

Clinical Characteristics of Adult Asthma

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Allergen sensitization and Th2 responses are the major factors predisposing to the development of allergic asthma.^{1,2} This was confirmed by a Korean cohort study that enrolled subjects living in urban (Seoul) or rural areas.³ The present study summarized the clinical features of adult patients with asthma who were admitted to a single university hospital in an urban area (Seoul) over a 6-year period.⁴ The authors reported that the atopy rate was 50%, which was higher than that reported several years earlier in the same city.^{5,6} However, asthma has heterogeneous phenotypes, and the atopy rate in Korea is increasing⁷ and differs according to patient age, with significantly higher atopy rates in the younger population.³ Therefore, if the authors were to dissect the clinical features according to the age of the study subjects, the results may differ.

The skin prick test is an essential method for screening atopy status and identifying the causative agents. The authors used 45 antigens to identify the causative agents. Although the authors did not list the skin prick test antigens, 45 inhalant allergens are not enough to identify the causative agents in adult asthmatic patients considering the major causative allergens in our environment.⁸ The clinical features of asthmatic patients may differ depending on the sensitizing allergens. In this study, the authors grouped all pollens into one group, which may give wrong information, as three seasonal pollen groups exist in Korea—tree, grass, and weed pollens—and sensitive patients show increased eosinophil counts with symptom exacerbation during the corresponding pollen season. Moreover, the results may differ depending on whether the patients are sensitive to multiple indoor and outdoor allergens or to a single allergen. We suggest comparing the patients sensitive to house dust mites alone with those who have combined sensitivity to one specific pollen or animal dander independently. More ideally, in most studies, the enrolled subjects were identified by positive bronchial challenge tests to the corresponding allergen.⁸

No published data suggest that asthmatic patients sensitized to fungal allergens present with a more severe phenotype. From this study, it is not clear whether the patients were sensitized to

fungal allergens alone or to multiple allergens, including house dust mites and pollens. Considering the cross-reactivity between *Alternaria* and *Cladosporium* spp,^{9,10} the same study subjects may have been sensitive to both groups. Moreover, the clinical severity of asthma depends on various other clinical parameters, such as smoking, the duration of asthma, and co-morbid conditions, especially chronic rhinitis.¹¹ Furthermore, the severity of asthma can be determined by asthma control status, episodes of asthma exacerbations, and anti-asthmatic medication requirements.^{12,13} A Korean cohort study suggested that smoking status, male gender, and longer duration of asthma are significant predisposing factors for severe asthma.¹⁴

This study provides recent data on the clinical characteristics of adult asthma in a single university hospital for a 6-year period. Further studies are needed in a larger multicenter cohort that dissects the clinical phenotypes, including the clinical course and therapeutic response.

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