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ALLERGY

From 1994 to 1995 327 children aged 5-15 years admitted to the allergologic laboratories. All of children were subjected to: anamnesis's collection, rhinoscopy, skin and provocation tests, determination of the total and specific IgE value in the serum.

The allergic diseases were diagnosed in 182 (55,6%) and 123 (67,6%) of them resulted sensitive to *Candida* and 59 (32,4%) to *Alternaria*. 62 (34%) patients were sensitive to both fungal allergens. We have also found out that 39% of *Candida* allergic patients show sensitivity in house and book dust and 56,5% in *Aspergillus flavus*.

The predominant sex was masculine one and had respectively a mean age of 12 years (*Candida*) and of 6 years (*Alternaria*). The clinical features were following: respiratory allergosis 57,7%, bronchial asthma 33,5%, atopic dermatitis 30,7%.

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DIAGNOSTIC METHODS IN ALLERGIES DUE TO MOULDS

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Skin prick test (SPT) positivity to moulds is a controversial problem. Aim of the study is to deeply evaluate a group of monosensitized and polysensitized patients, showing, with SPT method, one or more specific skin test positivity to moulds.

425 patients affected by conjunctivitis, rhinitis and/or asthma were tested from January 93 to October 95: 312 were positive to one or more respiratory allergens and, among those, 25 were positive to one or more mould species. The main respiratory allergens (*Dermatophagoides*, Wall Pellitory, Grass, Olive, *Artemisia*, Birch, Hazel Nut, Alder, English Plantain, Cat Epidermal) and a selection of mould allergens, including *Alternaria* t., *Cladosporium* h., *Candida*, *Aspergilli* mix, *Penicilli* mix, *Mucor* m., *Tricoepidermophyton*, were tested with SPT. Patients with a skin test positivity to moulds were submitted to a series of additional diagnostic tests: a) daily symptom score; b) specific IgE levels; c) domestic environment moulds sampling; d) nasal smear; e) nasal cytology; f) Specific Nasal Provocation Test (SNPT) and/or Specific Conjunctival Provocation Test (SCPT). Our results have shown that moulds can cause specific symptoms, even in some polysensitization cases, and exclude or assign a secondary role in other cases. We therefore believe that the combined use of these methods can lead to a complete diagnosis of these patients.

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STUDY ON AIRBORNE FUNGAL SPORES IN THE BADAJOZ AREA (SPAIN)

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Airborne fungal spores (AFS) are potential allergens. They have been implicated in both asthma and allergic rhinitis, and other health symptoms.

The atmosphere in Badajoz city (located in the southwest of Spain) was monitored to determine the concentration, seasonal occurrence, and identity of AFS, and environmental factors responsible for AFS dispersion (temperature, relative humidity, speed and wind direction and rainfall). Atmospheric sampling was carried out with a Burkard Volumetric Spore Trap from May to August during 1993 and 1994. The occurrence of AFS was calculated hourly and daily.

Twenty-six spore types could be identified. Mean spore concentrations were about 3000/m³. The spores of *Cladosporium* were dominant (60-70%) followed by *Ustilago*, Basidiospores, *Alternaria* and *Drechslera*. The highest AFS concentrations were observed in May-June. *Cladosporium* spores reached peak levels about 20.000/m³. We have found statistical association among the presence of some AFS types and biometeorological factors.

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COCKROACH ALLERGENS IN HOUSE DUST

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Cockroach (C) have been recognized as a potential source of indoor allergens and can represent an important risk factor for asthma. The levels of C allergens (Bla g 1 and Bla g 2) were measured (monoclonal antibodies) in dust from the houses of patients with respiratory allergy and related with socio-economic and geographic conditions. We included 30 patients sensitized (positive skin prick tests) to C, 15 to house dust-mites and 14 to grass pollen, all resident in Porto area. The median of Bla g 1 and Bla g 2 in the 59 samples was respectively 21.3 U/g (1.6-123.4) and 0.8 U/g (0.01-1.90), with a significant correlation between them ($r=0.77$, $p<0.01$). House dust samples from patients sensitized to C contain significantly higher levels of Bla g 1 and Bla g 2, in comparison to the two other groups. Houses with visible C, located in rural areas and near the coast sea or river-side also had significantly higher levels of these two allergens. Although the significant levels of cockroach allergens found in our region and their relationship with cutaneous sensitization and certain housing conditions, further studies are necessary to define the clinical relevance of this sensitization among us and the most adequate measures to avoid the exposure to these insects.

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RAGWEED ALLERGY: EPIDEMIOLOGY

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We have been counting pollens in the air of a village in a hilly area near Milan since 1982. In 1988 we found ragweed pollens in the pollen trap. We have studied the ragweed concentrations between '88 and '95.

The peaks of ragweed pollen concentration were: