

Letter to the editor

Atopy and allergy in East Africa

I read with great interest the paper by Sunyer et al. published in the August issue of *Allergy* (1). The links between asthma and environmental allergens have been recently questioned in developed countries (2), but, also in these countries, most asthmatics are (also) atopic (3). On the other hand, although most patients in the study of Sunyer et al. were atopic, few were asthmatic, and there was no correlation between atopy and asthma (1). The study suggests that in tropical areas where parasites are endemic, the relationship between asthma and IgE is different from that of areas without major parasitic disease. I found these results fascinating, but the definition of atopy then becomes of paramount importance. It was defined as "any specific IgE over 0.35 kU/l", and this definition may be problematic.

- 1) Although levels of specific IgE between 0.35 and 0.70 kU/l are true positive in the ImmunoCAP System, there could be some concern in subjects with very high IgE levels.
- 2) In the study, over 30% of subjects had total IgE of >2000 kU/l and over 60% had total IgE of >1000 kU/l. Although the ImmunoCAP System is a very reliable test that does not appear to be influenced by total IgE levels (4), it is possible that extremely high total IgE levels, or IgE as part of immunocomplexes containing IgG antibodies, may induce some nonspecific binding. Such immunocomplexes are likely to be present in the sera of patients with helminth infestations.

- 3) The lack of cross-reactivities between parasite allergens and inhalant allergens has been discussed, but not demonstrated. It has been shown that *Dermatophagoides* and cockroaches share common allergens with many unrelated allergens such as those of snails (5), Crustacea, or *Anisakis* (6). Thus, in such a critical study, appropriate *in vitro* experiments should be carried out to exclude this possibility.
- 4) A panallergen common to mite and helminth may also be present, inducing low levels of specific IgE (7). A pilot study using the common panallergens identified would be helpful.

The authors did not test these possibilities, which can be excluded technically. It seems that the message of the paper will not be altered when the appropriate control studies have been done but, without them, the conclusions of the paper may not be as clear as proposed by the authors.

Moreover, it would have been interesting to know the exact levels of specific IgE in the subjects studied, since, by the method of the authors, low levels of *Dermatophagoides pteronyssinus* IgE were not found to be clinically relevant in an Italian population (8). A more recent paper using a refined technique showed similar results for many different allergens (9).

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