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Parietaria pollen allergens (officinalis, judaica, lusitanica, creatica) are one of the most common causes of pollinosis in the Mediterranean (Spain, France, Italy, and Croatia). Parietaria has very long period of pollination, often reaching peaks of more than 500 grains/m3 of air at the beginning of June, and very strong allergenic properties. There is a significantly positive correlation for the newcomers between the intensity of the skin test reaction and concentration of specific serum IgE with the length of residence in the area, whereas autochthonous patients show a negative correlation between the age and intensity of hypersensitivity. This suggests that the environment encountered at birth may have a decisive role in the development of allergic respiratory diseases. Due to structurally similar pollen antigens in different Parietaria species, they are all equally useful in diagnosis and treatment of allergy, regardless of the pollen species to which the patient is sensitive or the prevalent species in the area. In our hands, specific immunotherapy with subcutaneous injections of partially purified, characterized, and standardized pollen extract of Parietaria allergen proved effective. It was possible to define an optimal maintenance dose of antigen per injection. During (years of) therapy, we observed an initial increase in total serum IgE concentration and increase in allergen-specific serum IgG blocking antibodies, decrease in allergen-specific serum IgE concentration and amount of histamine released from peripheral blood leukocytes challenged in vitro with the allergen, as well as in symptom and additional medication scores.

Key words: allergens; allergy and immunology; Croatia; desensitization, immunologic; hypersensitivity; hyposensitization, therapy; immunotherapy, allergen; pollen

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