

CORRESPONDENCE

Wheatburger anaphylaxis due to hidden buckwheat

Sir, Allergic reactions to vegetable burgers are seen more and more frequently among outpatients who are referred for allergological investigation. The causative allergen in our country is mainly sesame seed (falafel anaphylaxis) [1,2]. A case of vegetable burger allergy due to peanut hypersensitivity has been described in this journal [3]. We now describe an anaphylactic reaction due to a wheatburger that was contaminated with buckwheat.

A 40-year-old atopic female druggist with mild hay fever in the past and a known occupational respiratory allergy to inhaled buckwheat flour, presented to the casualty ward with an anaphylactic reaction after a meal at a local restaurant. Although assured that the ordered wheat burger did not contain buckwheat, she felt an immediate heat sensation on her neck, swelling of her hands and generalized urticaria after eating three bites. Despite promptly taking an antihistamine pill (terfenadine, 120 mg), the symptoms persisted and she became hypotensive. In the emergency room she responded to intravenous corticosteroids and antihistamines and could be discharged after an observation period. It was later discovered that the wheatburger had been fried in the same pan as had previously been used to prepare a buckwheat crêpe. Skin-prick tests with buckwheat extract (1% w/v) carried out 4 weeks later gave a strong positive response (weal > 20 mm with pseudo-podia) and resulted in the patient's developing a mild anaphylactic reaction requiring intravenous antihistamine therapy. The specific serum IgE were positive (class 3; 3.84 kU/L) as measured by radioallergen sorbent test (RAST) CAP (Pharmacia). The patient also had positive skin-prick test reactions to grass, mugwort and sorrel pollen. The anaphylactic episode after ingestion of a wheatburger is, therefore, explained by the contamination of this burger with traces of buckwheat allergen.

Buckwheat (*Fagopyrum*) is not a cereal, but belongs rather to the *Polygonaceae*, a family which also includes

rhubarb (*rhoeo*) and sorrel (*rumex*). Buckwheat allergy is frequent in Asian countries such as Japan because of its widespread use both in foods and in pillows and other bedroom furnishings. Buckwheat must therefore be regarded as containing very potent allergens that are not inactivated or destroyed through heating [4,5]: this episode again demonstrates a potential danger in the increasing popularity for vegetarian food as well as the dangers posed by 'hidden' allergens to patients with a high degree of sensitization.

Therefore, such patients would be well advised, when they take a meal in a restaurant or are on holiday, to take with them an emergency kit containing not only antihistamine and corticosteroid tablets, but also the life-saving epinephrine inhalator (Medihaler-Epi spray).

References

- 1 Kägi MK, Wüthrich B. Falafel burger anaphylaxis due to sesame seed allergy. *Lancet* 1991; ii:382.
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- 3 Donovan KL, Peters J. Vegetableburger allergy: all was not as it appeared. *Br Med J* 1990; 300:1378.
- 4 Davidson AE, Passaro MA, Settigone GA. Buckwheat-induced anaphylaxis: a case report. *Ann Allergy* 1992; 69:439-40.
- 5 Schumacher F, Schmid P, Wüthrich B. Zur Pizikel-Allergie: ein Beitrag über die Buchweizenallergie. *Schweiz Med Wochenschr* 1992; 123:1559-62.

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