a positive correlation between a positive numerical value for the ISAC specific component and for the ImmunoCAP D.P. D.F.

Conclusions: ISAC is a reliable method for diagnosing allergic rhinitis. Further studies of the utility of ISAC in SIT patients are needed.

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Prevalence of Skin Reactivity to Blomia Tropicalis Antigen in Patients with Respiratory Allergy at Hospital Universitario De Puebla

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Background: Published studies shows that the sensitization to Blomia tropicalis mite plays an important roll on the development of allergic diseases. The aim of our study is to determine the prevalence to skin reactivity to Blomia tropicalis’ antigen in patients with respiratory allergy.

Methods: We conducted a descriptive, observational, prospective and transversal study being the criteria for inclusion: male and female patients aged 2 to 85 who came for first time at our service with diagnosis of asthma, rhinitis or asthma more rhinitis. We evaluated the skin reactivity by skin prick test to Blomia tropicalis’ antigen. Descriptive statistics was implemented by estimating simple measures and dispersion.

Results: From a total of 110 patients, their mean age was 16.25 (2–58), 50% were males, 92% were from urban areas and 7.3% from rural areas. Of the patients studied 2.7% had asthma, 73.6% had rhinitis and 23.6% both diagnoses. The prevalence of positive skin reactivity to Blomia tropicalis was 24.5%. The prevalence of positive skin reactivity for the rhinitis subgroup was 59.3% and for the asthma/rhinitis subgroup was 40.7%, while in the asthma subgroup the prevalence was 9%.

Conclusions: The high prevalence of skin reactivity to Blomia tropicalis indicated the importance of including Blomia tropicalis in routine diagnostic testing and immunotherapy treatment.

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Prevalence of Sensitization to Parietaria, Pinus, Cupressus and Morus Pollens in Patients from Craic

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Background: The pollens of Cupressus, Parietaria, Pinus and Morus are important causes of allergic respiratory diseases. In a study of pollen concentration in Monterrey in 2004, these pollens occupied the first places in frequency. The objective was to determine the prevalence of sensitization to Parietaria, Pinus, Cupressus and Morus in patients from Craic (Regional Center of allergy and clinical immunology, Monterrey, Mexico).

Methods: Is an observational, cross-comparative, double-blind study in which patients were included if they underwent prick tests to aeroallergens in CRAIC between October 2009 and February 2010. All patients underwent skin testing with allergen extracts for Parietaria, Pinus, Cupressus and Morus pollens 2 of each, a weight-volume (dilution 1:20) and other units.

Results: We included a total of 256 patients, 140 female (53.1%), 130 (50.8%) were under 18 years. The prick test with allergenic extract of Cupressus was positive in 39 (15.2%) patients with W/V and 18 (7%) patients with PNU, the prick test to Parietaria allergenic extract was positive in 3 (1.2%) patients W/V and 4 (1.6%) patients with BAU, the prick test with Pinus allergenic extract was positive in 4 patients (1.6%) with W/V and 2 patients (0.8%) with PNU, and the prick test with Morus allergen was positive in 19 patients (7.4%) with W/V in 8 patients (3.1%) with PNU. Of the 44 aeroallergens our center applies Cupressus (1:20) ranked 7th place.

Conclusions: Cupressus sensitization was high in our study group (15.2%). Consideration should be the routine use of allergen extract of Cupressus for diagnosis and treatment in patients with respiratory allergy.

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Prevalence of Skin Reactivity to Antigen Mus Musculus in Patients with Respiratory Allergy

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Background: It has been reported worldwide high prevalence of sensitization to antigen Mus musculus (mouse) in patients with allergic respiratory diseases.1,2

Methods: We performed a cross-sectional, observational, prospective and descriptive study in patients of both genders, from 2 to 58 years old, attending for the first time to the service of Allergy and Clinical Immunology in the University Hospital of Puebla, with clinical symptoms suggestive of asthma, allergic rhinitis, or both, for a period of 6 months. Each patient underwent clinical history and prick skin test with epithelial antigen Mus musculus. Data were analyzed with the program SPSS-Statistics 18.

Results: We included 110 patients, 50% were women, mean age was 24.1 years (SD 16.2) 92.7% were from urban areas and 7.3% rural. The overall prevalence of skin reactivity to antigen epithelial Mus musculus was 1.8%, the corresponding to patients with allergic rhinitis were 2.4% and the remaining subgroups were nonreactive. One of these patients worked with laboratory animals including Mus musculus, which represented 33% of patients with positive skin reactivity.

Conclusions: The results presented here support the relevance of implementing skin testing with antigen Mus musculus only in those patients who suffer from respiratory allergy and who have a history of recurrent exposure to it.

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Atopy Patch Test to Aeroallergens Extracts is Useful In Allergic Diseases Diagnosis When Skin Prick Test is Negative

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Background: The atopic diseases are generally diagnosed by performing skin prick tests (SPTs) to different aeroallergens. However, when this study results negative, it is possible to perform atopy patch test (APT). This technique has been introduced to evaluate sensitization to aeroallergens in patients with atopic eczema dermatitis syndrome. Nevertheless, its role in other allergic diseases has not been proved. Objective: Evaluate aeroallergens response using skin prick test (SPT) and atopy patch test (APT) in patients with allergic diseases.

Methods: Retrospective cohort study of individuals who performed SPT and APT as part of allergic diseases study. The study subjects were patch and skin prick tested to house dust mite (Dermatophagoides), trees, grass and fungi.
mix, cat and dog dander, among others. The tests were performed at the respiratory allergic disease center of Santa Maria Clinica in Santiago, Chile, between January 2010 and April 2011.

