

confounding factors that may account for behavior (eg, socioeconomic background, genetics, education).

"Achieving Tobacco Cessation: Current Status, Current Problems, Future Possibilities" provides a quick summary of smoking cessation techniques. There are many more complete sources for current cessation strategies, such as the United States Public Health Department's clinical practice guidelines for treating tobacco use and dependence,⁵ but this review provides an adequate summary and references. The chapter notes that combination therapies seem to confer the most benefit, but relapse rates remain high. Most interesting was the discussion of a genetic basis for nicotine addiction. New studies regarding future trends seem to show some promise, but unfortunately there is still much to be learned.

The final article covers the controversial area of "Smoking Reduction for Smokers Not Able or Motivated to Quit." I thought this article was an excellent and well-balanced summary of the pros and cons of smoking reduction. There is limited evidence comparing smoking reduction and complete smoking cessation. This chapter included no graphs or charts, but I didn't think they were necessary. The author clearly presents existing data on smoking reduction and describes what future research is needed, but he correctly points out that the ultimate goal remains smoking cessation.

As an allied health professional involved in out-patient pulmonary education, I am always looking for information that allows me to increase my knowledge of COPD and smoking cessation. I found these reviews to be a very good source of information for providers interested in tobacco dependence and COPD.

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Pharmacotherapy in Chronic Obstructive Pulmonary Disease. Bartolome R Celli, editor. (Lung Biology in Health and Disease, Volume 182, Claude Lenfant, executive editor.) New York: Marcel Dekker. 2004. Hard cover, illustrated, 354 pages, \$99.75.

This 354-page book is a summary of current pharmacologic treatment of chronic obstructive pulmonary disease (COPD). The book is primarily intended for clinicians and researchers interested in important clinical outcomes in COPD and how specific drugs relate to those outcomes. The book will help the reader understand and evaluate pharmaceutical trials, the choice of outcomes, and the potential benefits of various COPD medications.

The book has 17 concise chapters, divided into 2 sections. The first section is on how to define, measure, and select outcomes for pharmacologic COPD studies. The second section, which is more relevant to therapists, nurses, and physicians, describes the effect of specific categories of medications on clinical outcomes.

After an introductory chapter, the first section consists of 10 chapters that provide an excellent overview of physiologic measures, symptoms, health status, and clinical outcomes such as exacerbations and hospitalizations. The contributing authors are experts with extensive experience in their fields. The book begins with a discussion of physiologic measures such as the expiratory airflows and lung volumes used to assess response to COPD therapy. The discussion covers reversibility of bronchoconstriction

and airway hyperreactivity. Subsequent chapters describe other physiologic markers of disease severity that are not as widely used, such as gas exchange, nocturnal hypoxemia, and exercise testing. The book describes the latter objective physiologic markers, but one of the book's strengths is its recognition that more subjective and patient-based variables, such as sensation of dyspnea and the patient's feelings about his or her own health status, are being more frequently used as outcomes in studies of COPD medications. Because current COPD drugs do not dramatically alter the course of disease progression (as measured with spirometry), the book emphasizes that the effect of medications on patient-based measures, such as symptoms or health status, may be as important to patients and providers as is change in forced expiratory volume in the first second.

The chapters on exercise testing and dyspnea give a very helpful discussion of the relationship between physiologic measures of hyperinflation, self-reported dyspnea, and instruments designed to measure shortness of breath. A chapter on health status briefly outlines the rationale for using measures of quality of life or health status in COPD, describes the instruments that have been developed (eg, Saint George's Respiratory Questionnaire and the Chronic Respiratory Questionnaire), and describes the use of those instruments to assess pharmacologic response to COPD drugs.

There is a useful chapter on COPD exacerbation, which is increasingly recognized as an important clinical outcome that has implications regarding optimizing quality of life, preventing hospitalization, and minimizing preventable health care utilization. After defining exacerbations the chapter briefly discusses the medications used to prevent and treat COPD exacerbations. The chapter on the genetics of COPD is interesting but seems out of place because it summarizes the methods used to identify candidate genes for the development of COPD and potential therapeutic implications.

The second half of the book consists of 6 chapters that overview research on specific drugs to treat COPD, including anticholinergics, β -adrenergic receptor agonists, theophyllines and other phosphodiesterase inhibitors, corticosteroids, antioxidants, and protease inhibitors. Each chapter discusses the rationale for the drug's use, the mechanism of action, and adverse effects, and provides a limited discussion on the effec-

tiveness of each medication group on the important clinical outcomes described in the book's first section.

The chapter on anticholinergics describes the rationale for use and the pharmacologic action, including the muscarinic receptor subtypes and the pharmacokinetics of short-acting versus long-acting anticholinergics. The discussion of clinical pharmacology studies of anticholinergics is brief, and there are few data on the clinical trials and effect on clinical outcomes. The chapter on β -adrenergic receptor agonists has a slightly more comprehensive but still brief discussion of the effect of β agonists on outcomes such as exercise, quality of life, and COPD exacerbations.

