

search findings on pathophysiology, diagnosis, and treatment of sleep apnea.

The intended readership is not plainly stated, but this is clearly not an abridged "how to" pocket manual for the busy clinician. Do not look here to learn how to score sleep studies or fit patients with continuous positive airway pressure (CPAP) equipment. Rather, this book would be worthwhile reading for clinicians who need to more completely understand the phenomenon of sleep apnea, how our diagnostic methods measure up or fail, and how our treatment methods are rationalized. This would include any physician, nurse, nurse practitioner, respiratory therapist, or sleep technologist with the stomach and desire to digest research summaries and analysis. If you are not satisfied with following rote diagnosis and treatment algorithms or blindly accepting consensus statements, but insist on validating such dogma on your own, this book is for you.

Although obstructive sleep apnea (OSA) seems to be the commonest type of sleep apnea, there is no section in this book on the important topic of central sleep apnea. The book's title implies that it would cover all types of sleep apnea, but since it does not cover central sleep apnea, it would have been better to have named the book **Obstructive Sleep Apnea** or to include a discussion about central sleep apnea.

The series editor, Claude Lenfant MD, states the aim of the book as an update in research and clinical application. Dr Pack, the editor of this volume, has done an admirable job of meeting that aim. He has assembled a diverse group of contributors, most of whom are distinguished by substantial research contributions in this field.

The chapters are largely well organized and thoughtfully chosen. Chapter 10, on functional brain imaging, is an exception and seemed a little out of place because it contained only a brief section on brain imaging in sleep apnea. This 40-page chapter is also peculiar in that it has 9 authors listed. Did all 9 really participate in writing it?

The chapters were substantially and refreshingly void of unsupported opinion. Like Sergeant Joe Friday in the television series *Dragnet*, this book says "Just the facts, Ma'am." Chapter 19, on oral appliance therapy (an otherwise excellent chapter) contained an exception to this rule. In the summary portion the authors opine about rigid roles for dentists and physicians in the management of OSA with oral appliances but

provide no supporting evidence. The authors also assert that an "appliance should be used during sleep for life," perhaps unaware that some patients successfully use the appliance as an alternative to CPAP during travel or for camping only, or successfully change back to CPAP after several years using an appliance.

The material in each chapter is presented logically and referenced exhaustively. The contributors appeared to have a free hand to arrive at unvarnished conclusions, and some of these conclusions run counter to much of prevailing conventional wisdom. For instance, Stradling and Davies in Chapter 16, "Simplified Diagnostic Tests for OSA and Its Variants," argue convincingly for their conclusion that conventional "polysomnography cannot, and should not, be regarded as a gold standard as it has never been properly validated as a tool to measure the actual pathological process resulting from reduced upper airway tone with sleep onset." They also point out that polysomnography has not been validated as a predictor for common clinical questions such as (1) What is the relationship between sleep apnea and the patient's symptoms? and (2) Is nasal CPAP or surgical treatment likely to benefit the patient?

Stradling and Davies's careful dissection of diagnostic goals and treatment end points in this chapter warrants expansion into another chapter of its own, as these topics form such controversial and critical elements of sleep medicine practice. Whereas the surgery literature (reviewed in Chapter 20) has been historically saddled with groundless treatment end points such as a reduction in the apnea index by "50% from its preoperative value," the end points of CPAP titration, pharmacotherapy, and oral appliance therapy have been assigned variably and empirically as well. Sanders and Sériès touch on treatment end points in Chapter 17, "New Developments in Positive Pressure Therapy for Sleep Apnea," but the reader would be well served by a discussion of this topic on its own.

In Chapter 2, "Biomechanics of the Upper Airway During Sleep," Smith and Schwartz argue convincingly against conventional wisdom as well. They show that there is little to distinguish the flow-limited respiratory events identified in the "upper airway resistance syndrome" from usual hypopneas and leave the reader to conclude

that there is little to justify a separate classification (apart from OSA syndrome) for these patients.

There is also evidence of thoughtful coordination between chapters. For instance in Chapter 1, "Anatomical Factors: Insights From Imaging Studies," in a brief discussion of genetic influence on upper airway structure, the reader is referred to Chapter 8, "The genetics of the OSA Hypopnea Syndrome," for further reading.