Results: Fifty-five patients were included, 18 (33%) males and 37 (67%) females, median age 6 years (range from 3 months to 62 years), with the following diagnosis: atopic dermatitis syndrome (60%), allergic rhinitis (58%), contact allergic dermatitis (16%), asthma (9%), recurrent bronchial obstructive syndrome (7%), allergic rhinoconjunctivitis (4%), chronic cough (4%), recurrent acute otitis media (2%) and recurrent laryngitis (2%). They underwent usual SPTs and APTs with multiple Aeroallergens extracts. Of the 55 patients, 22 showed a positive SPT and 32 a positive APT; in 14 (25%) both, SPT and APT were positive. In 8 (15%) the SPT was positive and APT negative, while in 18 (33%) the SPT was negative, but the APT positive. Fifteen (27%) were negative to both tests.

Conclusions: Our results show that APT might be a useful diagnosis test in patients with allergic diseases and that its routine use can improve their diagnosis.

571 Clinical and Laboratory Studies of the Fate of Intranasal Allergen

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Background: The nose is generally the first site of contact for inhaled particles including allergens, however the precise way in which allergens are handled by the nose is unknown.

Objective: This study aimed to describe the dispersal of Der p 1 allergen by measuring the recovery of allergen following nasal administration and to evaluate whether Der p 1 can be detected in nasal biopsies after natural exposure and nasal challenge.

Methods:

1) Der p 1 allergen was administered intranasal to 20 non-atopic healthy subjects and recovery of Der p 1 was measured in the nasal wash, nasal mucus and induced sputum up to 30 minutes after challenge.

2) In 8 subjects (5 atopics) Der p 1 was sprayed intranasal into one nostril and 30 minutes later a biopsy was taken, the contralateral nostril served as a negative control. Immunohistological localisation of Der p 1, IgE positive cells, macrophages was undertaken. Eosinophils were shown by H-E staining.

Results:

1) Less than 25% of total allergen inserted into the nasal cavity was retrievable after aqueous or particulate allergen challenge. Most allergen was retrieved from the nasal mucus.

2) Under baseline conditions, in atotics and non-atotics, mild Der p 1 tissue staining in nasal epithelial tissue was observed. Following challenge epithelial Der p 1 staining increased both in atotics and non-atotics, while increased staining of lamina propria was found in atotics only. Also increased eosinophils, macrophages and IgE positive cells were observed in areas of higher concentrations of Der p 1 staining in the epithelium, mucous glands and lamina propria compared to the contralateral unchallenged nasal mucosa and also compared to the nonatotics.

Conclusions: Der p 1 allergen is detected in nasal tissue after natural exposure and independent of atopic status. After challenge the nose effectively retains allergen which is mucosally located. Furthermore in atotics allergen is bound to epithelial cells and rapidly transported to the subepithelial lamina propria where it can bind to IgE-bearing mast cells and recruit eosinophils and macrophages facilitating induction and persistence of inflammation.

572 Effect of Enzymatically Modified Isoquercitrin, a Flavonoid, on Symptoms of Japanese Cedar Pollinosis

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Background: The prevalence of allergic diseases has increased all over the world during the last 2 decades. Dietary change is considered to be one of environmental factors that cause this increase and worsen allergic symptoms. If it is the case, an appropriate intake of foods and beverages with antiallergic activity is anticipated to prevent the onset of allergic diseases and ameliorate allergic symptoms. Flavonoids, ubiquitously present in vegetables, fruits or tea possess antiallergic and antioxidant effects, so that we examined the efficacy of a flavonoid on clinical symptoms of Japanese cedar pollinosis.

Methods: We investigated the efficacy of enzymatically modified isoquercitrin (EMIQ), a quercetin glycoside, to relieve symptoms of Japanese Cedar pollinosis by 3 different clinical trials. In either trial patients were randomly assigned to the EMIQ group or the placebo group and took one capsule containing EMIQ plus corn starch or corn starch only twice a day. The efficacy was evaluated with the total symptom, medication or QOL score. Study 1 (reference 1) and 2 (reference 2); EMIQ (100 mg/day) versus placebo, for 8 weeks, started after (study 1) and before (study 2) the onset of pollen release, Study 3; EMIQ (200 mg/day) versus placebo, for 4 weeks, started after the onset of pollen release.

Results: In study 1 and 2, during the entire study period, ocular + medication score for the EMIQ group was significantly lower (P < 0.05) than that of the placebo group. When limited to the period, total symptom + medication score for the EMIQ group was significantly lower than that of the placebo group in all 3 studies.

Conclusions: These results indicate that intake of EMIQ, a quercetin glycoside proved to be effective for the relief of symptoms caused by Japanese cedar pollinosis.

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573 Prevalence of Allergen Sensitization in Children with Atopy Suspicion between Six Months and Five Years of Age

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Background: Classically we have been taught that the skin prick test (SPT) must be performed over 4 years of age mainly because of the lack of sensibility the test has on younger children, now a days the utility of the SPT in younger children with atopic history is controversial and it would help make an early diagnosis. The objective of this study is to describe the prevalence of allergen sensitization in children between 0 and 5 years of age that have atopic history. We also describe the sensitization percentages to the most relevant allergens according to age group.

Methods: SPT performed between January 2006 and July 2010 at the Respiratory and Allergy Department of Clínica Santa Maria to children with