

Clinical Challenges in COPD. Claudio F Donner MD, Mauro Carone, editors. Oxford: Clinical Publishing. 2007. Hard cover, illustrated, \$99.95.

Imagine a clinical “grand rounds” series at the local medical center, dedicated just to chronic obstructive pulmonary disease (COPD). Each week at this special conference, a particularly instructive case would be presented and then discussed by a different team of international experts on the specific aspect or management problem illustrated by that patient. By attending this conference regularly, clinicians who cared for patients with COPD would gain new understanding of its pathophysiology and manifestations and also be updated about new research findings and approaches to therapy. If the cases were carefully selected to illustrate clinically important, particularly challenging aspects of COPD management, and if the experts discussing them focused on the practical application of available diagnostic tests and therapeutic interventions, then over the course of several months the attendees would acquire knowledge and insight directly applicable in their own practices, to the benefit of their patients.

In this book Donner and Carone give us what could be the experience of attending such a weekly conference over a period of about 6 months. Each of the 21 chapters is presented in a format very like that of grand rounds. There is a brief introduction to set the stage for that week’s topic, followed by the presentation of an actual patient with COPD whose case has been selected to illustrate a particular clinical problem, and then a focused, in-depth discussion of how best to recognize and manage that problem. The book may thus be thought of as a continuing-education vehicle for practicing clinicians, rather than as a textbook or monograph on COPD. As with real-life weekly conferences whose discussants each have their own specific topics of interest, although many aspects of the disease and its management are illustrated by the presented cases, some topics are emphasized more than others, and a few are left out.

The organization of the book—or the apparent lack thereof—reflects what happens at a weekly case conference, with topics

presented as they arise in clinical practice rather than according to a carefully mapped-out curriculum to cover the field in a particular sequence. As a result, this is a book that can be read straight through, or opened at random to read a few pages as time allows, or consulted for a specific problem presented by a patient, using the table of contents or index as a guide.

Most of the chapter titles identify the clinical problem to be discussed, such as “A 52-year-old woman with mild COPD and substantial oxygen desaturation during exertion,” although in a few instances the topic is not evident from the title, as in “A 68-year-old patient with COPD.” Chapter topics run the gamut of important issues encountered in managing COPD: diagnostic evaluation, the use of medications, pulmonary rehabilitation, managing exacerbations at home and in the hospital, and identifying and treating common complications. A few chapters address infrequently encountered issues such as hypersensitivity pneumonitis, mitral stenosis, and reactivation of tuberculosis. I especially liked the chapter by Mahler and Scano on managing dyspnea in patients with end-stage COPD, the one by Troosters and Casaburi on exercise evaluation and training, and the one by Jones and Güell Rous on improving health status and quality of life. However, with only 1 or 2 exceptions, all the chapters cover their topics well, answer the questions posed by the patients presented, and are clinically relevant.

In an otherwise excellent chapter that discusses the choice of antibiotics for treating COPD exacerbations, the authors provide lists of antibiotics from which to choose for different types of exacerbation, depending on patient factors—with no mention of costs. Among the agents appropriate for “simple” exacerbations the list includes cefpodoxime (retail patient charge for a 10-day course \$82.80 in my hospital’s pharmacy) and doxycycline (\$5.95), whereas the “complicated” exacerbation list includes moxifloxacin (\$89.15) versus amoxicillin/clavulanate (\$4.20). Given the chapter’s discussion of the difficulties in demonstrating clinical superiority of one antibiotic over another in this context, acknowledging the existence of such cost differences would have been

pertinent for the reader, regardless of the health-care system in which he or she practices.

In a couple of places it would have been useful to provide more discussion on how to approach the presenting clinical scenario rather than focusing so much on the specific disease entity that turned out to be the cause of that problem in the patient described. For example, in Chapter 19 a patient is described who presented with hypoxemia out of proportion to the severity of his airflow obstruction, and was found to have chronic thromboembolic pulmonary hypertension. This important but quite uncommon condition is subsequently discussed at length, but a differential diagnosis of the presenting clinical problem would also have been helpful, with a discussion of the other potential causes to be considered and how to evaluate patients for them. Many middle-aged and elderly smokers have heart disease—with or without concomitant COPD—but come to the clinician with respiratory rather than typical cardiac symptoms. It would have been nice to address this common scenario in the book. In Chapter 15 a patient with COPD is presented whose symptoms turn out to be caused by previously undiagnosed mitral stenosis; this disorder is covered extensively in the chapter, but more common cardiac conditions that bring patients to the doctor with similar complaints—such as ischemic disease and congestive heart failure—are not mentioned.

Depression, another very common and frequently debilitating problem in patients with severe COPD, is mentioned in passing several times but not addressed in enough detail to help the reader in recognizing, evaluating, or managing it. Other topics that might have been included are the importance, assessment, and management of chronic hypoxemia and cor pulmonale; case management and approaches for improving therapy-adherence in patients with limited socioeconomic resources or behavioral problems; and current techniques for helping patients to stop smoking. However, the book is deliberately concise and of a manageable size, and the editors have done a good job of including most of the important issues encountered in managing COPD.

