


The effects of mold sensitivity on the clinical characteristics of adult asthmatic patients

[The original paper](#)  contains 13 sections, with 7 passages identified by our machine learning algorithms as central to this paper.

Paper Summary

SUMMARY PASSAGE 1

Introduction

Direct associations between increased fungal exposure and a loss of asthma control are numerous [4]. Previous studies have suggested an increased risk of asthma development after mold exposure at an early age [2,5]. McSharry et al. found that high environmental mold exposure was associated with poor lung function [6].

SUMMARY PASSAGE 2

Setting And Participants

Patients meeting relevant criteria who were admitted to the department of immunology and allergic diseases in the outpatient clinic between June 2013 and June 2018, and having an asthma diagnosis according to Global Initiative for Asthma (GINA) guidelines [1] were retrospectively evaluated from their paper files. The hospital has electronic records for all patients. In this department, doctors also collected and filed separate paper files for each patient.

SUMMARY PASSAGE 3

Data Collection

Patients' demographics, smoking history, body mass index (BMI), asthma history, asthma duration, age at asthma diagnosis, comorbidities, presence of allergic rhinitis, sinonasal polyposis, drug allergies, systemic corticosteroid use, and lifetime hospitalization/emergency department visits were obtained from manually filled records. PFT and SPT results performed concurrently on the same day were recorded.

SUMMARY PASSAGE 4

Statistical Analysis

Categorical variables are expressed as absolute and relative frequencies, whereas quantitative variables are expressed as means and standard deviations. To evaluate the relationship between independent variables (i.e. demographic variables, asthma history, asthma clinical course, and PFT) and dependent variables, Pearson's chi-squared test was used. For categorical variables and numerical variables, one-way analysis of a variance test was used with a posthoc Tukey test.

SUMMARY PASSAGE 5

Results

Table 3 shows the multinomial logistic regression analysis findings of other groups in comparison with the non-sensitized group. The absence of drug allergies [odds ratio (OR): 8.794, 95% confidence interval (CI): 1.499-51.603], absence of ED admission (OR: 3.351, 95% CI: 1.116-10.065), and presence of occupational exposure (OR: 7.943 CI: 1.383-45.608) were more associated with sensitization without molds as compared to patients with non-sensitization. Separately, shorter asthma duration (OR: 1.795, 95% CI: 0.829-3.890), absence of SNP (OR: 3.791, CI: 1.207-11.903), presence of AR (OR: 4.132, 95% CI: 1.436-11.886), and well-controlled asthma (OR: 2.647, CI: 1.096-6.392) were more associated with mold sensitivity than with non-sensitization.

SUMMARY PASSAGE 6

Discussion

The relationship between mold sensitivity status and asthma has been previously studied. Many prior studies showed that mold had a negative impact on asthma symptoms and asthma control [2]. A recent study that evaluated the relationship between mold burden in house dust and asthma control found that the concentrations of some molds detected in dust samples from the homes of asthma patients were negatively associated with parameters of asthma control in male subjects, but not in female ones.

Strengths And Limitations

In conclusion, asthmatic patients determined to be mold-sensitive by SPTs were found to have better asthma symptom control. The measurement of the mold exposure that patients encounter in their unique environments can lead to better accuracy regarding the effects of mold on asthma control and comorbidities. Based on the findings of this study, it should be kept in mind that mold sensitization in adult asthmatics is not always a poor prognostic factor.