

her diet, she developed generalized urticaria and Quincke's edema of the lips and eyelashes. A milk-free diet stopped her symptoms, but they recurred to a variable extent after diet failure with products containing cow's milk proteins.

Skin prick tests were performed with

diluted fresh

homogenized and

pasteurized milk

containing 3.5% fat.

Starting with a

dilution of 1:10 000

(milk/water), the skin threshold was identified at a dilution of 1:100 (milk/water). Specific IgE against cow's milk protein (4.26 kU/l), α -lactalbumin (4.71 kU/l), and casein (3.97 kU/l), as well as specific IgE against cooked milk (2.82 kU/l), whey (2.23 kU/l), and milk powder (0.5 kU/l) was found.

Because it is difficult to avoid cow's milk proteins, we performed oral desensitization with cow's milk for 5 days under clinical conditions, starting with 1 ml of cow's milk 1/100, doubling the dose every second hour, with 4–6 doses per day, until reaching 32 ml 1/100, and then repeating the same with dilution 1/10. Undiluted cow's milk was administered in a similar manner, continuing with 64, 100, and 200 ml and then daily intake of fresh cow's milk. The patient tolerated the procedure well. She was advised to continue drinking milk daily. Six months later, the patient was still free of symptoms.

Oral desensitization with food was introduced early in the therapy of food allergies. Schemes for cow's milk protein desensitization were normally performed over many weeks (3). We suggest a 5-day oral rush desensitization under clinical conditions. Our case has proven that this treatment is a fast and safe procedure to induce tolerance of cow's milk.

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Unexpected anaphylaxis to cashew nut

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Key words: anaphylaxis; cashew nut; food allergy; pistachios.

● DETECTION of culpable food(s) in patients with suspected food anaphylaxis can be difficult since both open and blind challenges might be impossible or unethical. This is a topical issue, considering allergen cross-reactivity between foods and inhalant allergens, the knowledge of which is of paramount importance in avoidance of dangerous foods. Allergy to the cashew nut and other plants belonging to the Anacardiaceae family (1) is well known.

Belonging to the Terebinthales order, the Anacardiaceae family includes edible species from the genera *Pistacia*, *Mangifera*, and *Anacardium* (Table 1).

Pistacia vera, i.e., the pistachio nut, is a tree native to the Middle East, but it is cultivated also in Italy, mainly in Sicily. The pistachio is a green, elongated nut, used in pastry, ice cream, and sauces, or as an appetizer.

The *Mangifera* genus includes the mango (*Mangifera indica* or *M. laurina*), a tropical fruit with an orange core and a sour taste.

Anacardium occidentale, commonly

known as the cashew nut, is eaten as a snack with drinks.

Other, nonedible Anacardiaceae species products (such as balsamic resins from *Terebinthus* plants and Chios turpentine) are used in natural medicine for their expectorant properties; other plants of this family are cultivated for ornamental (*lentiscus*, *Pistachio chinensis*, *scotanus*, false pepper) and industrial (tannin from *Sommachus*; glossy black varnish from *Toxicodendron*; a very strong wood called quebracho from *Schinopsis*) purposes.

We describe the case of a patient allergic to pistachio who had

anaphylaxis due to

cashew nuts. A 42-

year-old white man

was admitted to our

emergency room

complaining of

mouth and lip itching, slurred voice, dyspnea, and vomiting a few minutes after eating some cashew nuts. Prompt treatment with steroids, antihistamines, and epinephrine relieved the patient's symptoms, leading to a complete recovery in about 24 h.

After some weeks, the patient underwent a careful allergy examination at our allergy clinic. History disclosed three previous episodes of adverse reactions to pistachio. At the age of 30 years, when eating chocolate and hazelnut candy, the patient reported suffering strong mouth itching followed by vomiting.

Three years later, the patient complained of the same symptoms while eating pasta with a sauce based on garlic, basil, and pine nuts and attributed the symptoms to pine nuts and basil. After a few months, mouth itching and vomiting occurred again when the patient ate pistachio nuts.

The patient inquired into the ingredients of the provoking foodstuffs and found that the candy contained pistachio extract and that pistachio nuts had been used for the pasta sauce. The patient then held pistachios

A patient allergic to pistachio nuts developed anaphylaxis after eating cashew nuts.

Table 1. Order: Terebinthales
Family: Anacardiaceae

Genus	Species	Common name	Features
<i>Pistacia</i> **	<i>P. lentiscus</i>	Lentiscus	Resin with expectorant properties can be obtained from bark
	<i>P. terebinthus</i>	Terebinthus	Resin with balsamic and expectorant properties can be obtained from (Chios or Cyprus Trementin)
	<i>P. vera</i>	Pistachio*	Seed can be eaten as it is or used for preparing pastry, ice cream, and sauces
	<i>P. atlantica</i>		
	<i>P. chinensis</i>		Grown in Italy as ornamental plant
<i>Cotinus</i>	<i>C. coggyria</i>	Scotanus	
	<i>C. americana</i>		
<i>Rhus</i>	<i>R. coriaria</i>	Sommacchus	Important source of tannin
	<i>R. typhina</i>		
	<i>R. sylvestris</i>		
<i>Toxicodendron</i>	<i>T. verniciflua</i>		Chinese lacquer can be obtained from tree; it contains volatile compound toxicondendrol, which can cause contact dermatitis
	<i>T. vernix</i>		
<i>Schinus</i> **	<i>S. molle</i>	False pepper	Grown as ornamental plant
<i>Mangifera</i>	<i>M. indica</i>	Mango*	
	<i>M. laurina</i>		
<i>Anacardium</i>	<i>A. occidentale</i>	Acajou*	Seeds usually eaten as snack with drinks
		Cashew nut or apple	
<i>Schinopsis</i>	<i>S. balansae</i>	Quebracho	Hard, heavy wood
	<i>S. lorentzii</i>		
<i>Harpephyllum</i>	<i>H. caffreum</i>		
<i>Scarsia</i>			
<i>Shmaltzia</i>			
<i>Spondias</i>			

*Edible.

