would like to congratulate the authors for the protocolization of urgent management of urticaria, an emerging disease, along with the increase in immunoallergic disease[2]. Our aim is to present subsequent immunocellular aspects, from the allergologic point of view, for a multidisciplinary approach.

Urticaria, acute or chronic, is a skin disease pathophysiologically associated with atopy[3] and is therefore also treated by allergology. The elevation of IgE (Immunoglobulin E) in many cases, due to its association with immunological and autoimmune mechanisms[3,4], points to its proven usefulness as a biomarker of activity, endotyping and therapeutic response[4]. Pathogenesis derived from IgE and its receptor FcεRI triggers mast cell activation, which, increasingly prevalent, is produced by immunological mechanisms, thyroid autoimmune or associated with atopic pathologies[2-4]. This means that early diagnosis and treatment with anti-IgE, after 2nd generation antihistamines, and other immunosuppressants are the consensus[3,4]. A recent study has shown that the determination of serum IgE and other inflammatory biomarkers such as CRP and D-dimer, transaminases and thyroid function, biomarkers easily determined in the ED, allow predicting the response and evolution of the disease, and even association with angioedema, not exclusive, to consider the different therapeutic options, beyond antihistamines, and even determine whether these are going to be effective[4].

It should be emphasized that not only the type I mechanism of hypersensitivity exists as the etiopathogenic basis of some urticarias, but that the 4 types of allergic hypersensitivity should also be taken into account. The different cutaneous presentations advocated by these mechanisms, involving systemic involvement, vary multifactorially on an individual basis[2,3], so their differential diagnosis should be mentioned.

The association between urticaria and angioedema is well known[2,3], as it is not an exclusive diagnosis, but interrelated in almost half of the cases. In the different types of angioedema (hereditary or acquired, with or without c1 inhibitor deficiency), there is involvement of the deeper dermis, with more than one lesion, classically in different locations, the differential diagnosis of which should be explained[2,5].

There are multiple co-factors that produce the onset or exacerbation of urticaria, classically implicated in atopic pathologies and in relation to new food allergens, which act by different types of immunological hypersensitivity, whose approach by allergology would be relevant to avoid urgent consultations[2,3,5].

With regard to the differential diagnosis of anaphylaxis, it should be noted that up to 20% occur without skin lesions, of greater severity, so their diagnosis of exclusion should not be based on skin symptoms. Conversely, there are biphasic anaphylaxis, most of them mild, with only the delayed appearance of skin lesions, the diagnosis of which is crucial if they are identified and treated early[5].

For all these reasons, in the multidisciplinary management of urticaria in the ED, the immunoallergic basis is crucial for the correct approach and therapeutic management increasingly prevalent in the context of the exponentially growing atopic predisposition.

Araceli Castro Jiménez[1],
Filomena Alonso Morales[2],
Fernando Florido López[1]

[1]*Area of Allergology, Hospital Virgen de las Nieves, Granada, Spain.*
[2]*Emergency Medicine, Hospital Virgen de las Nieves, Granada, Spain.*

maraceli.castro.sspa@juntadeandalucia.es

Conflicting interests: The authors declare no conflicts of interest in relation to this article.

Contribution of the authors, financing and ethical responsibilities: All authors have confirmed their authorship, the non-existence of external financing and the maintenance of confidentiality and respect for the rights of patients in the document of author's responsibilities, publication agreement and assignment of rights to EMERGENCIAS.

Editor in charge: Òscar Miró.

Article not commissioned by the Editorial Committee and with external peer review.

References

1 Silvestre Salvador JF, Giménez-Arnau AM, Gómez de la Fuente E, González Del Castillo J, Martínez Virto AM, Miguens Blanco I, et al. Manejo de la urticaria en urgencias: recomendaciones de un grupo multidisciplinar de expertos. Emergencias. 2021;33:299-308.
2 Simon D. Recent Advances in Clinical Allergy and Immunology 2019. Int Arch Allergy Immunol. 2019;180:291-305.
3 Guo C, Saltoun C. Urticaria and angioedema. Allergy Asthma Proc. 2019;40:437-40.
4 Altrichter S, Fok JS, Jiao Q, Kolkhir P, Pyatilova P, Romero SM, et al. Total IgE as a Marker for Chronic Spontaneous Urticaria. Allergy Asthma Immunol Res. 2021;13:206-18.
5 Cardona V, Ansotegui IJ, Ebisawa M, El-Gamal Y, Fernandez Rivas M, Fineman S, et al. World allergy organization anaphylaxis guidance 2020. World Allergy Organ J. 2020;13:100472.