KAAACI Symposium 2: Elderly asthma

Immune gets old: Immunosenescense and elderly asthma

Division of Allergy and Clinical Immunology, Department of Internal Medicine,
Seoul National University Bundang Hospital, Seoul National University College of Medicine;
Institute of Allergy and Clinical Immunology, Seoul National University Medical Research Center

Yoon-Seok Chang

Population aging is a global issue, especially in Asia. Korea is aging faster than any other developed country. The prevalence of asthma has two peaks - in childhood and in the elderly. Elderly asthma which has different features from childhood asthma has been increasing in the Asia-Pacific region. The prevalence of elderly asthma is 6.8～12.7% in Korea. The socioeconomic burden of asthma, especially in the elderly is high. It is important for us to prepare for the allergic diseases in an aged society.

Risk factors of asthma could be atopy, airway hyperresponsiveness, smoking, obesity, and so on. Sensitization to inhalant allergens showed a different feature in the elderly. Interestingly atopy may not be the risk factor for elderly asthma. Recent studies showed that the sensitization to Staphylococcal enterotoxin and other proteins such as serin protease like protein D could be risk factors for elderly asthma. Disturbance of regulatory T cell subpopulations and microbial changes may be involved in the pathogenesis of the elderly asthma. Microbiome studes showed different features in young and in the elderly.

Inhaled corticosteroid is the key component in the treatment of elderly asthma. According to the control status of asthma, long-acting beta2 agonist, long-acting muscarinic antagonist, leukotriene receptor antagonist, or xanthine could be considered in addition to increasing the dose of inhaled corticosteroid,

Although recent therapeutic approaches such as anti-IgE or anti-IL5 monoclonal antibodies are available, the treatment strategy based on the pathogenesis and comorbidity of the elderly asthma is still needed.