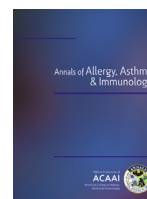




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Letter

Anaphylaxis induced by Goji berries

Consumption of Goji berries (GBs) (*Lycium barbarum*) has increased, at least in Europe, in recent years. This is likely to be due to their described immunomodulatory and anticancer effects.¹ To date, 11 patients experiencing hypersensitivity reactions of various severity degrees have been reported only by Spanish researchers.^{2–4} Sensitization, not clinical reactivity, to GBs has been reported in 33 (5.8%) of 566 individuals tested, of whom only 2 were symptomatic (6%). A total of 94% of the 33 GB-positive cases were also positive to other allergens, and more than 90% were sensitized to peach. The authors identified a lipid transfer protein as the major allergen of GBs (Lyc e 3), which is cross-reactive with Pru p 3.³

We describe a case of GB-dependent exercise-induced anaphylaxis in a 37-year-old man. The patient, known to be pollen allergic since childhood (well-controlled asthma and rhinitis), was offered the berries by his grandmother to achieve better performances in playing basketball and to be immune protected against the rigors of the incoming winter in Northern Italy.

One evening (approximately 2 hours before moving to the gymnasium), he had a light meal that consisted of chicken salad and GBs. He had neither bread nor any other wheat-containing food. A few minutes after starting the warm-up, he felt sick, and soon after hives started to appear all over his body accompanied by wheezing. Having never before had any systemic or local reaction to food or any other factor, he was not carrying an epinephrine autoinjector and was, therefore, rushed to the nearest emergency department (ED). In the ED, he received 500 μ g of epinephrine intramuscularly and intravenous fluids and corticosteroids with prompt response. After a few hours of observation in the ED, he was discharged and advised to consult an allergist.

We saw him 3 weeks after the episode and performed skin prick tests with the major inhalants, the results of which were positive for grass, ragweed, mugwort, pellitory, birch, and olive tree. The results were negative for latex. We prescribed an epinephrine autoinjector and advised the patient to abstain from consuming GBs. The patient was invited to return with GBs to be skin tested

(prick-and-prick testing). The GB test yielded a wheal that measured 9 $\times$ 4 mm. Tomato, peanut, and hazelnut (in previous reports tomato and nut test results were positive in approximately 30% and 24% of GB-positive cases, respectively) also tested positive to approximately the same degree.

Molecular diagnosis was then performed, which gave the following results: Pru p 3, 2.88 kU/L, and Ara h 9, 0.81 kU/L. The results of testing with latex components were negative or borderline (Hev b 8, 0.31 kU/L).

In conclusion, because the consumption of GBs is clearly increasing in our country as a healthy food, GBs must be regarded as a new and potentially dangerous food allergen especially in individuals sensitized to the lipid transfer protein of other fruits (peach in particular).

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