This text has no color illustrations but is otherwise appropriately replete with graphs, tables, diagrams, and illustrations. I was particularly impressed by the elegant axial magnetic resonance images in Chapter 7, which demonstrate thinning of the lateral pharyngeal walls with weight loss. There is an extensive subject index (18 pages) as well as an amazing author index totaling 50 pages—a handy tool if you know whose work you are looking for. If you were looking for JA Fleetham, for instance, you would find 38 citations, each listed by page number. I found the text virtually free of typographical errors.

Bound with a glossy white paper veneer, this stubby (23.5 cm tall) and fat (3.8 cm thick) little book will fit nicely on any bookshelf. I enjoyed the book immensely and learned much.

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**Clinical Management of Chronic Obstructive Pulmonary Disease.** Thomas Similowski MD PhD, William A Whitelaw MD PhD, and Jean-Philippe Derenne MD, editors. (Lung Biology in Health and Disease, Volume 165, Claude Lenfant, executive editor.) New York/Basel: Marcel Dekker. 2002. Hard cover, illustrated, 1,072 pages, \$250.

Chronic obstructive pulmonary disease (COPD) is increasing in frequency in the United States and the world. The incidence, prevalence, and death rate attributed to this disease are rising. COPD is currently the fourth leading cause of mortality in the United States. The increasing burden of this disease has resulted in a major effort by the World Health Organization and the National Institutes of Health, including publication of the *Global Initiative for Chronic Obstruc-*

*tive Lung Disease* document in 2001,<sup>1</sup> which proposes a new system of severity classification of COPD and treatment guidelines emphasizing current knowledge in the field, and highlights subjects of knowledge deficit. It is therefore timely and quite appropriate that a major volume covering clinical treatment of COPD should be published. And a major volume it is. **Clinical Management of Chronic Obstructive Pulmonary Disease** is composed of 45 chapters by 93 authors and has 1,072 pages. The topics range from some rather basic science issues, such as the treatment implications of the genetics of COPD, to very practical chapters such as the one covering the general practitioner and COPD. Regardless of whether a chapter deals with research tools or practical medication suggestions, all of the contributions discuss issues related to COPD treatment.

The book opens with a foreword by Dr Gordon Snider, who is a pioneer and authority in this field. This is a well-written overview that sets the stage well for the rest of the authors. I appreciated this piece because it allows the reader to grasp the depth and breadth of the COPD disease process, which has been recognized but not well understood for several hundred years. The balance of the book is divided into 10 parts, which are logical and clearly related. Sections on diagnosis and follow-up are followed by sections on treatments, such as pharmacologic therapies, treatment and prevention of infections, and treatment of associated conditions. In addition there is a section covering approaches to treatment in a number of countries around the world.

One of the major positives of this book is the quality of the authors. Most of them are authorities in their fields, with international reputations. The authors come from 12 different nations. I believe this is a reflection of the international interest and expertise in this field, and the geographic diversity benefits this text. Overall the quality of the writing is very good. Explanation of the basic science and mechanisms is quite clear, and diagrams, data plots, and photographs are used appropriately. For example, the chapter on COPD imaging nicely demonstrates the wide variety of computed tomography scan findings that are seen with emphysema.

The physical layout of the text is well done. The typeface is easily readable and the size of the pages is pleasing. Although the volume is quite thick, I did not feel over-

whelmed by the quantity of text. Diagrams are easily readable and labeled appropriately. The chapters are of a length that can easily be read at one sitting. The index is complete, although not exhaustive for a text of this size.

References for the individual chapters are quite up-to-date. I believe they are also quite complete. The number of references ranges between 60, for the shorter chapters, and 200, for the longer ones. I carefully reviewed the references of the chapters on subjects with which I am most familiar, and found that the references chosen were important contributions to the field and appropriate.

