

reduced immunogenicity of insulin lispro is related more to its faster absorption rate than to any changes in the immunogenic epitopes.

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Allergy to cypress pollen

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Key words: asthma; children; Cupressaceae; cypress.

● CUPRESSACEAE pollen allergy, which has been reported to cause winter conjunctivitis, rhinitis, and asthma in various parts of the world, is on the increase in the Mediterranean area (1-3). This study was conducted to determine the frequency of cypress sensitivity in children with asthma in southeast France.

Between October 1995 and October 1998, skin prick tests with the major aeroallergens (dust mites, cat and dog danders, *Blatella germanica*, *Alternaria*, and mixed grass pollen) and *Cupressus sempervirens* pollen were performed in 759 children with asthma living in Marseille and the surrounding area. Cypress extracts were 1:20 w/v, while the other extracts were standardized

(Laboratoires Stallergènes, France). Atopy, defined by at least one positive skin response to allergens, was found in 469 children (61.8%). Among them, 54 children (39 boys), aged 26-184 months (95.4 ± 40.8), were sensitive to cypress extracts; i.e., 7.1% of all the children with asthma and 11.5% of the atopics. These 54 patients completed a questionnaire concerning asthma, symptoms suggestive of cypress allergy, and place of residence.

Except for two children with persistent asthma, the 52 remaining subjects suffered from frequent episodic asthma. They were all treated with inhaled corticosteroids, plus long-acting β_2 -agonists in 12 cases (22.2%). Asthma was mainly perennial but most of the symptoms were noted in winter, during which colds were described as exclusive triggers of acute episodes in the youngest. Antihistamines were prescribed in 18 children (33.3%) with allergic rhinitis. Two children reported spring conjunctivitis. Thirty-five children (64.8%) lived in apartments in the town center. Frequencies of responses to allergens in the 54 children are shown Fig. 1. Multiple skin sensitivities were found in 48 children (88.9%). The six children with isolated sensitivity to cypress were younger than the multiple-sensitive

In our region, 7.1% of children with asthma are allergic to cypress.

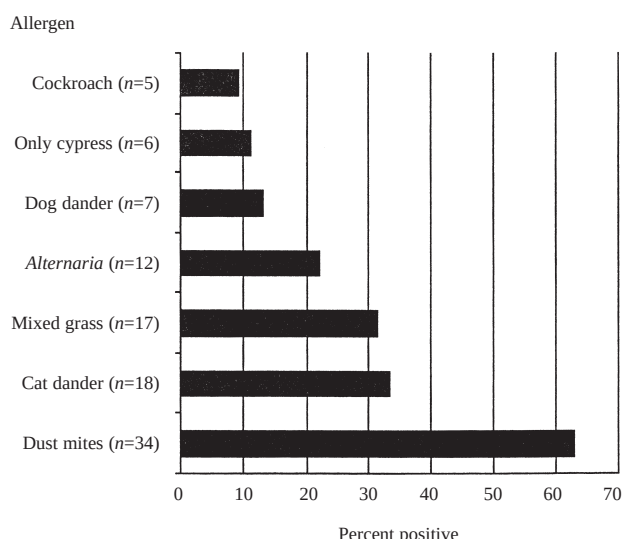


Figure 1. Frequencies of responses to allergens in cypress (*Cupressus sempervirens*)-sensitive children with asthma living in southeast France (n=54).

children (55.1 ± 25.4 months vs 100.4 ± 39.7 ; Mann-Whitney U-test, $P=0.009$) and were all living in the town center ($P=0.05$). It was not possible to correlate respiratory symptoms to cypress sensitivity.

This study demonstrates the relatively high frequency of cypress sensitivity in urban or suburban children with asthma in southeast France. This may be explained by a major exposure to cypress pollen in the atmosphere due to an increased use of cypress as ornamental trees in gardens and parks of Marseille and/or a possible interaction between air pollution and cypress allergens (4, 5).

The diagnosis of cypress allergy, mimicking seasonal infective respiratory disorder, is usually underestimated (3). This problem may be even more important in young children. However, because our children have multiple sensitivities, especially to allergens well known to trigger asthma, cypress sensitivity cannot be considered a direct cause of asthma. Instead, these results confirm that asthma is almost exclusively recorded in cypress-sensitive patients with sensitivity to other allergens (1). On the other hand, the surprising findings of young children with isolated sensitivity to cypress force us to be cautious in drawing conclusions.

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Occupational allergy to cyclamen

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Key words: cyclamen pollen; occupational allergy.

● FLORISTS, greenhouse workers, and floriculturists run an increased risk of developing both types I and IV occupational allergies to **IgE-mediated respiratory allergy to pollens.** decorative plants. Regarding type I allergy, the weeping fig (*Ficus benjamina*) is a pot plant notorious for causing sensitization in those handling it both occupationally and privately (1, 2). Cut flowers of the Compositae (daisy) family are also a frequent cause of occupational IgE-mediated sensitization in florists and horticulturists (3). Recently, many other decorative plants, such as Christmas cactus and *Stephanotis floribunda*, have been incidentally reported to cause IgE-mediated allergy (4, 5).

In this paper, we describe a floriculturist family of which the mother and daughter

developed IgE-mediated allergy to cyclamen pollen.

Patient 1. For 17 years, a 44-year-old woman worked together with her husband and later also with her daughter (patient 2) in a small-scale family business breeding cyclamen cultivars. To improve the characteristics of these indoor plants, substantial amounts (g) of pollen were manually collected and transferred from one (white) cultivar to another (red) cultivar to produce hybridization. High-level exposure to the cyclamen pollen was inevitable. After 10 years, the patient developed progressively symptoms indicating sensitization: sneezing, itchy, watery eyes, running nose, and even severe dyspnea. Mainly because of the last symptom, she was forced to quit her job. Her atopy history was negative.

Patient 2. This was the 17-year-old daughter in the family, who had assisted her parents at weekends during the last few years. Her atopy history revealed only allergy to cats. During her work in the greenhouse, she had developed symptoms of rhinoconjunctivitis, but not dyspnea.

Cyclamen pollen provided by the patients was used to prepare an aqueous extract (10% w/v). Skin prick tests (SPT) with this extract were highly positive in both mother and daughter, but negative in eight healthy controls, including the husband of patient 1. In a control experiment, SPT with aqueous extracts from cyclamen petals (10% w/v) and leaves (10% w/v) proved to be negative in both mother and daughter.

With the cyclamen pollen as a substrate in the RAST, specific IgE was found in the serum of both mother and daughter: 0.4 kU/l and 4.8 kU/l, respectively. These *in vitro* experiments were done at the Central Laboratory of Blood Transfusion in Amsterdam, The Netherlands. Total IgE was normal in both patients.

SPT with routine inhalant allergens were positive for house-dust mite and dog