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Cross-allergy to Latex and Spinach

Sir,

Immediate hypersensitivity to latex proteins is frequent and affects approximately 10% of medical personnel in operating rooms and intensive care units. Cross allergy to latex proteins and food allergy is well known for avocados, bananas and kiwi fruit (1).

We report here a case of allergy to latex and spinach.

CASE REPORT

A 37-year-old man who worked in intensive care unit had had contact urticaria from latex gloves since 1995. He had no urticaria when he used vinyl gloves and was not atopic. Three re-challenge tests with latex gloves reproduced urticaria on his hands. The patient had eaten spinach twice, which produced diffuse urticaria, facial erythema and pruritis. In 1997 he experienced 2 episodes of diffuse urticaria with angioneurotic oedema during exercise (intensive swimming), 1–2 h after eating a meal including spinach. A re-challenge test with spinach alone reproduced diffuse urticaria. He sometimes ate avocados, bananas, kiwi fruit, sweet peppers and peanuts, but without reaction.

The cutaneous prick tests were compared with histamine. They were positive for latex, spinach, avocado, banana, peanut, apple and sweet pepper (Table I), but negative for kiwi fruit, melon, wheat, rice, dactyle, artemisia, phleum and birch. Total IgE antibodies were normal, at 30 kU/l. Radio-allergosorbent testing (RAST) for IgE antibody were negative for latex, avocado, spinach, banana, phleum and artemisia.

DISCUSSION

In this case we demonstrated an allergy to latex proteins (proved by contact urticaria, positive prick test and re-challenge test with latex), associated with an allergy to spinach (reproducible urticaria and positive prick test for spinach). The negativity of IgE antibodies for latex and spinach does not exclude the diagnosis of allergy, especially since total IgE antibodies were normal. IgE antibodies might be fixed in tissues and not in plasma. The patient was not atopic, had no reaction to pollens and his prick tests were negative for pollens.

Cross allergy between latex and avocados or bananas is well documented, with a common epitope (1, 2), and has been described with kiwi fruit, mango, peanut and sweet pepper (3).

Table II. *Cutaneous prick tests*

Substance	Prick test (papule (mm)/erythema (mm))
Positive control (histamine)	5/10
Negative control (–) (solvent)	0/3
Latex	5/8
Spinach	5/20
Sweet pepper	7/15
Banana	3/5
Avocado	4/10
Apple	6/15
Peanut	4/10
Wheat	0/3
Kiwi fruit	0/3
Paprika	0/3

Spinach belongs to the chenopodiacea family. Only 2 cases of cross allergy between latex proteins and spinach have been reported previously (4). There may be a common epitope between latex and spinach.

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