

New treatment modalities in pulmonary medicine

Dear colleagues,

The past 20 years have been witness to remarkable progress with respect to the treatment of pulmonary diseases. However, troubling realities exist despite better outcomes. The focus of this supplement is to review new treatment modalities in pulmonary medicine.

It has long been known that asthma usually has an early onset with intermittent symptoms, has a good response to inhaled therapy, and is often associated with other allergic diseases, whereas chronic obstructive pulmonary disease (COPD) is of late onset, has progressive symptoms, a poor response to inhaled therapy, and is usually associated with smoking. However, real life data have shown that some patients can occasionally have features of both diseases, and this condition has been termed the asthma-COPD overlap syndrome (ACOS). This new terminology is discussed by Dr.Kocakaya in this issue [1].

There is an executive summary written by Dr. Peker. This is entitled “Obstructive Sleep Apnea and Driving Risk: The current Turkish legislation, controversies and future perspectives”. This article updates recommendations based on the current literature in this field [2].

Several novel and potentially less invasive methods for bronchoscopic lung volume reduction have been developed over past years for patients with advanced emphysema. The choice of endobronchial therapy largely depends on the distribution of the emphysema and the presence or absence of interlobar collateral ventilation. Dr. Olgun Yildizeli highlights the information about endobronchial coil and valve implementation in COPD patients [3].

New treatment approaches are evolving in the treatment of severe asthmatics. The efficacy of bronchial thermoplasty is promising for patients whose asthma symptoms are not controlled despite medical therapy. Dr. Sagmen reviews the

literature about bronchial thermoplasty and reports which patient will respond to bronchial thermoplasty [4].

COPD guidelines recommend the combined use of inhaled long-acting β_2 -agonists (LABAs) and long-acting muscarinic antagonists (LAMAs) if symptoms are not improved by a single agent. Dr. Balcan has written about the latest developments in bronchodilator treatment in COPD patients [5].

People with asthma and COPD are considered to be at risk for complications of influenza. This virus has been responsible for a major increase in morbidity and mortality during epidemic periods, especially in such patients. Each year, an average of 20,000 people die of influenza-related illness in the United States [6]. Vaccination remains the primary preventive strategy. Annual influenza vaccination in COPD decreased the rates of hospitalization, pneumonia, and deaths among the elderly and people with high-risk conditions. The other major impact on population health is pneumonia. The Centers for Disease Control and Prevention recommend pneumococcal vaccination for all patients \geq 65 year of age as well as for younger patients with chronic medical illnesses, including COPD. I summarize recent recommendations about influenza and pneumococcal vaccine [7].

Improved survival rate in patients with acute respiratory failure requiring mechanical ventilation have recently resulted from the developments in respiratory intensive care units. New data are emerging daily from intensive care units. In addition to the current information about noninvasive mechanical ventilation, new modalities in intensive care units such as ultrasonography, ECMO, hypothermia are reviewed by Dr.Karakurt *et al.* [8,9].

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Guest Editor for this special issue

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