Analysis of factors influencing sensitization of Japanese cedar pollen in asymptomatic subjects

Analysis concerning the risk factors influencing the sensitization of Japanese cedar pollinosis in asymptomatic subjects has not been done. Risk factors for sensitization to Japanese cedar pollen were analyzed among 73 subjects who do not develop symptoms of pollinosis. Their ages ranged from 18 to 60 years with the mean of 34.1 years. Possible factors influencing sensitization were investigated through a written questionnaire and doctors’ questioning. Japanese cedar specific IgE titers and Dermatophagoides pteronyssinus specific IgE titers in the serum were measured by CAP-FEIA (fluorescent enzyme immunoassay). Of the 73 subjects, 26 were sensitized to the Japanese cedar pollen. Among the eleven factors examined, sensitization to house dust mites was shown to significantly influence the sensitization. The sensitization rate to the pollen did not correlate to presence of other allergic diseases, history of rhinosinusitis, family history of Japanese cedar pollinosis, food preference, presence or absence of cedar trees in the surroundings, present living circumstances, childhood circumstances, age, sex, or smoking habits. Significantly high odds ratio for sensitization to house dust mite (6.63; 95% confidence interval: 1.76-32.2) was found. The present study indicates that sensitization to the pollen in the subjects without pollinosis is influenced by sensitization to house dust mite.