ventilation, smoking cessation, oxygen therapy, and surgical therapy. In addition, there are some very good chapters on pharmacotherapy, including chapters on anticholinergic, β2 agonists, corticosteroids, phosphodiesterase 4 inhibitors, antibiotics, antioxidants, and mucolytics, each written by acknowledged experts in the field. There are some useful chapters on end-of-life and palliative care. Also, economic burden, pharmacoepidemiology, and social and behavioral impacts of COPD are comprehensively covered. COPD guidelines are extensively reviewed by Calverley, who has been involved in their development.

Section 7 is perhaps the most exciting section. It includes pharmacotherapy and developing therapies such as protease inhibitors, retinoids, and chemokines. These give us a nice insight into possibilities for future respiratory drugs.

Overall, the editors succeeded in accomplishing their mission. I don’t think that this will be a major resource for scientists who focus on selected aspects of COPD biology. However, it could be an extremely helpful and very useful resource for those who practice and those involved in translational research, all trying to improve the management of patients who suffer with COPD.

James F Donohue MD
Division of Pulmonary and Critical Care Medicine
University of North Carolina
at Chapel Hill
Chapel Hill, North Carolina

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Pulmonary Disorders of the Elderly: Diagnosis, Prevention, and Treatment.

Pulmonary Disorders of the Elderly is the creation of authors who have the collective experience of over 250 years in treating patients with pulmonary and cardiac disease. Written primarily for physicians, it is a small textbook that contains crucial information to help older adults avoid preventable pulmonary disease and guide therapeutic interventions for those already diagnosed with chronic or acute lung disease.

There are 15 chapters altogether, presented in a logical sequence. Chapter 1, “The Aging Lung,” sets the stage for subsequent chapters. Understanding age-associated physiologic change in lung function is a key ingredient in caring for elderly pulmonary patients. The information about aging lungs is artfully presented. An explanation for age-associated functional change is offered when known. Physiological change related to structural alteration is presented accurately and succinctly. The author provides technical information without belaboring the point. A delightful surprise at the end of the first chapter (and in each subsequent chapter) was the bibliography/reference section. Looking to see if references were current, I was immediately drawn to a 1993 publication date. My concern dissipated when the citation ended with the following quote from the author: “An authoritative chapter on the subject. Although more than a decade old, most of the information is still relevant.” From that point on the book ceased being a medical compendium and became a personal message to all who care for older adult patients. I was excited to read more.

The 2nd chapter deals with the 2 most frequent presenting symptoms: dyspnea and cough. The author’s common-sense approach, which involves more reliance on a good history and physical examination initially to narrow down the potential cause of the symptom, is refreshing. An outline, in table format, lists specific observational findings related to dyspnea, and pairs them with potential diagnoses. Another table gives added meaning to the “look, listen, and feel” approach to patient assessment, with a discussion of percussion, palpation, and auscultation. A third table presents a step-wise approach to patient evaluation and factors in the diagnostic tool, the cost of the procedure ($ through $$$$), potential risk to the patient, and the need for a consultation. Acute versus chronic symptoms are discussed with suggested causes and potential solutions. The 2006 American College of Chest Physician guidelines are generously added to the text, interspersing the current approaches to treatment with tried-and-true therapeutic interventions. This, from the collective wisdom of renowned physicians, serves to set this book apart from others.

Chapters 3 through 12 each cover an individual disease process. Though not written in a “cookie cutter” manner, most follow a similar format, starting with the disease process and progressing through etiology, diagnosis, treatment, and summary. The majority of chapters have very instructive tables, which range in content from recommended drugs and dosages to common appearance of parenchymal abnormalities on imaging studies to differentiating asthma from chronic obstructive pulmonary disease (COPD) in the elderly. Many chapters include algorithms for helping to make treatment decisions. Three chapters are devoted to pneumonia, referred to as “the friend of the aged” by Osler in his 1901 edition of The Principles and Practice of Medicine.

Chapters 3 through 7 cover various forms of infectious disease. This is fitting, as “infection is exceeded only by atherosclerosis as the most frequent cause of death in people 85 and older.”