I have one criticism of the book. With the large number of authors there is some overlap in the more closely related chapters. For example, Figure 1 in Chapter 1 appears again in Chapter 4. There is also some repetition in the text. For instance, in Chapter 10, "The General Practitioner and the COPD Patient," there is a segment on inhaled bronchodilators and steroids, and Chapter 15 provides a complete treatise on inhaled steroids,  $\beta$  agonists, and anticholinergic agents, with some similar data and treatment suggestions. If the book is used as a reference (not read through from cover to cover) this repetition should not present a problem. However, this begs the question of how the book will be used. Dr Lenfant (the editor of the series of which this book is a part and also the Director of the National Heart, Lung, and Blood Institute) states that the book should "attract the attention of practicing physicians." I think the book deserves that attention, but at 1,072 pages I cannot imagine a practicing physician will have the time to read it from beginning to end. It is no *handbook*, for residents, fellows, or even practicing pulmonologists. I do believe, however, that it is a reference that can be used to access the current state of knowledge and best practice in specific areas. For example, for data on oral and inhaled steroids for stable COPD the reader can go to Chapter 16, which gives a complete and accurate assessment of this aspect of COPD management, and which can be easily digested in half an hour. Used that way I see an important role for this book for practicing physicians, nurses, and therapists in the community. As an academic physician who sees numerous COPD patients and is involved in clinical investigation of COPD, I find that this work represents an important synthesis of the field. I

will certainly keep it close at hand in my office. I expect that others will also find it valuable.

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#### REFERENCE

1. Pauwels RA, Buist AS, Calverley PM, Jenkins CR, Hurd SS. Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease. NHLBI/WHO Global Initiative for Chronic Obstructive Lung Disease (GOLD) Workshop summary. *Am J Respir Crit Care Med* 2001;163(5):1256-1276. *Respir Care* 2001; 46(8):798-825.

**Lung Disorders Sourcebook.** Dawn D Matthews, editor. (Health Reference Series) Detroit: Omnigraphics. 2002. Hard cover, illustrated, 657 pages, \$78.

The **Lung Disorders Sourcebook** is part of the Omnigraphics Health Reference Series. This edition provides basic consumer health information about a variety of common pulmonary disorders, their diagnosis, common treatment modalities, and risk factors. Prevention strategies to avoid the acquisition of lung disorders from environmental exposures to radon, asbestos, formalin, and passive smoke are also highlighted. This book is divided onto 6 parts: Introduction; Types of Lung Disorders; Diagnosis; Treatment; Risks and Prevention; and Additional Help and Information. Each part is broken down into chapters devoted to specific disorders, diagnostic tests, therapies, or health risk/prevention. Also included is a comprehensive glossary and resource directories.

Part 1, "Introduction," is divided into 5 chapters. This section commences with a historical view of the lung and includes chapters on lung structure and function, the environment and lung disease, how lung diseases begin, and who can get respiratory failure. This section is very well written, presenting very complex material in a simple, easily digestible, and detailed manner. The author uses line drawings to illustrate respiration, pulmonary circulation, and in-

Chronic obstructive pulmonary disease (COPD) is a lung disease characterized by airway obstruction due to inflammation of the small airways. It is caused by a combination of factors, including smoking and environmental pollutants.

1. Sex Differences in Chronic Obstructive Pulmonary Disease Mechanisms. *American Journal of Respiratory and Critical Care Medicine*. 2016. url: <https://www.atsjournals.org/doi/full/10.1164/rccm.201512-2379ED>. 2. Georgios Ntritsos, Jacob Franek, Evangelos Evangelou, et al. Gender-specific estimates of COPD prevalence: a systematic review and meta-analysis. *International Journal of Chronic Obstructive Pulmonary Disease*. 2018. url: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5953270/>. 3. WHO. Buy *Clinical Management of Chronic Obstructive Pulmonary Disease* by Jean-Philippe Derenne at TextbookX.com. ISBN/UPC: 9780824706104. Save an average of 50% on the marketplace. Some error text about your books and stuff. Close. and Leonard D. Hudson *Disability in Chronic Obstructive Pulmonary Disease* Abebaw M. Yohannes and Martin J. Connolly *The General Practitioner and Chronic Obstructive Pulmonary Disease Patient* C. P. van Schayck, P. M. van Grunsven, C. van Weel, and G. van den Boom *PATHOPHYSIOLOGICAL TREATMENTS Genetics of Chronic Obstructive Pulmonary Disease and Emphysema: Diagnostic Applications and Therapeutic Perspectives* Andrew J. Sandford and Peter D.