

Letters to the editor

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PINE POLLEN HAY FEVER

To the Editor:

In May, 1993, I saw a 40-year-old female with a 6-year history of rhinoconjunctivitis symptoms from mid-February to mid-March. She noted symptoms when pine pollen was evident in her kibbutz in the southern part of Israel. Her prick tests were positive to pine mite (Hollister-Stier, 1:20) and negative to cypress, grasses, weeds, molds, house dust and *D. farinae*.

Freeman found that 1.5% of her atopic patients had positive skin tests (prick and intradermal) to pine pollen.¹ Only some of her patients had allergy symptoms related to pine pollen exposure.

I can only guess the prevalence of pine pollen hay fever in my practice since I don't skin test for pine routinely; however, in 18 years of practice in Beer Sheva, with about 40 new patients/yr, I have only seen this one patient with pine pollen hay fever.

In the Negev, cypress and pine pollinate during mid-February to mid-March. Both are the most prolific pollen producers, although more patients seem to suffer during the grass season (mid-March to June).²

Pine pollen hay fever occurs, but is a rare disease.

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al used 1 mg/mL, whereas in Nelson's unfavorable article,³ 10 mg/mL histamine concentration was used. In our hands, 10 mg/mL gives frequent false-positive cross-over reactions at adjacent sites, whereas 1 mg/mL does not. By contrast to histamine 10 mg/mL, large positive *antigen* reactions rarely spill over and are obvious when they do because the wheal exceeds 15 mm. This may be because antigen-induced wheals and erythema, by contrast to histamine-induced reactions, are generated by many different mediators in addition to histamine with built-in limiting feed-back controls. If diffusion or lymph channel surface spread of histamine is directly related to its concentration, then it is logical that false-positive adjacent reactions are more likely to occur when 10 times more than is necessary of histamine is used.

The 10 mg/mL histamine control should be abolished for other reasons as well, namely that it lowers the sensitivity for comparing antigen reactions to the positive control, and it confuses the literature. The high incidence of false positives reported by Adinoff et al³ are not reproducible with the proper histamine concentration, ie, 1 mg/mL.

This potential error of interpretation of the Multi-test method should be corrected by those who are responsible for perpetrating it.

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Response:

Thank you for the opportunity of responding to Dr. McCann's letter which expresses continuing disagreement with the findings of Adinoff, et al reported some four years ago in the *Journal of Allergy and Clinical Immunology*.¹

There appears to be little merit in reiterating what is already in print. However, it does seem appropriate to take exception to Dr. McCann's assertion that 1 mg/mL histamine is "the proper concentration" and that 10 mg/mL histamine "should be abolished." A number of investigators have found 10 mg/mL histamine to be a useful concentration for several different purposes. I will cite only a few examples:

It has been recommended as the best reference for biological standardization of extract potency.²

It has been recommended as the standard control for prick skin testing by the European Academy of Allergy and Immunology.³ In accordance with these recommendations it was employed as the positive control in a recent publication in the American allergy literature.⁴

Finally, even higher concentrations of histamine have been employed by some investigators. In studying the reactivity of the skin to histamine from infancy to old age Bousquet and co-workers employed 3-fold dilutions of histamine hydrochloride from 1 to 243 mg/mL.⁵ The summary data were expressed as the mean wheal size for each age group induced by histamine hydrochloride, 27 mg/mL.

I believe that these examples should suffice to indicate that there is no single histamine concentration that will serve all investigators in all circumstances. In part the use of apparently widely varying concentrations of histamine is explained by the character of the dose response curve to histamine which is logarithmic. Thus a 10-fold increase in concentration results in only approximate doubling of the diameter of the wheal.

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HISTAMINE CONCENTRATION FOR SKIN TESTING

To the Editor:

The article by Mahan et al¹ regarding the reproducibility of the Multi-test skin test device (Lincoln Diagnostics, Inc) and the accompanying guest editorial by Harold Nelson,² neglected to emphasize an important variable, namely the concentration of histamine used in the positive control. Mahan et