

Correspondence

Ves v 5 can establish the diagnosis in patients without detectable specific IgE to wasp venom and a possible north-south difference in Api m 1 sensitization in Europe

To the Editor:

We read with great interest the publication of Korošec et al.¹ Although Ves v 5 is by far the most important allergen of wasp venom, some patients are solely sensitized to Ves v 1. We were able to confirm that recombinant Ves v 1 (rVes v 1) is a useful supplement to rVes v 5 by using the CAP system: 13 of 163 patients with an unambiguous diagnosis of wasp venom allergy were negative for rVes v 5. Six of these had specific IgE (sIgE) to rVes v 1. Therefore, 95.7% of the patients (156 of 163) could be diagnosed with the combination of rVes v 1 and rVes v 5. However, we would like to emphasize an interesting aspect of rVes v 5. Korošec et al included only those patients who had a detectable sIgE to wasp venom for further analysis. Although the sensitivity of the wasp venom extract is high, in a small number of patients sIgE cannot be verified. We investigated 26 wasp venom-allergic patients without detectable sIgE to wasp venom. Interestingly, 17 of the 26 (65.4%) could be diagnosed with rVes v 5 but not with rVes v 1 in the CAP system. Paradoxically, diagnosis could be established with the major allergen component but not with the wasp venom extract. The reasons for this discrepancy are a matter of speculation. The likeliest explanation is that wasp venom extract is a mix of different *Vespula* species and Ves v 5 is likely to be underrepresented in the venom mix. Therefore, it is important to consider determining rVes v 5 in patients with a clear history of wasp venom allergy and negative sIgE to wasp venom, which could enhance the general sensitivity of this test.

In contrast, the situation is different in bee venom allergy. A low sensitivity of Api m 1 has been recently described by our group² and was confirmed by another group.³ Although 12 bee venom allergens have been identified so far and sensitization to multiple allergens might be common,² only rApi m 1 is commercially available for testing. However, some report a higher frequency of Api m 1 sensitization^{4,5} and we also observed differences between our study centers.² Hofmann et al⁶ suggested that sensitivity might depend on the inclusion criteria of patients and that patients without detectable sIgE to bee venom and negative skin test results are more likely to be negative for Api m 1. We hypothesize that geographic differences rather than inclusion criteria may play a role. In 2 Italian centers, all patients had sIgE to bee venom, but only 13 of 30 (57.9%) in Verona (Northern Italy) and 16 of 38 (56.7%) in Ancona (Central Italy) were sensitized to rApi m 1, respectively. This confirms our recently observed low sensitivity of 61.8%² and suggests a possible north-south difference in Api m 1 sensitization in Europe (Fig 1). From this data it is obvious that sensitization to Api m1 decreases from north to south Europe. One could speculate that the venom composition might vary and therefore cause these discrepancies. Therefore, despite considerable progress by the introduction of recombinant allergens, larger studies to determine individual sensitization patterns of patients from different regions with the whole panel of venom components (when available) are needed.

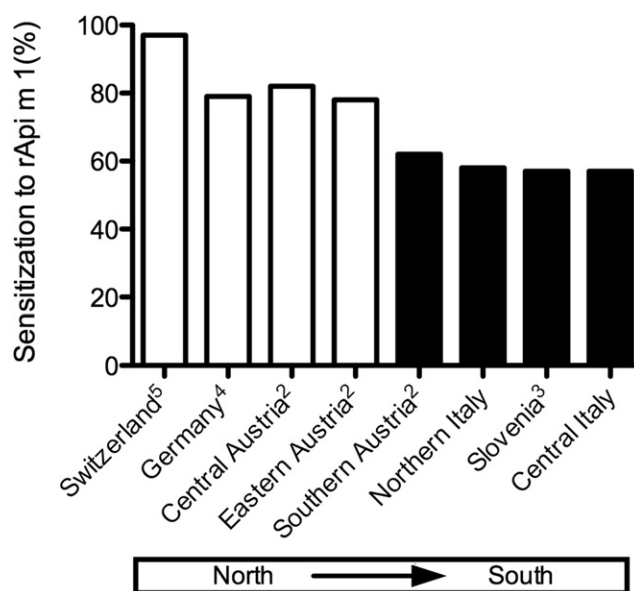


FIG 1. North-south difference in Api m 1 sensitization in Europe.

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