



POSTER PRESENTATION

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Multiple primary food allergy in pediatric patients seen in a tertiary referral center

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Background

Multiple food allergy is increasing.

Objective

To find out the frequency of multiple primary food allergy (MPFA) in our patient population; the causal foods and their number per patient; age at diagnosis of food allergy; symptoms; frequency of environmental allergy occurring in those patients.

Methods

MPFA was defined as primary allergy simultaneously occurring to at least 3 unrelated foods. Allergy to a specific food was considered proven based on at least one of the following: a clear cut clinical history; elimination and reintroduction; a specific IgE level or skin prick test size \geq the 95% positive predictive value (defined for cow's milk, egg, peanut, wheat, potato); a positive provocation test. Primary allergy to the given food was documented by the involvement of class 1 allergens and/or the timing of food allergy development. Files of all patients visiting our tertiary Pediatric Allergy Center between September 2008 and August 2009 were studied retrospectively.

Results

Out of 715 patients 65 subjects (40 boys/25 girls) were found to have MPFA (9%). Age at enrollment ranged from 6 to 192 months (median 5.8 months); age at first diagnosis ranged from 1 to 192 months (median 11 months; mean 18,5 months). The causal allergens were egg (60/65), cow's milk (57/65), potato (22/65), peanut (21/65), tree nuts (18/65), fish (15/65), soy (14/65), wheat (10/65), banana (6/65) and kiwi (5/65). In 32/65 subjects more than 3 different foods were involved. The

symptoms were: atopic dermatitis, gastrointestinal manifestations, urticaria, angioedema, respiratory manifestations, anaphylaxis and failure to thrive in 92%, 61%, 45%, 41%, 35%, 28% and 21% respectively. Thirty out of 32 subjects having reached the age of 6 years (93%) also suffered from respiratory allergy.

Conclusion

Up to 10% of children visiting a tertiary allergy center might present with MPFA, needing specialized dietary advice.

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