**Pollen from this plant can cause allergies.

responsible for his previous adverse reactions and carefully avoided them without undergoing any allergy evaluation.

No other diseases were reported by the patient. In particular, he had never complained of allergy symptoms or skin diseases such as contact dermatitis or urticaria in the past.

In consideration of reported cross-reactions between pistachio nuts and *Artemisia* (2) and *Parietaria* (3) pollens, a skin prick test with commercial extracts for a panel of inhalant allergens (including pollens, dust mites, and mycophytes) was performed. Only a weak positivity for dust mites was found; pollens and mycophytes were negative, thus excluding pollinosis.

To diagnose an adverse reaction to Anacardiaceae, a skin prick by prick test

(according to Dreborg & Foucard [4]) was performed with a positive result for pistachio and cashew nut and a negative result for mango pulp and peel; prick by prick testing for mango seed, performed in a second session (as reported in ref. 5) was positive. Specific serum IgE levels to pistachio and cashew nut, evaluated by CAP-RAST (Pharmacia Diagnostics AB, Uppsala, Sweden), were normal, as they were for pollens, mycophytes, and mites.

The following conclusions can be drawn:

- In a patient with severe allergic reactions to a food derived from the Anacardiaceae family, the safest diagnostic test appears to be the fresh food skin test.
- All food derived from the same botanic family should be tested even if the reaction

occurred to only one of them; moreover, all parts of the vegetable (skin, pulp, and seed) should be tested.

- The patient must be carefully informed about diet restrictions and modifications: on the one hand, all cross-reacting foods derived from the same botanic family must be eliminated; on the other hand, the patient must be aware of hidden allergens contained in industrially prepared foods (such as snacks, sauces, pastry, and candies), since all the ingredients are not always reported on food labels (6).

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Anaphylaxis to persimmon

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Key words: anaphylaxis; cross-reactivity; *Diospyros kaki*; persimmon fruit.

● THE persimmon is the edible fruit of the persimmon tree (*Diospyros kaki*), which belongs to the Ebenaceae family. The fruit consists of a berry, as large as an apple, orange in color, with soft, juicy pulp, sweet if ripe. In northern Italy, it becomes ripe in late autumn and is usually eaten fresh by itself.

This report describes, for the first time, an anaphylactic reaction after eating of a fresh persimmon by an atopic patient.

A 20-year-old man exhibited itching, generalized urticaria, facial angioedema, asthma, gastrointestinal complaints, and diarrhea, 10 min after eating a fresh persimmon fruit. He was rushed to the hospital emergency ward. Chest examination

identified wheezing. The usual blood pressure of 120/80 mmHg dropped to 90/60.

The patient had already been known to us for more than 10 years, initially for chronic rhinoconjunctivitis, and subsequently also for asthma. In 1986 and in 1994, the skin prick test (SPT) had been positive for dust mite (*Dermatophagoides pteronyssinus* [+++]) and *D. farinae* [+++]

and for *Alternaria alternata* (++) In 1994, total and specific serum IgE was determined by ImmunoCAP tests

(IgE-FEIA and RAST-FEIA, respectively; Pharmacia CAP-System, Uppsala, Sweden). The total IgE was >1000 kU/l. Specific serum IgE was class 4 for Der p (21.5 kU/l), class 6 for Der f (>100 kU/l), and class 4 for *Alternaria* (26.8 kU/l). In 1986 and 1994, SPT was negative for pollens, animal dander, molds, and a battery of commercially available (Lofarma, Milan, Italy) food allergens.

Since the patient's symptoms were perennial without seasonal modifications and since the atmospheric dispersion of *Alternaria* spores in our region occurs only from April to September, the positivity to *Alternaria* was considered only nonclinical sensitivity.

Eating persimmon had never affected the patient before, although he always used to eat it in autumn, but he had recently experienced oral allergy syndrome (OAS) to kiwi (*Actidinia chinensis*).

SPT were performed by placing a piece of persimmon fruit and a piece of kiwi on the forearm and pricking through them (the prick-prick method). SPT with persimmon and kiwi yielded a wheal and flare reaction (persimmon wheal 15 mm in diameter with pseudopods; the kiwi wheal was 9 mm in diameter). The RAST to persimmon and kiwi was negative, despite clearly positive SPT. At a follow-up after 1 year, the patient refused further blood examination.

To our knowledge, this is the first report of an anaphylactic reaction caused by

persimmon fruit ingestion. The IgE-dependent mechanism was supported by immediate positive skin reaction. The RAST negativity was probably due to a marked increase in level of serum total IgE (total IgE was >1000 kU/l in 1994) and/or to the short time between symptoms and blood examination.

The patient was sensitized to dust mite and *Alternaria*, but not to pollens or food allergens except kiwi. Actidin (Act c 1), the main proteic component of kiwi (1), is an enzymatic protein belonging to the cysteine proteases, the structure of which is similar to Der p 1 (2).

These data suggest the intriguing possibility of cross-reactive allergenic structures in *D. kaki* and *D. pteronyssinus*.

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Azapropazone in aspirin intolerance

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Key words: aspirin intolerance; azapropazone; nonsteroidal anti-inflammatory drug (NSAID).

● PATIENTS with aspirin intolerance often react also to many nonsteroidal anti-inflammatory drugs (NSAID) such as indomethacin or diclofenac. The reactions do not depend on an allergic mechanism but are related to the pharmacologic action of the NSAID. The inhibitory effect on