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## Anaphylaxis to *Raphanus niger*

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**Keywords:** allergy; anaphylaxis; food supplement; radish; *Raphanus niger*.

Immunoglobulin E (IgE) mediated food allergy to members of the *Brassicaceae* family is uncommon. The first case was described in 1980 by Panconesi et al. (1) and was attributed to mustard in a pizza. Since then, several mustard allergy cases have been reported (2, 3), being allergic to other crucifers is exceedingly rare, namely to the *Raphanus* gender. To our knowledge, only two cases of possible allergic reactions to *Raphanus* have been reported, one patient with contact dermatitis (4) and another one with acute urticaria (5).

Nowadays, adverse events related with dietary supplements intake are increasingly reported, but the majority of the consumers are not aware of the potential dangers of these natural health products (6).

The authors report the case of a 56-year-old female patient, with a

history of nonatopic asthma and allergic rhinitis since childhood. The patient initiated generalized urticaria, facial angioedema, and severe bronchospasm ( $O_2$  saturation in room air = 88%), 10 min after the ingestion of a 15 ml ampoule of Hepatocomplex® (Bicol Laboratórios, Alcoitão, Portugal), a food supplement used for weight loss. She was medicated in the emergency room with i.m. adrenalin, as well as i.v. corticosteroid and  $H_1$  anti-histamine, with regression of the symptoms. No other food was ingested in the previous hours. There was also no strenuous exercise after the ingestion. The patient had taken this food supplement previously with no adverse reaction.

Skin prick test with Hepatocomplex® was performed. Not only was the skin test positive (5-mm mean diameter wheal), but it was accompanied by dry cough that promptly reverted with inhaled salbutamol. The composition of this food supplement was analyzed to find the culprit foodstuff. It contained rosemary (*Rosmarinus officinalis*), artichoke (*Cynara cardunculus*), and black radish (*Raphanus niger*), as well as sorbitol, glycerin, lecithin, choline, arginine, vitamin E, and several oligo-elements. Prick-prick tests with the first three fresh foodstuffs were performed and were clearly positive for the black radish (10.5-mm mean diameter wheal); the remainders were negative; the patient also had a positive prick-prick test (5-mm mean diameter wheal) to radish (*Raphanus sativus*). The same skin tests were negative in 10 adult atopic controls. The patient has no recollection of purposely eating any type of radish. Ingestion of other members of the *Brassicaceae* family did not elicit symptoms, namely mustard, broccoli, and cabbages. Avoidance of the *Raphanus* gender has been indicated, as well as an adrenaline auto-injector was prescribed for possible hidden allergens, taking into account the severe nature of the reaction.

To our knowledge, this report constitutes the first anaphylactic IgE-mediated reaction to foodstuff of the *Raphanus* gender. Our patient presented a positive skin test with the raw *Raphanus niger*, as well as *Raphanus sativus*, a closely related species.

An irritant effect can be ruled out, because the same skin test was negative in 10 atopic controls. Although also suggestive of an IgE-mediated reaction, in the report of Sayed et al. (5), they did not perform skin prick or prick-prick tests and only had a late moderately positive scratch test at 40 min. Oral provocation test is formally contra-indicated in our case, given the clear cut history of severe anaphylaxis and positive skin test. Allergy to other constituents of the food supplement was ruled out. Considering the extensive use of herbal and food supplements, a comprehensive risk-benefit analysis including a surveillance system for monitoring the adverse health effects of these products is essential, allowing the identification of unpredictable adverse reactions, namely allergic, which are potentially severe (6).

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Accepted for publication 16 December 2009  
Allergy 2010; 65:1202  
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DOI: 10.1111/j.1398-9995.2010.02330.x

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