The book is an international effort, with authors representing 11 different countries and most chapters having authors from more than one country. However, it has a distinctly Italian flavor, with both of its editors and 19 of the 43 contributors representing that country. In a multi-contributor book with an international diversity of authorship, some unevenness in the English is not unexpected. In general, the chapter introductions and discussions are nicely edited and read well. Occasionally, unfamiliar descriptions and terminology in the case presentations may cause the American reader to stumble, although the intended meaning can nearly always be discerned. One exception was the baffling sentence (on page 171), "In a flat and treatable abdomen a mildly liver enlargement was noted." There is also some variability in the use of units of measure, most problematically so with arterial blood gas tensions, which are mostly in mm Hg but sometimes in kPa. Typographical errors are very few, although one of potential importance (on page 9) recommends a daily prednisolone dose of 30 mL rather than 30 mg.

The 21 chapters average about 9 pages and 40 references (ranging from 5 to 95 references). The text is laid out in a single column that uses a fairly small font, which, with relatively few illustrations and tables, makes for pretty dense reading through some long stretches of uninterrupted text. There is some unevenness in the illustrations. Several of the conventional chest radiographs are poorly reproduced, which makes identification of the intended findings doubtful, although the latter are generally not really crucial to the message. The chest computed tomograms in Chapter 18 are small, uncropped, and lack arrows to identify the abnormalities described, whereas those in Chapter 20 are effectively cropped and labeled. I did not notice the extensive table of abbreviations in the back of the book until after reading the chapters, but this was not a serious problem, as in nearly every case the abbreviations and acronyms are defined in the text on first use.

I found the book's contents to be up to date and accurate. A rare exception was this sentence on page 112: "Although chronic GC [glucocorticoid] therapy clearly reduces morbidity and mortality, GCs must be used prudently in the light of their numerous side effects." This pronouncement is made without elaboration or clarification in the chap-

ter that discusses the complications of prolonged corticosteroid therapy.

These are all minor complaints, and this is a most interesting, unusual, and useful book. It is not an introduction to COPD, and I think it will mainly be of interest to advanced trainees and practicing physicians. The book will also be useful to physician assistants, nurse practitioners, and others who provide front-line care to patients with COPD, but perhaps less so to hospital-based respiratory therapists and nurses who have less responsibility for diagnosis and overall approaches to management.

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Medication Treatments for Nicotine Dependence. Tony P George, editor. Boca Raton: Taylor & Francis/CRC Press. 2007. Hard cover, illustrated, 327 pages, \$149.95.

In the foreword, Tony George reveals his goal that this publication serve as a primer for both basic and clinical researchers, for students of various disciplines, and for clinicians who treat nicotine dependence. Parts of this book may appeal to respiratory therapists and clinicians. However, much of the book, as is suggested by the illustration on the cover, is dedicated to the mechanisms by which nicotine and medications interact with the nicotinic receptors and the pharmacologic profiles of the nicotinic acetylcholine receptor subtypes, which may be less interesting to individuals on the front lines in patient care.

This book, which incorporates contributions from leading basic and clinical scientists, is organized into 6 sections. Topics covered include basic science of the nicotinic receptor pathway; first-line, second-line, and novel medications; behavioral therapy; special populations; pharmacogenetics; neuroimaging; and future research subjects and treatments for nicotine dependence. Each chapter is written by an expert or experts in the field and includes its own abstract, introduction, and conclusions. Though there is some overlap of information in the chapters' introductions, this format may help the reader target sections that

will be most informative, depending on the reader's goals, which may be research-oriented versus patient-care directed.

The first section is on the basic science and provides a foundation to understand the pharmacology and physiology of the effects of nicotine on nicotinic receptors. This very detailed section explains the medications' mechanisms of action, which are further discussed in later sections. The first chapter describes the interaction between nicotine and the various subtypes of nicotinic receptors, and then details the signaling pathways by which nicotine acts in the peripheral and central nervous system. Animal models of nicotine addiction that can be used to better understand human addiction to nicotine and to develop and evaluate candidate medical therapies for nicotine addiction are also described.

The second section reviews first-line medications, including nicotine-replacement therapy and sustained-release bupropion. Varenicline, which has since gained Food and Drug Administration approval for smoking cessation, is covered in the later section on novel therapies. The second section discusses the pharmacokinetic properties of these treatments, summarizes results from clinical trials, and provides practical information such as the pros and cons of the various forms of nicotine-replacement therapy and questions that help screen for contraindications to bupropion.

The section on second-line treatments provides great detail on tricyclic antidepressants, monoamine-oxidase inhibitors, and opioid antagonists. This level of detail may be more than most in a general audience need, so this section might serve as a reference resource to address questions that arise with patients who have either failed first-line therapy or for smokers considering a second-line agent for another indication.

The fourth section covers several novel medication treatments that are either in various stages of development or are currently approved for other indications. These treatments include nicotine vaccines, GABAergic (gamma-aminobutyric acid) agents (eg, baclofen, tigabine, topiramate), cannabinoid antagonists (eg, rimonabant), and medications that target the dopamine D3 receptor pathway. Varenicline, an $\alpha 4\beta 2$ nicotinic acetylcholine receptor partial agonist that has since been FDA approved for smoking cessation, is covered in the last chapter in this section. However, this chapter does not contain as much practically useful informa-