

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  $\beta$ -adrenergic receptor agonists has a slightly more comprehensive but still brief discussion of the effect of  $\beta$  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