Bronchial Asthma

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The last few decades have seen a rise in the prevalence of allergic diseases, including asthma and allergic rhinitis; both are common chronic diseases that affect the quality of life of patients and have a significant economic impact. It is estimated that 300 million people worldwide suffer from asthma and this figure is projected to rise to 400 million by year 2025. Asthma accounts for approximately 500,000 hospitalizations each year, with around 250,000 deaths annually attributed to the disease. Allergic rhinitis, previously regarded as a trivial disease affects between 10% and 30% of all adults and as many as 40% of children. The prevalence of rhinitis is around 35% in Europe and Australasia and it affects approximately 60 million people in the United States, and its prevalence is increasing. Allergic rhinitis has a considerable effect on quality of life and can have significant consequences if left untreated causing fatigue, headache, cognitive impairment and other associated symptoms.

In India, asthma imposes a substantial burden; though there is a paucity of appropriate epidemiological data to determine prevalence for asthma or the allergic asthma. However, a multicenter study by the Asthma Epidemiology Study Group of the Indian Council of Medical Research found the prevalence of bronchial asthma in Indian adults to be 2.38%. In India 20 to 26% people suffer from allergic rhinitis and symptoms of rhinitis were present in 75% of children and 80% of asthmatic adults. With present Indian population estimated to 1 billion plus, number suggest enormity of the burden of rhinitis and asthma in the country. But despite imposing substantial burden both diseases still remains under-recognized, underestimated and under-treated, in India.

Presently anti-inflammatory and bronchodilator treatments, concurrent with other drugs such as anti-leucotrienes, are effective for most of asthma patients, but these therapies fail to provide symptomatic relief to all the patients. Hence despite varied therapeutic options currently available, many asthmatic patients with moderate-to-severe persistent asthma continue to experience symptoms even after therapy with inhaled or systemic corticosteroids; accounting for 217,000 emergency room visits and 10.5 million physician office visits every year.

Although difficult-to-treat patients represent less than 20% of the asthma patient population, they consume a disproportionate share of asthma care resources. As these patients require frequent/unplanned medical attention and seek care in emergency departments and other urgent care facilities. The Global Asthma Physician and Patient Survey not only defined an unmet need in asthma treatment, but also revealed that there was an direct relationship between the quality of physician–patient communication, the level of treatment side effects and the extent of patient compliance, highlighting a clear need for improved patient-focused care in asthma.

Patients with severe persistent asthma who are inadequately controlled despite Global Initiative for Asthma (GINA) step IV therapy, are a challenging population with significant unmet medical need. Several reasons have been quoted for this non-maintenance of therapeutic effects, such as patient non-adherence, poor inhalation, lack of response to pharmacotherapy, presence of co-morbid diseases, triggers such as respiratory infections (particularly viral).
This subset of patients who experience frequent exacerbations requiring emergency department visits or hospitalizations, may benefit from novel therapies like anti immunoglobulin-E (IgE) antibodies, cytokine modulators and DNA vaccinations; designed to target specific mechanisms underlying airway inflammation.\(^9\)

This special issue of JAPI focuses on various relevant issues that we face in our day to day practice. Clinical presentations, management of stable and acute attack, asthma with its co morbidities are discussed, smoking and asthma and steroid resistant asthma is dealt in detail.

Montelukast has seen decade of its use, with acceptance in beginning with slight repulsion and now use with anti histaminic and is discussed in details. Newer therapeutic options will give insight to future strategies in asthma management.

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References