

prompted to stop the immunotherapy with pollen allergen and continuing with house-dust-mite SLIT without complaints.

The presented case is unique in that, an anaphylactic reaction to high dose multi-pollen SLIT occurred 1 month after the preseasonal initiation of SLIT during the maintenance phase. On the other hand, 3 years earlier the same mixture but with low dose (100 IR) was used in this patient with no adverse reaction. This can be due to a dose-concentration environmental allergen exposure during the high spring pollen season and simultaneously using high dose multi-pollen SLIT.

There are no reported studies demonstrating efficacy and safety of SLIT using multiple allergens, instead there are clinical cases reporting anaphylaxis on using multiple extracts (4).

Many studies have demonstrated the efficacy and safety of SLIT in children mono-sensitized with pollen and perennial allergens (5, 6). In our opinion, multiple allergen SLIT should not be recommended and this case should draw a special attention on children receiving co-seasonal pollen SLIT especially when mixture of multiple extracts is concerned, and should be warned and closely followed-up for any potential systemic side-effects.

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Allergy due to *Phytolacca dioica*

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Key words: aeroallergens; entomophylia; hypersensitivity; IgE mediated; ornamental tree; *Phytolacca dioica*; Phytolaccaceae family; pollen-allergy; rhinoconjunctivitis.

The Phytolaccaceae (Pokeweed) family (Magnoliophyta division and Caryophyllales order) is formed by trees, bushes and herbs from 18 genera and almost 125 species (1–3). Some species are used for the food and dyeing industry, others have medicinal and ornamental properties (1, 2, 4). *Phytolacca dioica* (Ombu, Umbra tree, Elephant tree, Beautiful shade), a semideciduous tree native from the 'Pampas' grasslands in South America, is also a species cultivated in southern Europe, where it has adapted to regions with a Mediterranean climate (1–4). Generally it develops as an individual specimen, mainly in Europe where it has an orna-

mental use, it can attain a height of 12–18 meters (1, 2, 4). It is disseminated by frugivore birds (4) and it's in leaf all year. Male and female flowers are found on separate trees, with somewhat pendulous clusters and cream-colored. Fruit is a fleshy berry, purple-black in colour (1, 2). Pollen grains are medium sized ($23 \times 31 \mu\text{m}$) and usually they are tricolporate, spheroidal, or subprolates (3).

Other Phytolaccaceae genera includes species like *Phytolacca americana* or *decandra* (Pokeroor, Coakum, Pidgeonberry, Redweed, Poleweed root) a large perennial branching herb with white flowers, and a dark purple berry fruit (1). *In vitro* the pokeweed mitogen, is a glycoprotein isolated from *P. americana* (5).

We describe an infrequent case of a 40-year-old female who presented recurrent episodes of rhinoconjunctivitis related with the exposition to the pollen of *P. dioica*'s tree (it present in her garden) and sibilance episodes by night in June–July.

Skin prick test (SPT) with common aeroallergens that included *Dermatophagoides pteronyssinus*, *Dermatophagoides farinae*, *Phleum pratensis*, *Cynodon dactylon*, *Oryza sativa*, *Olea europaea*, *Platanus* spp., *Cupressus sempervirens*, *Pinus radiata*, *Phoenix dactylifera*, *Parietaria judaica*, *Artemisia vulgaris*, *Alternaria alternata*, *Cladosporium* spp., *Aspergillus fumigatus*, *Penicillium* spp., cat and dog dander, histamine and saline solution (Diater, ALK-Abelló, CBF-Leti, Stallergenes; Spain, Denmark, Spain, France) were performed with commercial extracts. Positive SPT results were obtained for house dust mite (*D. pteronyssinus*, *D. farinae*), *P. dioica* pollen tree (an extract prepared for Diater Laboratories, San Martín de la Vega, Spain) and histamine. Skin prick test with *P. dioica* pollen extract in five health person were negative. The basal espirometry parameters were: forced vital capacity (FVC) 4360 ml (108%), forced expiratory volume in 1 second (FEV1) 3700 ml (117%), FEV1/FVC 85%, forced midexpiratory flow rate (FEF .25–75%) 3550 ml/s (111%).

Total serum IgE was 98 UI/ml (Phadia, Uppsala, Sweden). Specific IgE antibodies levels against *D. pteronyssinus*, *D. farinae* and *P. dioica* pollen tree

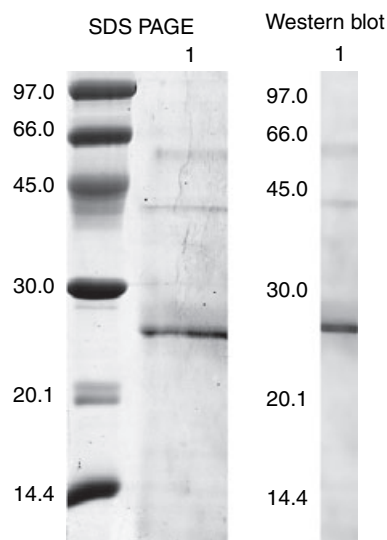


Figure 1. (A) Protein separation by 12.5% SDS PAGE (reducing conditions). LWM: molecular weight standard. Lane 1: *Phytolacca dioica* pollen

were 0.38, 0.35, and 3.2 IU/mL, respectively. Protein extracts of *P. dioica* pollen tree, were separated by sodium dodecyl sulphate-polyacrylamide gel electrophoresis (SDS-PAGE). The binding of IgE antibody to allergens was analyzed by Western blot using serum from the allergic patient and anti-human IgE peroxidase conjugate (Dako, Carpinteria, CA, USA). Protein separation by SDS PAGE showed three major bands with 26, 42, and 60 kDa and IgE-immunoblotting experiments performed with serum from this patient revealed an IgE-binding to these proteins (Fig. 1).

Phytolacca dioica is a frequent botanic specie in South America countries, present in different pollinic calendars (3, 6, 7). Although the pollination data are scarce, some authors suggest entomophylia (8).

Our results suggest that pollen of *P. dioica* can induce IgE-mediated allergic responses, we report a patient with rhinoconjunctivitis, and perhaps sibilance, caused by its pollen. The bibliographical search has not located similar communications about this pollen allergy.

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Allergic rhinitis in the Italian population evaluated through the national database of general practitioners

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Key words: allergic rhinitis; general practitioners; prevalence.

Allergic rhinitis (AR) is probably the most common IgE mediated disease. Its prevalence in the general population in industrialized countries is reported to range between 10% and 20% (1) with a certain

variability that is attributable to the definitions used, to the methods of diagnosis and to the type of survey. It is hypothesized that the prevalence of AR remains underestimated, as a large proportion of patients do not seek for medical advice or specialist consultation. It is also conceivable that general practitioners (GPs) are, together with pharmacists, the first healthcare professionals to whom patients refer for their rhinitis symptoms (2). Although GPs with their databases have been sometime involved in epidemiological studies (3, 4), there is so far no evaluation of the prevalence of AR directly made by GPs. Thus, we searched a national GP database in order to get information on rhinitis prevalence in adults. A cross-search was also made for the prescriptions of antihistamines.

The data were obtained from the 'Health Search/Thales Database' (HSD), an Italian general practice research database set up in 1998 by the Italian College of General Practitioners (SIMG). Health Search/Thales Database includes, in electronic format, the complete medical data of all patients registered in the list of the physician (4, 5). Briefly, the HSD contains patient's demographic details, medical records (e.g. diagnoses, tests and tests results, hospitalization), drug history and prevention information. A unique identification number links all

Prevalence of rhinitis evaluated by general practitioners.