

We agree that it is better to express mite allergen levels deposited on the floor as the results per unit area. However, it is also necessary to express the results per unit weight, because this at least has the advantage that the data can be readily compared with those of most previously published studies.

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Pneumococcal antibody assay standardization

To the Editor:

I read with interest the report of Drs. Go and Ballas (*J Allergy Clin Immunol* 1996;98:205-15) involving an evaluation of anti-pneumococcal antibody responses in normal subjects. As a retrospective study, this report is well done. However, I am concerned about combining IgG anti-pneumococcal polysaccharide (PnP) results (even as fold change), which were obtained with the highly divergent assay methodologies that were used from 1977 to 1993. In 1994, a Centers for Disease Control sponsored international collaborative study of IgG anti-PnP measurements was conducted in which a set of unvaccinated and vaccinated sera were sent to established research and clinical laboratories that had been performing these measurements for years. Many of the participants in this international study were authors of publications that Drs Go and Ballas selected for their article. The discordance of IgG anti-PnP results between laboratories was extremely high. Because this was a poor showing, these data were not published. Rather, the international community began an intense effort to develop a "consensus" standardized enzyme immunoassay for IgG anti-PnPs.

For several years now, this major international effort has been spearheaded by Dr. George Carlone at the Centers for Disease Control and supported by the World Health Organization. The goal of this study has been the establishment of a standardized assay methodology for IgG anti-PnP measurements. In its current form, the consensus assay uses preincubation of each test serum with C-polysaccharide to make the assay highly PnP-type specific. It uses common supplies and reagents and the 89-SF reference serum which has been assigned ng/ml levels of IgG anti-PnPs for the major PnPs serotype specificities. Finally, it uses a well-characterized peroxidase-conjugated monoclonal anti-human IgG Fc detection antibody (clone HP6043) that ensures uniform IgG isotype specificity. Details of this assay can be obtained from Dr. George Carlone at the Centers for Disease Control (FAX: 404-639-3115). Finally, because the study that the authors have done is important in light of the emergence of new conjugated PnP vaccines, I would encourage Drs. Go and Ballas to repeat their nice meta-analysis with future data from laboratories that use the consensus IgG anti-PnP assay.

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Reply

To the Editor:

We thank Dr. Hamilton for pointing out the very problems of measuring anti-pneumococcal antibodies that our report was intended to elucidate. We are in full agreement that the measurement of anti-pneumococcal capsular polysaccharide needs to be standardized. Once this is done, we can begin to determine the normal antibody response in persons of different age groups.

We would be delighted to repeat our meta-analysis in the future, once data obtained with standardized methods become available.

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Asthma, nasal allergies, and multiple sclerosis

To the Editor:

Oro et al. (*J Allergy Clin Immunol* 1996;97:1402-8) report that the prevalence of IgE-mediated allergic disease is decreased in patients with multiple sclerosis (MS), supporting the hypothesis that genetic factors that promote susceptibility to T_{H1} -mediated inflammatory disease in human beings protect against the development of T_{H2} -mediated disease.

We addressed this important issue in an epidemiologic study of the prevalence of asthma and nasal allergies in two samples of patients with MS treated in neurology units of teaching hospitals in Paris and South-Western France (Toulouse). We compared these prevalences with those observed in population samples randomly selected from electoral rolls in the same regions (18th district of Paris and city of Montpellier) as part of the European Community Respiratory Health Survey (ECRHS).^{1,2}

Both patients and control subjects ranged in age from 20 to 44 years and were sent the standardized ECRHS postal questionnaire. Response rates were 92% in Paris patients ($n = 302$, 41% male), 94% in Toulouse patients ($n = 308$, 32% male), 74% in Paris control subjects ($n = 3152$, 46% male), and 69% in Montpellier control subjects ($n = 3774$, 50% male).

In Paris, asthma during life was slightly less prevalent in patients with MS than in control subjects (7.1% vs 9.4%, NS). In contrast, the prevalence of nasal allergies was significantly lower in patients with MS than in control subjects (23.3% vs 30.8%, $p = 0.006$). Analysis of data by sex showed that prevalences were significantly lower in women with MS than in control women for both asthma (4.7% vs 9.2%, $p = 0.05$) and nasal allergies (19.2% vs 31.2%, $p = 0.001$). In the group with an age range of 20 to 30 years, prevalences were significantly lower in patients with MS than in control subjects for nasal allergies (15.6% vs 31.8%, $p = 0.007$) and of borderline significance for asthma (4.7% vs 12.0%, $p = 0.08$). A similar pattern was observed for both asthma and nasal allergies when patients with MS from Toulouse were compared with control subjects from Montpellier, although differences were smaller and not statistically significant.

The differences in asthma prevalence between patients and control subjects are probably underestimated, because asthma is unlikely to be ignored in patients treated in university