LETTERS TO THE EDITOR

Skin Prick Test to Horse Should Be Included in the Standard Panel for the Diagnosis of Respiratory Allergy

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We read with interest the article by Novembre et al [1], who report that the prevalence of sensitization to horse in children was 2.7% (624 positive results in a population of 23 460 individuals who underwent skin prick testing [SPT] at their allergy unit over the last 8 years). The authors show the importance of indirect exposure to horse allergens in inducing allergic sensitization and recommend that horse be included in the routine panel of allergens used for the diagnosis of respiratory allergy.

We completely agree with the conclusions of Novembre et al [1], and report our findings in adults.

We recently studied the prevalence of allergic sensitization to horse allergen in an urban atopic population in Naples, Italy [2]. We consecutively examined 1822 patients at our allergy service during the years 2005 and 2006. Of the 1201 individuals with a positive SPT result for at least 1 allergen, 35 adults (3.43%) were sensitized to horse dander. Of these, 6 patients reported direct contact with horses and 10 denied direct contact but reported occasional contact with horse owners (indirect exposure). The remaining 19 patients denied apparent direct or indirect exposure to horses or horse allergens. Twenty of the 35 horse-sensitized patients reported both nasal and bronchial symptoms, 14 reported rhinitis without asthma, and 1 reported asthma without rhinitis.

The results of SPT and specific immunoglobulin (Ig) E levels against e3 (horse dander) did not differ significantly between patients who had direct contact with horses and those who had indirect contact, between patients who had direct contact and those who had no apparent contact, or between patients who had indirect exposure and those who had no apparent contact with horse. On the contrary, levels of IgE against horse serum proteins (Re205) were significantly higher in patients with direct contact than in those with indirect contact, and those with no apparent contact. Apart from 1 patient, all individuals exposed directly to horse had specific IgE against horse serum proteins, whereas no patients with indirect exposure or no apparent contact had serological responses to horse serum proteins. Another finding of our study is the high prevalence of women (25/35), a family history of allergy (25/35), and concomitant allergic sensitization to dog and cat (23/35 and 25/35, respectively).

A recent multicenter study involving 19 Italian allergy clinics has shown that the mean prevalence of allergic sensitization to horse is 6.31%, 5.09%, and 5.24%, respectively, in northern, central, and southern Italy. Only 27% of horse-sensitized patients reported direct exposure to the animal (G Liccardi, unpublished data).

Finally, we previously found that direct contact with horse triggered severe respiratory symptoms in 2 adult patients who were allergic to horse but who were unaware of their allergy, as they had never had contact (direct or indirect) with the animal [3].

Allergy to horse with no apparent exposure might be explained by mechanisms other than those suggested by Novembre et al [1], such as a cross-reaction between horse allergen and the major allergens of several mammalian species. including dogs, cats, cows, guinea pigs, and rabbits [4,5]. All these allergens are lipocalins, typically small proteins whose major feature is the ability to bind small hydrophobic molecules such as steroids [6]. Moreover, a recent study demonstrated that the first contact with serum albumin (a 68-kDa panallergen involved in allergy to milk, meat, and epithelia) was through cow's milk and that patients might have developed sensitization to epithelial serum albumin even in the absence of direct contact with animals [7]. Given reports in children and adults [1,2,3], the Italian adaptation of the GINA guidelines [8] has recognized horse as an "underestimated" risk for allergic sensitization and suggested including it in the standard panel for the diagnosis of respiratory allergy.

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ERRATUM

Quality Assurance of Allergen-Specific Immunotherapy During a National Outbreak of Anaphylaxis: Results of a Continuous Sentinel Event Surveilance System

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The legend for Figure 2 should have read:

Figure 2. Number of injections per allergen and clinic (20500 injections)