

Correspondence

Guidelines for management of people with histories of insect sting anaphylaxis and subsequent negative venom skin tests

To the Editor:

The recent Rostrum article¹ authored by several members of the AAAAI Insect Committee addresses the practical implications of the failure of skin test reactivity to detect venom allergy. These issues have previously been discussed in detail.^{2,3} The data are based on isolated case reports and one study suggesting a higher incidence than previously reported.² As a result of these observations, the authors suggest more dependence upon in vitro assays and more recommendations for epinephrine availability for people with negative skin tests.

It still needs to be reemphasized that for the majority of people who have insect sting reactions, the skin test is an accurate assessment of their clinical sensitivity; furthermore, for many people, insect allergy is a self-limited process. For example, in the largest reported study⁴ of people who had severe insect sting anaphylaxis, only 5 of 149 people had negative skin test reactions up to a venom concentration of 0.1 µg/mL. In my own experience, conversion from a positive to a negative skin test has continued to be an absolute criterion to stop venom immunotherapy (VIT).

The Rostrum article does appropriately point out the failure of the venom skin test to detect all clinically allergic people. Unfortunately, in my opinion, it does not sufficiently define recommendations as the consequence of this observation for the clinical allergist. As suggested in the previous editorial,³ I would recommend the following: (1) As the severity of repeat resting reactions tends to be similar, the real concern regarding negative skin test reactors are the people who have had potentially life-threatening sting anaphylaxis. These people should have serum antibody assays. If positive, VIT should be initiated if negative epinephrine availability is prudent. Obviously, in this latter group, there remains an unresolved issue of the duration of the epinephrine recommendation. (2) For people who have had mild to moderate sting anaphylaxis and have negative venom skin test results, no further recommendations, in vitro assays, or availability of epinephrine are generally needed. (3) Unfortunately, the sensitivity of the in vitro assay as performed in different commercial laboratories has not been evaluated. The high incidence (40%) of low-titer serum venom-specific IgE detected in people with negative skin test results comes from a very sensitive assay developed in a research laboratory.² Thus, if the allergist has concerns about venom allergy in people with negative skin test results, serum assays performed elsewhere need to have the same degree of accuracy.

Observations and clinical/immunologic correlations will continue. It is important to reemphasize, however, that the diagnosis and treatment of insect sting allergy for

the majority of the people is reliable. The exceptions are disturbing but do not suggest that large-scale in vitro testing or epinephrine availability is needed.

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