Results: 7 month old boy with history of gastrooaphageal reflux since 2 months old; product of the first pregnancy of a young mother with history of asthma during childhood, obtained by cesarean section. He received maternal human milk combined with normal infant formulae since birth to 5 months of age when he started other foods. He presented skin perioral rash with the ingestion of apple and sometimes with infant formulae and gastroenterologist changed to extense hydrolized formulae but the parents decided to give partial hydrolized formulae because of cost and taste. In his white blood cell count marked eosinophilia was noted (700/μL); elevation of total IgE (170 UI/mL; normal ≤ 15 UI/mL) and specific IgE (chemiluminiscence by immunoCap system) positive to Egg white (>300) (Class IV), Egg yolck (110) (Class III), Soy (200) (Class III) and Casein (21) (Class II). Skin prick tests reported (papules): negative saline control = 0 mm, positive histamine control = 5 mm, Soy = 4 mm, Cow’s Milk = 12 mm, Egg = 34 mm. The boy had received cow’s milk in infant formulae, soy in cookies given since 5 months of age and egg in cakes eaten by the mother in great amounts during pregnancy and breast-feeding.

Conclusions: Recommendations to avoid soy, egg and cows milk products were given to the parents, changing to an extense hydrolized formulae with good clinical results. The present case suggests that sensitization during pregnancy and breast-feeding to several foods can be present in high risk infants.

Abstracts

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The Evaluation of Allergen Sensitivity in Food Allergy Patients in Antalya, Turkey
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Background: In this study, the socio-demographic characteristics, skin prick test were evaluated in treated patients diagnosed with Food allergies.

Methods: The study was conducted in Antalya between 10 November 2009 and 20 September 2010. A questionnaire made by the investigators taking the latest literature data into consideration were used during the study. The total number of the patients was 127. The specific IgE levels were determined by the method of cutaneous prick test and presented clinical symptoms of which 30% were cutaneous and 70% gastrointestinal. Thirty percent of the patients had a reaction after the Prick-to-Prick test (95% CI, 26.59-45.40) [P = 0.005] of which 17% developed respiratory symptoms, 22% skin, and 61% gastrointestinal. The main fresh foods with which the patients gave positive were: milk 16% (95% CI, 8.81-23.18), egg 10% (95% CI, 4.12-15.88), and wheat 7% (95% CI, 1.99-12.00). Prick tests like milk, eggs and corn could not be assessed properly by the sample size.

Conclusions: Prick-to-Prick tests are more effective than Prick to detect patients with food clinical reactions.

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Clinical Correlation of Prick and Prick-to-Prick Skin Tests to Food in a Group of Children with Allergy Symptoms
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Background: The food hypersensitivities IgE-mediated in children is of 1.6% to 6%. It can be manifested clinically as allergy in different devices and systems. Skin prick tests have a predictive positive value of less than 50% and 95% of negative predictive value. Prick-to-Prick tests have not been studied extensively.

Objective: To clinically correlate food hypersensitivity to Prick and Prick-to-Prick tests in a group of children with allergy symptoms in the skin, the gastrointestinal tract and the respiratory system.

Methods: A retrospective study done in the department of Pediatric Allergy of a Children’s Hospital from June 2008 to May 2011. Data was taken from the records of 100 patients who gave positive to Prick and Prick-to-Prick food tests. We also looked for the clinical setting referred to by the patient. The frequency and CI 95% were analyzed by Chi2. Out of the 100 patients, 48 were female and 52 male. These patients were grouped by age range. Fifteen patients fall within 1 to 2 years range, 15 patients fall within the 3 to 5 year range and 26 patients within the over-6-years range. Twenty patients presented asthma, 16 allergic rhinitis, 24 atopic dermatitis, 33 food allergy, 5 gastrointestinal eosinophilia, and 2 children presented other reactions. The tests were done with extracts of IPI ASAC Laboratories and fresh food. We considered that the tests that were positive were those with a wheel diameter greater than 3 mm over the negative control.

