



Importance of IgE in chronic spontaneous urticaria

Importância da IgE na urticária crônica espontânea

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Chronic urticaria (CU) is a common, heterogeneous disease often associated with significant impairment of quality of life. CU is classified into spontaneous (CSU) or inducible (CIU) based on the absence or presence of a specific trigger, respectively. Mast cells have a central role in the pathogenesis of CU, as several studies have shown an increase in histamine or in the number of mast cells in skin biopsies of patients with CU. This is also attributed to the good response to antihistamines.¹ Although mast cells express a variety of membrane receptors, mast cell activation in CSU is mainly mediated by immunoglobulin E (IgE) and its high-affinity receptor, FcεRI. The importance attributed to IgE and its receptor arises from significant advances in the treatment of CU in the last decade, with the introduction of omalizumab, a monoclonal anti-IgE antibody. Seventy to 80% of patients with CSU refractory to antihistamines (after a fourfold increase in the dose) achieve complete disease control with omalizumab.^{2,3}

However, how mast cells are activated in CSU remains unknown. The main hypothesis is that activation occurs through autoimmune mechanisms: (a) the development of IgG anti-IgE autoantibodies; and (b) the development of IgE antibodies to autoantigens, such as thyroid peroxidase.

Therefore, these mechanisms could explain why patients with CSU have a good response to omalizumab. However, the response to omalizumab can vary, with some showing an early response after the first dose, others responding between the second and sixth doses, and a small portion may not respond adequately to omalizumab.⁴

Several retrospective and prospective studies have evaluated biomarkers that could predict the severity of CSU and the early or late response to omalizumab. In this edition of *Arquivos de Asma, Alergia e Imunologia (AAAI)*, Girardello et al.⁵ described the response to omalizumab in a group of patients with severe CSU, while Bastos Jr et al.⁶ conducted a detailed retrospective study including potential biomarkers to assess disease severity and treatment response.

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References

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