

Assessment of the effect of non-asthmatic allergic rhinitis on pulmonary functions - A prospective case-control study

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Abstract

Introduction Allergic rhinitis, beginning from childhood, is a global health problem. According to the literature, allergic rhinitis has been found to be associated with asthma and other allergic manifestations. In this study we like to find out the significance and prognostic importance of pulmonary function test (PFT) in allergic rhinitis. **Design and setting:** The study was carried out over a period of 2 years, with 63 cases and controls each. Subjects in the age of 20-55 years with allergic rhinitis and SFAR score of ≥ 7 were included as a case. Participants were interviewed and sent for PFT. Controls were recruited from the retrospective data of healthy individuals with pulmonary function parameters done for health checkup. These controls had an SFAR score of < 7 . **Main outcome measures:** Clinical data and PFT of cases and controls was used for the study. SFAR score was used to recruit the cases and controls. All the data obtained were analyzed and compared between cases and controls. **Results** The mean age of the cases and controls were 33.17 ± 10.817 and 44.41 ± 7.4 , respectively. Majority of cases and controls were males (60.3% and 57.1%). A statistically significant difference in FEF₂₅₋₇₅% among cases and controls was noted ($p=0.00$), thus proving probability of developing small airway obstruction in subjects with allergic rhinitis. **Conclusion** Subjects with allergic rhinitis have a probability of developing small airway obstruction with subclinical changes, hence necessitating the need of regular follow-up.

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