Correspondence

The many abilities of omalizumab and the unbeaten path

To the Editor:

We appreciated the article by Cardet and Casale,[1] who focused on the current status of omalizumab treatment in its authorized applications (ie, severe allergic asthma not controlled by standard therapy and chronic spontaneous urticaria not controlled by antihistamines), as well as off-label use in a number of other IgE-mediated or non–IgE-mediated diseases.

Severe uncontrolled asthma remains the major indication for omalizumab treatment, which was long ago added to step 5 therapy in the Global Initiative on Asthma (GINA) guidelines. In the GINA 2017 update, also sublingual immunotherapy with registered dust mite tablets was added as an option in steps 3 and 4 in adult patients with mite allergy "who have exacerbations despite ICS [inhaled corticosteroids], provided FEV_1 is > 70% of predicted lung function."[2] Indeed, uncontrolled asthma is a contraindication to allergen immunotherapy,[3] and therefore omalizumab, based on its capacity to control asthma in patients not responding to standard drug treatment, is a candidate to overcome such a contraindication and to work as a synergic agent when immunotherapy is indicated. In fact, Cardet and Casale[1] included "Facilitation of subcutaneous immunotherapy to aeroallergens" in the indications by quality of supportive evidence.[1]

A recent review analyzed the available literature, which comprises only open studies, on the use of omalizumab as an adjunct to allergen immunotherapy. Omalizumab was able to improve the safety of immunotherapy, but the authors claimed larger, randomized, placebo-controlled trials aimed at identifying patients with the highest response to omalizumab treatment, optimal dosing strategies, and the duration of treatment.[4] Actually, despite reports of some persistence of the efficacy of omalizumab after stopping treatment,[5] there is no evidence on the optimal duration allowing withdrawal. Clear evidence is available instead for allergen immunotherapy, with a duration of 3 to 5 years being agreed upon in consensus documents.[6] This crucial outcome is produced by the mechanisms of allergen immunotherapy, which substantially reverse the immune response typically occurring in allergic subjects toward tolerance.[7] Hence it is surprising that the ideal sequence for treating patients with severe allergic asthma was overlooked thus far. Such a sequence would consist of an initial treatment with omalizumab to achieve disease control, thus allowing, when the contraindication is overcome, immunotherapy. Once asthma control is achieved through immunotherapy, omalizumab could be withdrawn to finally complete the treatment when the optimal duration of immunotherapy is reached.

Notably, use of immunotherapy is now supported by the updated GINA guidelines, at least in patients with asthma induced by dust mites,[2] which are the most common cause of respiratory allergy worldwide. We believe that studies addressing the synergy of omalizumab in combination with allergen immunotherapy to achieve long-term effectiveness are warranted to prove the rationality of this model.

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