



EPIDEMIOLOGY

ARTEMISIA IS THE MOST IMPORTANT RISK FACTOR OF ALLERGIC DISEASE IN DANIU EREA, YU LIN, CHINA

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Background: In the past decades, the prevalence of allergic disease such as rhinitis (AR) and urticaria, has been dramatically increased in Yu Lin, a city in North China.

Aims: To know the epidemiological characteristics of the affected population and to analyze the relevant risk factors, an investigation on the prevalence of AR in the population of Daniu Area, most of which are immigrant workers in North China was performed.

Methods: A total of 359 subjects with AR, 122 volunteers (aged from 20 to 60 years) of immigrant workers diagnosed as AR in Daniu underwent intradermal testing using a panel of 3 standardized allergen extracts. The panel comprised extracts of Artemisia sp., Artemisia annual L., and Artemisia ordosica krasch. Subjects with positive skin responses were further tested for their serum concentrations of IgE antibodies against Artemisia.

Results: 90 of 122 had positive intradermal reactions to Artemisia and 77 of them donate serum for IgE testing. The prevalence of sensitization to pollen in voluntary workers with allergic rhinitis in Daniu was 73.8%. The prevalence of specific IgE was 63.1%.

Conclusions: Artemisia pollen is the most prevalence inhalant allergen in Daniu, north China, which should receive more attention by the medical care givers. The allergic effect is time dependent and environmental factors facilitate the development of allergic diseases. Now environmental exposure rather than genetic factors are the most like explanation for these allergic diseases. Effective intervention measures to reduce allergens of Artemisia pollen should be administrated.

