

(malate dehydrogenase and phloem Lec 17-1) have been involved for the first time, to our knowledge, in melon allergy. It is also the first time, to our knowledge, that a lectin has been described as a potential allergen in the Cucurbitaceae family.

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COMBINED CETIRIZINE-MONTELUKAST PREVENTIVE TREATMENT FOR FOOD-DEPENDENT EXERCISE-INDUCED ANAPHYLAXIS

Food-dependent exercise-induced anaphylaxis (FDEIA) appears during or soon after exercise if it is preceded by ingestion of foods, whereas food allergens and exercise are independently tolerated.¹ We describe a 17-year-old adolescent referred to us for 2 episodes of anaphylaxis that occurred while jogging on the

beach 60 minutes after eating. Because of generalized urticaria, abdominal pain, vomiting, wheezing, dyspnea, and hypotension, he required hospitalization and emergency department treatment with epinephrine, intravenous antihistamine, and corticosteroids. His clinical history disclosed that on both occasions he had had milk for breakfast and a ham-cheese-tomato sandwich and peaches 1 hour before running.

The patient had seasonal rhinoconjunctivitis and took cetirizine (10 mg/d) whenever he had an attack. On admission, he underwent a physical examination and blood tests, the results of which were unremarkable. Basal serum tryptase levels (ImmunoCAP; Phadia, Uppsala, Sweden) were normal (2.96 ng/mL). Skin prick test results (Stallergenes, Antony, France) proved positive only to mites and grass pollen. Prick by prick with peach presented weak positivity (flare diameter, 10 mm; wheal diameter, 3 mm). IgE specific peach levels (ImmunoCAP) were 0.40 kUA/L.

Written consent was obtained from the patient and his parents. The boy started cetirizine therapy, with separate food challenges with milk, wheat, tomato, and peach being performed in a resting state. Results were negative. Ten-minute strenuous running tests were performed on a treadmill. No symptoms appeared after exercise tests performed in a fasting state. Open food-exercise challenges (OFECs) were performed 60 minutes after ingestion of the foods mentioned previously. Only the OFEC with 2 peaches was associated with generalized urticaria, nausea, swelling, coughing, and wheezing within 3 minutes. Symptoms quickly increased in intensity and were followed by vomiting and hypotension. After being treated with epinephrine, intravenous antihistamine, and corticosteroids, the patient showed progressive resolution of symptoms. His serum tryptase level after OFEC was high (18.02 ng/mL) but returned to the reference range within 48 hours.

Although there is a possibility that exercise challenges to diagnose FDEIA may not be completely reproducible, with negative challenge results alternating with positive results,¹ in this case report the positive OFEC confirmed a relationship between peach ingestion and symptoms. Because this was accompanied by increased tryptase serum concentrations, a double-blind exercise food challenge, the gold standard for FDEIA diagnosis,¹ was not considered necessary.

The patient and his parents expressed concern regarding other possible cross-reacting foods in the Rosaceae family and requested possible preventive treatment to be used in case of exercise shortly after ingesting potentially dangerous foods. Systemic reactions to peaches and apples in relation to sensitization to nonspecific lipid transfer proteins have been reported.² Because cetirizine alone was not effective, a trial with cetirizine (10 mg) plus montelukast (10 mg) daily for 3 days was prescribed to verify its preventive effect on FDEIA. Under pharmacological protection, the patient endured the entire test after OFECs with peaches and apples without any wheezing or symptoms. He was dismissed with a diagnosis of peach-induced FDEIA and was advised not to do strenuous exercise for at least 4 hours after eating peaches, to carry injectable epinephrine (Epipen; Dey LP, Napa, California) in case of an attack,³ and to continue preventive therapy during the spring and summer consisting of cetirizine plus montelukast. He continued treatment as prescribed and did not experience any further episodes of FDEIA despite no limitations except peaches.

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Recently, it has been shown that during human anaphylaxis there is increased production of cysteinyl leukotrienes, giving us the rationale for the suggested preventive treatment.⁴ Therefore, because oral antihistamine alone usually does not prevent FDEIA,⁵ the addition of montelukast may be considered helpful. The combination of drugs abrogated symptoms in this patient, allowing him to continue his physical activity without limiting foods except for peaches.

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