

Preface

Severe Asthma: A Heterogeneous Disease



Rohit K. Katial, MD, FAAAAI, FAAAAI, FACP
Editor

Severe asthma is a heterogeneous disease characterized by variable airflow obstruction with cough, dyspnea, and wheezing. Such patients are at risk of exacerbations, which may lead to hospitalization, and in rare circumstances, death. Over the past decades, the prevalence of severe asthma has been estimated to be around 5% to 10% of the total asthmatic population. However, the exact prevalence is not known because of the lack of an accurate and consistent definition of severe asthma. In the literature, a distinction is sometimes made between “difficult-to-control asthma” and “severe refractory asthma.” In patients with difficult-to-control asthma, the lack of asthma control is generally due to other factors than asthma itself, such as nonadherence to treatment or comorbidities. On the other hand, in patients with severe refractory asthma, the disease remains uncontrolled despite addressing and removing all possible factors that might aggravate the underlying disease. Management of severe asthma is associated with a high and disproportionate consumption of health care resources. In addition, there exists a substantial unmet clinical need. Therefore, much research is currently ongoing on topics such as assessment and evaluation, phenotyping, and novel treatment modalities for severe asthma.

The majority of patients with asthma can be treated effectively with the currently available medications. However, a proportion of patients labeled as “severe refractory asthma” remain a challenge for the treating clinician. Recently, monoclonal antibodies targeting interleukin-4 receptor, interleukin-5, and interleukin-13 have demonstrated efficacy by reducing exacerbations when administered in addition to standard therapies in severe asthma. Highlighting the importance of phenotyping, these therapeutics have enhanced efficacy in subjects selected based on elevated eosinophils or T helper 2-associated markers. Therefore, it becomes imperative for the clinician dealing with these difficult patients to have a more complete understanding of this group’s heterogeneity in order to target therapy appropriately. This issue on severe asthma provides a

comprehensive review covering genetics, physiology, biomarkers, comorbidities, phenotypes, psychosocial factors, as well as traditional and emerging therapies.

Rohit K. Katial, MD, FACAAI, FAAAAI, FACP
National Jewish Health
1400 Jackson Street
Denver, CO 80206, USA

E-mail address:
katialr@njhealth.org