

Original Paper

Prevalence of fungi in patients with allergic rhinitis in Shahrekord, Iran (2009)

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Abstract

Background and Objective: The identification of fungi agents causes allergic rhinitis is crucial for the appropriate diagnosis prophylaxis and treatment of patients suffering from the disease. This study was done to evaluate the prevalence of fungi in patients with allergic rhinitis in Shahrekord, Iran.

Materials and Methods: This case-control study was done on 124 patients whom referred to Kashani hospital in Shahrekord, Iran during 2009. 62 patients with allergic rhinitis were selected as case group and 62 patients without allergic rhinitis were considered as controls. Direct smear and culture of nasal secretion were performed to identify the fungi. Also IgE level's were measured for all participants. Data were analyzed using SPSS-16, Chi-Square and independent t-tests.

Results: The fungi from culture medium of nose excretion were isolated from 15 (24%) cases and 5 persons (8%) in control group. The most common isolated fungi were *Aspergillus* (8%) and *Penicillium* (6.5%). In direct smear the fungi agent were found in 23% and 8% in case and control groups respectively. The IgE titre in 31% of cases with allergic rhinitis was higher than 100 IU/mL, but this titre of IgE only was seen in 4.8% of control group ($P < 0.05$).

Conclusion: This study showed that the fungi can be considered as induce of allergic rhinitis.

Keywords: Allergy, Rhinitis, Fungi, *Aspergillus*, *Penicillium*

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