Food allergy in children of immigrants from Latin America born in Spain in an area of Madrid

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**Background:** In 2015, the 11% of the total population in Madrid was foreign, being the Latin American origin the most frequent followed by Asia, East Europe and in fourth place by other EU countries. In our working area, the foreign population average was even higher: 19%. Racial disparities in food sensitization have been described. The aim of this work was to study the clinical characteristics of food allergy in children of immigrants from Latin American countries born in Spain.

**Methods:** In our study population 474 children reported allergy to food (cow’s milk and hen’s egg allergy not included) between 2012 and 2016. We analyze all the children from Latin American origin who were born in Spain evaluated in our center. Clinical history, skin tests and quantitation of specific IgE antibodies were performed as well as oral food challenges.

**Results:** A group of 29 children were included with an age range of 1-14 y.o., (Mean 7). Most of them were male (69%). Familiar atopy history: Rhinoconjunctivitis/Asthma was the most frequent entity (66%) followed by Atopic Dermatitis (16%). Most of the patients reported a personal history of Rhinoconjunctivitis/Asthma (51%) caused by pollen in 59% of cases; and AD (48%). Concerning food allergy, Latex-fruit group was the most frequent (25%), being Melon the most common, followed by Banana and Kiwi. Treenuts were the second family involved (21%), being Walnut the most common, followed by Peanut. Fruits belonging to the Rosaceae family were also involved (19%), being Peach the most frequent followed by Cherry. Shellfish (17%) was the forth family, Prawn was the most common, and Fish (11%) the fifth family, Hake was the most common. Finally, Legumes (7%) were the sixth group involved in allergy episodes, being Bean the most frequent. Describing Clinical Manifestations, Urticaria/Angioedema was the most frequent entity (59%), OAS the second (35%) followed by Anaphylaxis (4%).

**Conclusions:** In this study, Rhinoconjunctivitis/Asthma was the most frequently reported entity of personal history of atopy, whereas in Spanish children Atopic Dermatitis is the most common. Latex-fruit group was the most frequently involved food in allergy episodes in contrast to what occurs in the Spanish native children, where the fruits of the Rosaceae family are the most common.