Theophylline and newer selective phosphodiesterase inhibitors are discussed in more depth; the chapter discusses their effectiveness in relation to important outcomes, and the pros and cons of theophylline. A more complete chapter on corticosteroids summarizes oral and inhaled corticosteroids for COPD and briefly discusses the clinical trials of inhaled corticosteroids and their place in published guidelines.

The primary strength of the section on specific pharmacologic therapies is that it provides a concise overview of the rationale for use, pharmacologic action, and adverse effects of COPD medications. These chapters do not, however, discuss in detail individual medications, delivery systems, or clinical trials. The book concludes with a chapter by the editor, Bartolome Celli, that provides an integrated approach for treating patients with COPD, emphasizing the relationship between physiologic measures, patient perception of symptoms, and the effect on health status.

In summary, **Pharmacotherapy in Chronic Obstructive Pulmonary Disease** is an excellent compilation of the important physiologic and clinical outcomes in COPD. In addition, there is a concise summary of the rationale and mechanism of action of COPD medications. This book will be a very useful reference for clinicians and researchers in selecting what outcomes to focus on in COPD and in assessing clinical trials of COPD-treatment drugs.

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Lung Volume Reduction Surgery for Emphysema. Henry E Fessler, John J Reilly Jr, David J Sugarbaker, editors. (Lung Biology in Health and Disease series, Volume 184, Claude Lenfant, executive editor.) New York: Marcel Dekker. 2004. Hard cover, illustrated, 507 pages, \$195.

Lung-volume-reduction surgery (LVRS) has engendered a great deal of debate in the pulmonary and thoracic surgery community. The book **Lung Volume Reduction Surgery for Emphysema**, edited by Fessler, Reilly, and Sugarbaker, details much of that debate and also presents the theory developed and data accrued over the past decade regarding LVRS. The book consists of 20 chapters, written by many of the major LVRS researchers. The preface is written by Claude Lenfant, the former Director of the National Heart Lung and Blood Institute of the National Institutes of Health, which is quite appropriate as Dr Lenfant was a major proponent and developer of the National Emphysema Treatment Trial (NETT), the largest and most comprehensive study of LVRS to date.

The book starts out with an overview of the epidemiology and pathology of chronic obstructive pulmonary disease, setting the stage for Chapter 3, which looks at the pathophysiology of emphysema, which in turn leads to discussion of surgery that could help chronic obstructive pulmonary disease patients. Chapter 3, written by Joseph Rodarte, is particularly clear in its explanation of why individuals with emphysema suffer from airflow limitation and why LVRS may be helpful. I was particularly affected by reading this chapter, as Dr Rodarte passed away shortly after writing it. He was a major contributor to the field of respiratory mechanics and was a teacher to many individuals interested in the function of the respiratory system. The chapter's clear and reasoned explanations were typical of Dr Rodarte.

The chapters that follow detail evaluation and preparation of the patient for LVRS, with a careful look at radiologic, medical, and anesthetic evaluations. In addition, the chapter details the implementation of maximal medical therapy and pulmonary rehabilitation prior to surgery. This is followed by a discussion of the surgical aspects of the treatment, which details the 2 currently accepted approaches: median sternotomy and video-assisted thoracoscopy.

Much of the latter part of the book details the data that accrued over the past decade, including data from case series, short-term randomized trials, and finally the NETT. All of these chapters are complete and concise. I particularly enjoyed reading the chapter that detailed the history and data produced to date by the NETT. As a participant in the NETT, I can say that the chapter is quite accurate and balanced in its presentation. The chapter on the financial aspects of emphysema and emphysema surgery is an important companion, as the NETT was designed to study the cost-effectiveness of LVRS.

Overall, I found the book quite readable. It has 29 contributing authors, but the editors did a nice job of getting the chapters to flow together. The book is of an appropriate length for the topic. If I have any criticism it is that the book will soon be partially obsolete because it discusses a surgical technique that is very likely to change. Various researchers are studying less invasive techniques of achieving lung-volume-reduction. However, the editors acknowledge that limitation, and I believe the volume is an excellent reference that documents a decade of intense interest in a therapy for patients with emphysema.

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Lung Transplantation. Nicholas R Banner, Julia M Polak, and Magdi Yacoub, editors. Cambridge, United Kingdom: Cambridge University Press. 2003. Hard cover, illustrated, 412 pages, \$140.

Lung Transplantation is a clear and concise text written for an audience that is becoming acquainted with end-stage lung diseases, the indications for transplantation, and the major issues following transplantation. The book is divided into 3 major sections: pulmonary disease; lung transplantation; and future directions. The book's organization is logical, coherent, and easy to follow.

Part I reviews the basic pathophysiology, epidemiology, diagnosis, and treatment of the 6 major lung diseases that are most commonly treated with lung transplantation. The chapters in this section differ slightly in their approaches to the various lung diseases and there is slight overlap among some of the chapters. In addition, some of the chapters