PP172
A multiple fruit allergy clinical case – Co-sensitisation or cross-reactivity?

Ana Castro Neves, Sara Prates, Paula Leiria Pinto
Allergy and Clinical Immunology Department, Hospital Dona Estefânia - Centro Hospitalar de Lisboa Central, Lisbon, Portugal

Background: Multiple fruit allergy may be due to co-sensitization or more often to cross-reactivity. Several proteins are described as being responsible for cross-reactivity, in particular nsLTP, Profilin and PR-10. Thaumatin-like proteins (TLPs) are also responsible for cross-reactivity, although they are less frequently reported in the literature.

Report: A 24-year-old Caucasian female, cook, with previous history of rhinitis and three gynecologic surgeries without complications was referred to our outpatient clinic for suspected food allergy. She presented with rapid-onset rhinorrhea, oropharyngeal itching and acute urticaria after banana milkshake intake. After this episode, she presented several reproducible reactions with vomiting, diarrhea and dysphonia after grape, wine, olives, olive oil, cantaloupe, melon, kiwi, persimmon, fig, papaya, nut, acai, peach and tomato intake. She also referred rhinoconjunctivitis while frying banana and hand pruritus while preparing fruit salad. She had no complaints with latex contact. She tolerates orange, apple, pear, cucumber and lettuce. Skin prick tests to aeroallergens were positive to D. pteronyssinus, plane tree, pellitory, birch and dog. Skin prick tests with commercial extracts were positive to banana, kiwi, avocado, grape, fig, mango, pineapple, tomato, latex and negative to LTP and profilin. Prick-prick tests were positive to grape, olive, olive oil, peach peel and walnut and negative to peach pulp and melon. ImmunoCAP ISAC® was positive only to TLP nAct d 2 (kiwi). Adrenaline auto-injector, fexofenadine and prednisolone were prescribed as emergency treatment.

Clinical Relevance of Report: TLPs have been identified in several fruits, vegetables and pollens. They are considered a putative panallergen but cases of allergy to multiple fruits are rarely described. In this patient with severe reactions to several fruits and vegetables the positive IgE to TLP and the negative result to other panallergens strongly indicate TLP as the causative allergen.

Statement of Consent for Presentation and Publication: the patient gave her consent to the presentation of her clinical case