Chapters 8 through 10 are important in their coverage of venous thromboembolism, interstitial lung disease, and congestive heart failure, respectively. The risk of developing any of these conditions greatly increases after age 50. The terminology in these chapters is up to date, and the suggested therapeutic interventions include newer drugs. Current recommendations for prophylaxis and the use of video-assisted thoracoscopic lung biopsy to establish a diagnosis of interstitial lung disease are covered. A figure that subdivides patients with heart failure into 4 categories, based on perfusion/congestion status, is presented for guiding therapy. The recommendations for nonpharmaceutical therapy in congestive heart failure are specific, and the section on pharmacotherapy discusses an important consideration when treating any disease process in elderly patients: avoidance of polypharmacy!

In Chapter 11 the authors point out that since about 10% of the population is believed to have COPD and another 10% are probably asthmatic, it is possible that 1 in every 5 patients seen by a primary care physician may have airway disease. The fact that asthma and COPD are so common in older adults gives added importance to this chapter. One major concern voiced by the author is that elderly patients with asthma, COPD, or emphysema are often misdiagnosed or never diagnosed, and symptoms of dyspnea, cough, and wheezing are attributed to aging. In addition to a discussion of prevalence, diagnosis, treatment, and prognosis, Chapter 11 includes a chart to help differentiate asthma from COPD in patients over age 40. Newer medications are discussed, and a short paragraph on future trends, including drug categories under investigation, adds to this text. Of interest, visiting nurses are mentioned as being a
source of help for elderly patients with asthma, whereas respiratory therapists are not. Perhaps this is an oversight regarding the value of home care respiratory therapists in educating patients on their disease process, and in discussing action plans for asthma and COPD.

Chapter 12 brings home the reality of lung cancer as the most common fatal malignancy in both men and women. The author is quick to address the lack of any current recommended screening for early detection of lung cancer in the United States. As a result, most patients diagnosed with lung cancer present in advanced stages of the disease. In contrast, it is noted that in Japan the standard of care for all smokers over the age of 45 is screening for early lung carcinoma, which results in a much higher survival rate at 5 to 10 years after treatment. The section that covers diagnosis includes a helpful algorithm for the workup of a solitary pulmonary nodule. Staging and TNM (tumor, node, metastasis cancer staging system) descriptors are covered, and there are brief paragraphs on mesothelioma, sarcomas, and secondary lung cancer. A comprehensive discussion on cancer treatment is not part of this chapter. Rather, it is recommended that an interdisciplinary team composed of a pulmonologist, oncologist, thoracic surgeon, and radiation therapist make decisions on potential therapeutic interventions.

Home treatment of chronic disease, covered in Chapter 13, is a comprehensive overview of long-term oxygen therapy. Specifics on how to prescribe oxygen, the requirements for Medicare reimbursement, and the benefits of oxygen therapy during exercise are presented. Different oxygen systems and delivery devices are explained, along with indications for and limitations of each. The chapter ends with a challenge to continue improving respiratory care for older patients while reducing cost and adding to the legacy of the long-term oxygen therapy pioneers.

The final 2 chapters, on progressive respiratory impairment and end-of-life concerns, round out the book. Both chapters are a testament to the wisdom and compassion of the authors, who are practicing pulmonologists who have worked in critical care medicine for over 40 years. Chronic respiratory insufficiency (most commonly a result of COPD, congestive heart failure, and various comorbidities) cannot be cured. Thus, patients and their families must be educated and encouraged to focus on an improved quality of life. These chapters provide “how to” advice on approaching a variety of difficult topics and conversations with patients. The overarching theme of this chapter is to provide patients with comfort, control, freedom, and peace. As a final message, the authors suggest the term “decisions at the time of transition,” instead of the somewhat depressing term “end-of-life decisions.”

