Clinical profile of food allergic patients in Brazil – Evaluation of a questionnaire

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Aims: The prevalence of food allergy (FA) is increasing and many factors may contribute to these results. The aim of this study was to perform a clinical examination of patients with FA in Brazil.

Methods: Cross-sectional study applying a written questionnaire (WQ) to parents of children presenting with food allergy in ten Pediatric Allergy Centers in Brazil.

Results: We evaluated 120 WQ from children aged 1-18 years-old. Median age for onset of symptoms was 7.8 months and 56.5 months by the time of WQ performance. The most frequently referred foods were: cow's milk (86%), egg (32%), wheat (4.1%), soybean (3.3%), peanuts (2.5%) and seafood (2.5%). Allergies to a single food were observed in 71.6% and 28.3% described multiple food allergies. The most prevalent symptoms were urticaria (44%), atopic dermatitis (AD) (29%), anaphylaxis (22.5%), eosinophilic esophagitis (2.5%) and wheezing (1.7%). The severity of food allergy was mild in 33.3%, moderate in 29.1% and severe in 37.5%; 17.5% were hospitalized due to food allergy. Food restriction was applied in 100% of patients. Regarding to other allergies, 47.5% of patients referred asthma/rhinitis associated. Skin prick test was performed in 37.5% of children, with positive results in 88.8%. Oral food challenge was performed on 36% and 70% failed the test. Patients with AD performed the Scoring Atopic Dermatitis (SCORAD), averaging 40. Risk factors significantly associated with severe food allergy were family history of rhinitis (OR=4.1; 95%CI=1.41-4.5), asthma (OR=2.5; 95%CI=1.5-3.7) and smoking (OR=1.4; 95%=1.1-2.0).

Discussion: In this sample, the symptoms began in the first year of life in congruence with most studies. The most reported food was cow's milk and egg, as well as reported in the literature, especially in children. Despite the WQ had been applied to patients up to 18 years, the mean age of them was 4 years old. The major limitation of this study was that the WQ was completed in specialized services with more severe patients.

Conclusion: Due to the increasing prevalence of FA, knowledge about food-related allergies, diagnostic tests and possible risk factors in specific population are important keys to create strategies for prevention and possible treatment options beyond food exclusion.