

DOI: 10.5152/TurkThoracJ.2019.276

[Abstract:0449] PP-064 [Accepted:Poster Presentation] [Asthma Allergy]

## The Relationship between Family History and Skin Test Positivity, Comorbidities and Smoking Habits in Asthma Cases

Yonca Sekibağ, Benan Müsellim, Bilun Gemicioglu

Department of Pulmonology, İstanbul University-Cerrahpaşa School of Medicine, İstanbul, Turkey

**Objectives:** We know the importance of genetic factors in asthma pathogenesis but we don't have enough information about how important are the details in family history. For this reason, family history features were evaluated in adult asthma cases and the relation between the medical history and skin test results of these cases were investigated.

**Methods:** 417 patients with definite asthma who were followed for at least 1 year were included in our study. 287 (68.8%) of the patients were female and 117 were male. The mean age was  $41.3 \pm 14.5$ . 69.5% did not smoke at all, 18% ex-smoker and 12.5% applied while they were smoking.

**Results:** 168 (40.3%) of the patients have a history of asthma in the family. In 97 of them (23%) had 1 relative, in 46 of them (11%) had 2, in 20 of them had 3 and in 1 of them had 4 relatives. In 99 of them (23.7%) had asthma in 1st degree relative, in 62 of them (14.9%) had 2nd degree relative and in 51 of them (12.2%) had 3rd degree relative. Skin test was positive in 181 (71.8%) of 252 patients whose skin test results were reached. 60.3% were positive for house dust mite, 22.2% were positive for cat, 20.7% were positive grass pollen, 18.3% were positive for dog, 17.9% were positive for tree pollen, 15.9% were positive for fungus. There is no relationship between sex and smoking habits with presence of asthma in the family ( $p > 0.05$ ). Coronary artery disease from comorbidities is more common in those with asthma family history ( $p = 0.014$ ). There was no relationship between skin test positivity and family history of asthma ( $p > 0.05$ ). Patients whose second-degree relative had asthma history had more allergies to pollen ( $p = 0.02$ ) and dog ( $p = 0.006$ ).

**Conclusion:** In asthma cases, family history and prick test positivity were not found to be related. It is concluded that there is a need for more studies with higher cases to emphasize the relationship between coronary artery disease, dog allergy, grass pollen allergy and family history of asthma.

**Keywords:** Asthma, history of family, allergy, prick test, comorbidities