FEATURES OF POLLINIC SENSITIZATION IN PATIENTS WITH POLLINOSIS IN THE CITY OF DNIPRO

I. V. Koretskaia, Ye. Dytyatkovska

Abstract. Hay fever is an allergic disease of the mucous membranes due to hypersensitivity to airborne allergens, when their air concentration periodically becomes causative. The main task of the specific diagnosis of hay fever is to establish hypersensitivity to certain pollen allergens. Evidence of hypersensitivity to any allergens, including pollen, should include: 1) the relationship of clinical manifestations of an allergic disease and contact with certain plants (seasonality of exacerbations) 2) positive skin tests to pollen of certain plants; 3) the presence of specific serum IgE antibodies to these pollen allergens. The aim of our study was to study the nature of sensitization in patients with pollinosis, residents of the city of Dnipro. A survey of 104 patients with hay fever with clinical manifestations of rhinoconjunctivitis was conducted. The duration of pollinosis ranged from 1 to 38 years and averaged (9.59 \pm 0.77) years. To identify causative allergens, all patients underwent skin prick tests with standard pollen allergens. The results of the study showed that in the majority of examined patients with pollinosis (78.8 %) there was a sensitization to pollen of plants of summer-autumn pollination (third pollen wave). Sensitization to plants of the second pollen wave (spring-summer pollinosis) was found only in 7.7 % of examined patients. It should be noted that 14 patients with pollinosis (13.5 %) had sensitization to pollen of plants of both the 2nd and 3rd pollen waves, and in these patients sensitization to the largest number of allergens was detected from 8 to 15. An analysis of the structure of sensitization showed that the most common combination was sensitization to ragweed pollen and sunflower pollen (84.9 %), wormwood (75.3 %) and cyclachaena (69.9 %); sensitization to pollen of sunflower — in combination with ragweed pollen (98.8 %), wormwood (81.3 %), cyclachaena (75 %); wormwood pollen — in combination with ragweed pollen (98.6 %), sunflower (91.5 %) and cyclachaena (77.5 %). Sensitization to pollen of cyclachaena was most often combined with sensitization to pollen of ragweed (98.5 %), wormwood (83.3 %), sunflower (90.9 %) and corn (56.1 %); and sensitization to corn pollen — with ragweed pollen (97. %), wormwood (80.4 %), sunflower (87.0 %) and cyclachaena (80.4 %). In this case, sensitization to the pollen of meadow herbs occurred in a significantly smaller number of patients. For example, sensitization to ragweed pollen was combined with sensitization to ryegrass pollen in only 14.0 % of patients, to timothy, fescue and wheat grass — in 12.9 %. However, 72.2 % of patients with sensitization to ryegrass also had sensitization to ragweed. Sensitization to timothy most often acted in combination with sensitization to ryegrass (88.9 %), fescue (83.3 %), wheat grass (77.8 %) and ragweed (66.7 %). And sensitization to the foxtail was combined in 100 % of cases with sensitization to timothy, in 90.9 % — with hypersensitivity to the fescue, wheat grass, hedgehog and ryegrass, and in 72.7 % — to ragweed.

Key words: hay fever, sensitization, pollen allergens.

E. V. Koretskaia

allergist KU "Dnepropetrovsk Clinical Association of Emergency Medicine" Dnieper City Council ",

Assistant, Department of Occupational Diseases and Clinical Immunology State Institution "Dnepropetrovsk State Medical Academy of the Ministry of Health of Ukraine" 49006, Dnipro, st. Vladimir Antonovich, 65,

49044, Dnipro, st. Vladimir Vernadsky, 9.e-mail: el.kor.allergy@gmail.com

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