Food allergens sensitisation in atopic asthmatic patients
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Aims: Sensitization to food allergens in patients with persistent allergic asthma followed in a tertiary clinic center.

Methods: A cross-sectional study was conducted with asthma patients in a regular follow-up in a tertiary clinic in São Paulo, Brazil. The study included patients older that 18 years with allergic asthma, with or without suggestive history of food allergy. Sensitization to aeroallergens, and food allergens was assessed by the skin prick test and/or specific serum IgE. Food allergens included: milk, egg, wheat, soy, shrimp, fish and peanuts. Data was also researched through clinic’s registration system, total IgE levels and severity of asthma, according to Gina 2015.

Results: We studied 41 patients with a mean age of 39.5 years and 73% were women. When assessing the severity of asthma, 39% had severe asthma, 39% moderate, and 20% mild asthma. Fourteen percent of the patients had suggestive history of food allergy. The mean total serum IgE was 1171.8 IU/mL. Thirty-nine percent of the patients had sensitization to some of the tested food allergens. Of these, milk and eggs accounted for 25% each, followed by shrimp - 20%. Wheat and peanuts accounted for 10% each of them, and soy and fish, 5% each of them. The group sensitized to food allergens had a higher total IgE level (1597 IU/mL), when compared to the group that was not sensitized to food allergens (912 IU/mL).

Discussion: It is well established in the literature that asthma is associated to different phenotypes, and therefore may be associated with varying degrees of treatment difficulties. It has been reported in the literature that food allergy might be a risk for complicated or poorly controlled asthma, not only in children but in adults as well, and was associated with asthma morbidity, including risk of hospitalizations and oral steroid use. Nevertheless, the prevalence of food allergy in adults with asthma is still not known. This study showed that nearly 40% of the allergic asthmatic patients with or without history of food allergy, had sensitization to major food allergens. These patients sensitized to food allergens also had higher levels of total serum IgE when compared with non-sensitized patients.

Conclusion: Due to the difficulty of control in some cases of asthma, different risk factors should be investigated, including food allergy. More studies should be performed to research these findings in large population. And it would have implications for the management of asthmatics, particularly those with severe disease.