

# Abstracts

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### F-7

ALLERGIC CHILDREN WITH POSITIVE SKIN TEST TO MOULDS: AN INDOOR AEROMYCOLOGICAL INVESTIGATION. L. Di Bernardino, A. Angrisano, G. Baio, R. Compostella. Divisione di Pediatria, Ospedale di Bollate, Bollate (Milano), Italia.

In 1873 was first hypothesized the aetiopathogenetic role of moulds in respiratory syndroms. Now it is well confirmed. Many authors report about results from mycoerological outdoor investigations but few performed the same studies inside the house of selected allergic patients (indoor study). For a 1 year period we screened both quantitatively and qualitatively the presence of 6 species of moulds (*alternaria*, *aspergillus*, *candida*, *penicillium*, *mucor*, *cladosporium*) in the indoor environment of 20 children complaining with respiratory symptoms probably of allergic origin and skin-test positive to one or more moulds. Mould species *mucor* and *candida* were detected only occasionally. *Penicillium* and *cladosporium* species accounted for the 41,6% and 47,2% of the total respectively, with a constant presence all over the year and a peak period from November to April for the former and a diminution during the winter months for the latter. *Aspergillus* though seldom found (7,4%) did not reveal a periodicity and *alternaria* (3,7%) had its peak during September-October.

### F-8

ALLERGY TO POLLEN FROM BETULACEAE AND CORYLACEAE IN GENOA (LIGURIA-ITALY). S.VOLTOLINI, L. BENZI, E. CRIMI, G. DELBONO, A. EBBLI, C. TROISE, A.C. NEGRINI. Servizio Autonomo di Allergologia, Ospedale S.Martino, Genova, Italy.

During the last few years the sensitization to pollens belonging to *Betulaceae* and *Corylaceae* (B-C) has been increasing in our country. In the period between 1983-87, of 1,921 patients affected by rhinoconjunctivitis and/or asthma with positive skin prick test to one or more of the different pollens, 310 had positive SPT to birch, alder and/or hazel: they grew from 27 (7.8%) in 1983 to 80 (20%) in 1987. 85% of these showed a coincident positive SPT with other pollens. Positive SPT was in agreement with the clinical history in 78% of patients and with RAST in 80%. Food hypersensitivities were reported by 58 patients, 19% of the B-C pollen allergic group. The rank order was fresh apple, peach, hazelnut and cherry. The diagnosis of food allergy was based only on the clinical history. A bronchial challenge with birch pollen was performed on 22 asthmatic patients: all showed an "early" reaction, 9 a "late" reaction too. The sensitization to pollens from B-C are becoming an important cause of respiratory and food allergy in Genoa.

### F-9

AEROBIOLOGICAL STUDIES OF POLLEN AND FUNGI AT AL-KHOBAR, SAUDI ARABIA, MAHDI AL-NAHDI, S.M. HASNAIN, A.R. AL-FRAYH. King Faisal University College of Medicine, Dammam & King Faisal Specialist Hospital & Research Centre, P.O. Box 3354, Riyadh 11211, Saudi Arabia.

A nationwide aerobiologic study is in progress in Saudi Arabia using Burkard 7-day volumetric spore traps to determine the major airborne allergens and their seasonal patterns. Eight months readings have been completed at Al-Khobar, an important coastal city on the Arabian Gulf. Pollen levels showed a double season. An autumnal peak reached its maximum in October rising sharply from the low summer values before falling during the short winter then rising again in springtime. Both local and imported flora were represented with *Chenopodiaceae*, grasses and *Ambrosia* as the most common botanical groups. Identification of the most significant individual species is still in progress. Fungal spores also show distinctive seasonal patterns. In descending rank order from the most common genera were *Cladosporium*, *Ustilago*, *Alternaria*, with *Chaetomium* and *Ulocladium* as consistent but minor components. Basidiospores and Ascospores represented less than 10% of the total spore population, indicative of the dry nature of the climate. Desert dust added an important irritant to the Saudi atmosphere but a major contaminating factor to the aerobiological material being analysed.