

CORRESPONDENCE

Practical guide to skin prick tests in allergy to aeroallergens: some concerns

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We read with great interest the GA²LEN-ARIA position statement regarding skin prick test to aeroallergens (1). Although we appreciate the effort in terms of its contribution to the practice, there are certain points that we believe need to be at least re-evaluated. Our concerns are mainly based on the observations we made in the largest paediatric allergy referral centre of our country (Turkey) where we retrospectively analysed SPT results of children and adolescents (2–18 years of age) with suspected respiratory allergies (2). We believe that our observations have critical importance as Turkey is within the geographical region of Europe (in Mediterranean region), more than four million Turks live in Europe and it is the seventh most commonly visited country (http://en.wikipedia.org/wiki/World_Tourism_rankings) all around the world. These points are summarised below:

In our study, we found that the diversity of sensitized allergens is wider in early years of life compared with that in the elder ages. For instance, we found that to cover 95% of sensitized children, the number of allergens needed are 12, 8 and 7 for preschool children (2–<6 year), school children (6–<12 year) and adolescents (12–18 year), respectively (2). Therefore, we do not agree to the suggestion of the position statement that in preschool children, the number of skin tests to inhalants should be reduced.

In our study, we found that the proportion of aeroallergen sensitization in children with suggestive history of respiratory allergy increases as children grow older. For instance, 10–20% of preschool children (2–<6 year), 30–60% of school

children (6–<12 year) and 50–70% of adolescents (12–18 year) were found to be sensitized to one of 30 aeroallergens tested (2). Low possibility of gathering a positive result, test-related discomfort (pain), low capability of tolerance of test-related stress in a young child are our major concerns for not performing skin prick test routinely during early years of life. Postponing for another visit at an elder age or replacing with specific IgE measurement are alternatives, which are the least painful and most cost-effective.

Like Spain, Italy and Greece, our observations suggest *Chenopodium*, *Plantago* and *Salsola Kali* pollens may also part of routine aeroallergen panel (3–5).

We believe the GA²LEN-ARIA position statement regarding skin prick test to aeroallergen is contributory and should be followed until evidence-based reviews with a stronger and deeper clinical and scientific appear.

Conflict of interest

All authors contributed to this correspondence and there is no conflict of interest.

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REPLY

We read with interest the comments of Sekerel and Sahiner rightly pointing out the interest of a paper in press (1), which was not available when our paper was accepted. They claimed that the minimum test battery panel required to cover over 95% of all of the sensitizations differed among three age groups in children. For preschool, school, and adolescent age groups, the minimum necessary test numbers were 12, 8, and 7, respectively. However, using the Stallerpoint[®], the authors found apparently similar results in each age group for the major Pooid grass pollen species: *Phleum*, *Festuca* and *Lolium* (6.2%, 5.9% and 5.3%) in preschool children, *Festuca*, *Phleum* and *Lolium* in school children (25.9%, 24.9% and 23.5%) and *Festuca*, *Lolium* and *Phleum* in adolescents (38%, 36.3% and 36.1%; personal communication with Prof Sekerel). These small differences may be explained by false negative tests (2). Pooid species highly cross-react and many centers in Europe only test patients with a single species. Thus, although it is not known whether a single species or a mixed grass pollen extract should be used, the claims of Sekerel and Sahiner to increase the number of skin tests do not appear to be substantiated, in particular because acceptability to skin tests in preschool children is essential and the number of skin tests should be reduced to a minimum based on the available evidence. Moreover, in their study, 12 (and probably only 9) allergens are proposed to be tested in preschool children indicating that the number of allergens tested in this age group is smaller than the GA²LEN list recommending the testing of 14 allergens. In

contradistinction to what may have been understood, the GA²LEN list was based on a series of five consecutive published studies (3, 4) and the final agreement among experts, a Delphi assessment is in revision in this journal.

Sekerel and Sahiner also commented on some regional allergens which may be of interest, such as *Salsola kali* or *Chenopodium* (5). These are important pollen allergens in semi-arid areas and merit further interest. However, in their paper (1), they only found 3.6% of patients sensitized to *Chenopodium* and 1.6% to *Salsola* indicating that these regional allergens have a low prevalence even in Turkey. It is therefore important to test these allergens depending on local climate, but possibly not to use them in a pan-European skin test battery. Moreover, the GA²LEN process of skin tests (3, 4) may be extended to other parts of the world to assess the common battery of skin tests.

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