

The Prevalence of Allergic Rhinitis among 11-15 Years-old Children in Shiraz

Hedaiat Akbari¹, Reza Farid-Hosseini², Sara Miri², Reza Amin^{1*}

¹Division of Allergy & Clinical Immunology, Department of Pediatrics, Shiraz University of Medical Sciences, Shiraz, ²Department of Immunology, Bu-Ali Research Center, Mashhad University of Medical Sciences, Mashhad, Iran.

ABSTRACT

Background: Allergic rhinitis is one of the most common forms of allergic disorders affecting children. The prevalence rate of allergic rhinitis differs among countries and even among regions within the same country. **Objectives:** To determine the prevalence of childhood allergic rhinitis and the presence and significance of eosinophilia in nasal secretions. **Method:** 4584 children aged 11-15 years-old of both sexes with allergic rhinitis were studied. The study was done during a four-season period. After physical examination of the nose, smear was taken from nasal secretions and it was stained. The results compared with nasal smears related to 340 healthy children controls. **Results:** 445 cases (9.7%) were diagnosed as having allergic rhinitis, on the basis of clinical criteria. Significant nasal eosinophilia was present in 274 (62%) of children with allergic rhinitis. 226 students (5.8%) of Shiraz school children had proven or classic allergic rhinitis. **Conclusion:** Allergic rhinitis is one of the major health problems among children in Shiraz. Eosinophilia of nasal secretions had a diagnostic specificity of 96% and sensitivity of 62% and seems to be having a moderate value as screening test for nasal allergy.

Keywords: Allergic Rhinitis, Eosinophilia, Prevalence