Overall this book was easy to read and contains a wealth of information on common disease processes in the elderly. Though designed for physicians, it would be one of those “frequently thumbed through” books on the shelf of any respiratory therapy department. I found it interesting that the authorship of the individual chapters was not revealed to the reader, but this did nothing to detract from the information presented. My only concern with this publication is its failure to mention the profession of respiratory care or pulmonary rehabilitation, which was most notably absent in the chapters on COPD and home care. We are indebted to the many outstanding pulmonologists who over the years have nurtured and trained us to care for their patients with pulmonary disease, and we need to expand our role in caring for the elderly. Education about and understanding of the subtle and not so subtle changes in our older pulmonary patients will serve us well, now and in the future.

Helen M Sorenson MA RRT FAARC
Department of Respiratory Care
The University of Texas Health Science Center at San Antonio
San Antonio, Texas

REFERENCES

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Obstructive Sleep Apnea: Pathophysiology, Comorbidities, and Consequences.


Lest anyone doubt that obstructive sleep apnea (OSA) has “arrived” and is now taking its place at the table of 21st century medicine, the arrival of volumes 3 and 4 of the Informa series on sleep disorders should dispel those doubts. Previous volumes in this series have covered pediatric and neurological problems in sleep. The latest 2 volumes have OSA as their sole topic. Volume 3 is concerned with pathophysiology, comorbidities, and consequences, and volume 4 is about diagnosis and treatment. These 2 volumes join a growing list of textbooks about sleep medicine more generally, yet it is noteworthy that 2 volumes are needed to contain the rapidly growing basic and clinical science that is rapidly accruing on OSA. This is a remarkable achievement for a disorder that really came into clinical consciousness only 30 years ago. In fact, some might argue that sleep apnea still has not come into the full consciousness of physicians, as it is still commonly overlooked by clinicians. These 2 volumes are virtually alone as texts specifically about sleep apnea. I suspect they will not be alone for long.

The 2 volumes are edited by Kushida, from Stanford University’s world-renowned sleep medicine program, who was an excellent choice for this task and has assembled many noted authorities in the field as his chapter authors.

The first chapter of Volume 3 is an overview of the history of sleep apnea. It is a thorough and detailed tour through sleep apnea in literature and the subsequent history of OSA from the 1870s and Broadbent’s perhaps first description of OSA to the present day. Sleep apnea is also perhaps the only disease whose prototypical patients come from the world of Shakespeare and Dickens. I am referring to the characters of Falstaff, from several of the Bard’s histories, and Joe the fat boy from Dickens’s The Posthumous Papers of the Pickwick Club. Despite early descriptions of the disease from the 1870s, it was not until the mid-20th century that Gastaut, in France, and others, put together the clinical observations known for some 70 years with the abnormal upper-airway closures and reopenings that we now understand as the basic pathophys-
Chronic obstructive pulmonary disease, left ventricular dysfunction and disorders associated with hypoxemia frequently result in pulmonary hypertension. Regardless of the etiology, unrelieved pulmonary hypertension can lead to right-sided heart failure. Signs and symptoms of pulmonary hypertension are often subtle and nonspecific. The diagnosis should be suspected in patients with increasing dyspnea on exertion and a known cause of pulmonary hypertension. Two-dimensional echocardiography with Doppler flow studies is the most useful imaging modality in patients with suspected pulmonary hyperten... TRENTON D. NAUSER, M.D., and STEVEN W. STITES, M.D., University of Kansas Medical Center, Kansas City, Kansas. We talked about medication and treatment options for your pulmonary embolism. We reviewed the risks and benefits of the medications, and talked about the advantages and disadvantages of outpatient treatment. These disorders predispose patients to venous and arterial thrombotic events, particularly when the abnormalities are not controlled by therapy. Occult neoplasm. ESC Guidelines on the diagnosis and management of acute pulmonary embolism (Konstantinides 2014) Scottish Intercollegiate Guidelines Network (SIGN). Prevention and management of venous thromboembolism: a national clinical guideline. American Society of Clinical Oncology. Antithrombotic therapy for VTE disease: Antithrombotic Therapy and Prevention of Thrombosis, 9th ed. (Kearon 2012).