Results: 10% (95% CI, 4.12-15.88) of the patients had a reaction after the Prick test and presented clinical symptoms of which 30% were cutaneous and 70% gastrointestinal. Thirty percent of the patients had a reaction after the Prick-to-Prick test (95% CI, 26.59-45.40) [P = 0.005] of which 17% developed respiratory symptoms, 22% skin, and 61% gastrointestinal. The main fresh foods with which the patients gave positive were: milk 16% (95% CI, 8.81-23.18), egg 10% (95% CI, 4.12-15.88), and wheat 7% (95% CI, 1.99-12.00). Prick tests like milk, eggs and corn could not be assessed properly by the sample size.

Conclusions: Prick-to-Prick tests are more effective than Prick to detect patients with food clinical reactions.
molecular weight, which may indicate the main allergens of these foods – Mal d 1 and Api g 1. Serum of only one patient revealed the presence of antibodies cross-reacting with the apple, celery and carrot protein with the same molecular weight, which may correspond to the main allergens of these foods – Mal d 1, Api g 1. Additionally, sera of 6 persons demonstrated the presence of antibodies reacting with apple protein with the molecular weight 10 kDa which may correspond to the lipid transfer protein (LTP). Among some of the patients, antibodies which have not been identified so far reacted with birch, apple and celery proteins.

Conclusions: Although the immunoblotting is an effective method confirming the existence of the cross-reactivity, it still remains the method of verifying and supplementing other diagnostic tests, and a negative result doesn’t exclude the existence of this kind of allergy.

429 Natural History of Food Allergy in Childhood -3 Years’ Follow up of Pediatric Food Allergy Patients
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Background: Food allergy (FA) is prevalent among children however natural history of FA is not fully clarified.

Methods: We sought to investigate the natural course of childhood FA. To follow up the transition of same patients, we collected clinical records of patients with 3 years’ interval from 2008 to 2010. Four hundred ninety-one patients (male 321 and female 170) were recruited to this study.

Results: The onset of FA was at the age of 5 months ± 1 year 3 month (mean ± SD). The clinical type at the onset was with infantile atopic eczema (84.1%), and followed by immediate reactions without eczema (14.9%). The initial diagnosis age was 10 months ± 1 year 4 months, and the first visit to our department was 1 year 11 month ± 2 years 5 months. Current age of the patients was 7 years 5 months ± 2 years 11 months, and 444 patients (90.4%) had experienced immediate reactions. The number of eliminated foods decreased from 2.4 ± 1.5 items/patient (n = 1191) to 1.9 ± 1.6 items/patient (n = 926) in 3 years. The ratio of stopping elimination of major allergens was 14.1 IU/mL vs 4.1

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431 Frequency and Characterization of Oral Allergy Syndrome in Mexican Adults with Nasal Polalliosis
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Background: Oral allergy syndrome (OAS) is a common cause of food allergy in adults. Our objectives were to determine the frequency and to describe its clinical features in Mexican people with nasal polinosis.

Methods: Diagnosis of OAS was made through the clinical history and a fresh-food-prick-by-prick test. The sample to estimate the frequency consisted in 100 consecutive subjects with a diagnosis of nasal polinosis, whereas to describe its clinical featuring, we look for the findings in 30 patients with OAS from a Second Level Hospital. Statistical analysis included descriptive measures and Spearman’s Rho Test for a correlation between clinical variables.

Results: The frequency for OAS was 13%. Mean age 29.9 years. By gender 26 women. Median for serum IgE was 160 UI/mL, while the average for total eosinophils was 278.2. The most common symptoms were oropharyngeal pruritus, followed by lip edema; the symptoms started in most of the cases within the first minute after eating the food. Predominant sensitizing aeroallergens corresponded to trees, among them, oaks. Twenty three different foods related to OAS were detected in total, mainly, peach (23 cases), apple (18 cases), pear (8 cases) and almond (7 cases). By anamnesis, 2 patients identified up to 8 foods. Evolution time of OAS correlated significantly to the evolution time of allergic rinitis (Rho = 0.49; P = 0.006) and duration of OAS symptoms (Rho = 0.37; P = 0.05). Evolution time of allergic rinitis and duration of OAS symptoms also correlated between them (Rho = 0.52; P = 0.003).

Conclusions: In a birch-free zone and sensitization to oaks and alders, as Guadalajara, in Mexico, OAS should be suspected as related to foods from Rosaceae family. The longer the evolution time of nasal polinosis and OAS, the longer the duration of OAS symptoms.