European Respiratory Monograph: The Spectrum of Bronchial Infections

Edited by Francesco Blasi and Marc Miravitlles.

Because mild respiratory infections are ubiquitous in the adult population, infections of the bronchial tree, and their impact on the progression of chronic lung diseases, continue to remain an arena for intense research. These infections have become increasingly accepted as one of the most important contributory and prognostic factors in the ultimate outcome of a wide spectrum of respiratory conditions. Underrecognized by many clinicians, the effect of bronchial infections—from neonates to the elderly population—often proves to be a major predictor of morbidity and mortality. In this monograph, the editors have assimilated an impressive array of experts with extensive clinical and research experience, drawing well-evidenced conclusions at the end of each chapter. Most chapters also include tables with invaluable clinical information and an extensive list of references to allow for further exploration of the literature by the reader.

The Spectrum of Bronchial Infections includes 13 captivating chapters that explore all aspects of bronchial infections, appealing equally well to clinicians of varied backgrounds and experience. It begins with a focus on the various causes and treatments of acute bronchitis.

Through a comprehensive review of the literature, the author clearly demonstrates that antibiotics should not routinely be used for acute bronchitis. Each treatment modality is discussed and associated with a level of evidence regarding its utility. Communication tips are provided for the clinician related to appropriate treatment options.

Chapters 2–10 focus on various aspects of chronic bronchitis and chronic obstructive pulmonary disease (COPD). Defined by chronic or recurrent bronchial mucus hypersecretion with associated histopathological changes, COPD afflicts millions of persons worldwide, with an expanding prevalence in an increasingly aging population. The importance of bacterial and viral infections is well known in cystic fibrosis and chronic bronchiectasis. In chronic bronchitis and COPD, this link is less clear but under increasing scrutiny. Potential mechanisms for the occurrence of infection in chronic bronchitis and the increased susceptibility of some individuals for infections is discussed in detail; this phenomenon is probably related to a combination of both pathogen and host factors. The authors also elucidate a unique adaptation to the immune system by certain bacteria, which limits an individual’s ability to clear potentially pathogenic microorganisms, thereby setting up a milieu for acute and chronic respiratory infections to take hold.

In focusing predominately on chronic bronchitis and COPD, this monograph also explores the contributory role of bronchial infections to a systemic inflammatory response and the future development of extrapulmonary diseases, including diabetes mellitus and atherosclerosis. It also reviews the humoral substances produced by the airway epithelial cells, including inflammatory mediators and chemotactic factors. Finally, it concludes with a discussion centered on chronic bronchiectasis not associated with cystic fibrosis. Although the author’s conclusions are based on comparatively small studies and expert opinion, they nevertheless provide valuable insight into an often difficult-to-treat clinical entity. Most importantly, the role of inhaled antibiotics is discussed in detail, allowing the clinician to understand better the balance between effective treatment and the development of antibiotic resistance, which continues to be a difficult problem worldwide.

The Spectrum of Bronchial Diseases is as a comprehensive and concise clinical reference. The editors have compiled chapters from leading experts on many aspects of bronchial disease. This monograph should challenge the reader’s preconceived notions with regard to the etiology, pathophysiology, and treatment of the aforementioned conditions. It provides an up-to-date source of information on the importance of and the potential long-term implications associated with acute and chronic bronchial infections, and it should cause savvy clinicians to pause and reevaluate all aspects of their management of patients with acute bronchitis, chronic bronchitis, COPD, cystic fibrosis, and chronic bronchiectasis.

Note

Potential conflicts of interest. Both authors: No reported conflicts.
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