

An Atlas of Chronic Obstructive Pulmonary Disease. Trevor T Hansel MSc PhD and Peter J Barnes DM DSc. Foreword by Bartolome R Celli MD. New York: Parthenon. 2004. Hard cover, illustrated, 290 pages, \$99.95.

The two authors of **An Atlas of Chronic Obstructive Pulmonary Disease** set out to provide a comprehensive and up-to-date reference that covers all aspects of chronic obstructive pulmonary disease (COPD). The book has a handsome, glossy, hard cover, and the colorful pictures and diagrams on the cover hint at the authors' very successful attempt to cover the topic in atlas form. The book is divided into 8 chapters, ranging from definitions and epidemiology to new drugs and potential future treatments. The book includes a very complete (10-page) index. The text font is relatively large (approximately 10-point) and easy to read.

Even though the book is billed as an atlas, the content is extensive and complete. The book's most impressive element is the 187 figures, tables, diagrams, and photographs within its 290 pages. The vivid colors and large size (often full-page and rarely less than half-page) of the figures catch and keep the reader's attention. The tables present information in a logical format. The figures of inflammatory cell and mediator pathways and pharmacologic pathways are good, making these potentially complex and difficult subjects relatively easy to comprehend. The figures are well referenced, for those who wish to review the original research. Various medical devices, including inhalers, noninvasive positive-pressure ventilation equipment, and pulmonary function testing equipment, are illustrated. Overall, the figures substantially enhance the text, covering concepts and topics that might not otherwise be adequately reviewed, even with much longer text discussions.

On the first page of each chapter is a chapter outline, which in most chapters is followed by a chapter summary. References are listed at the ends of the chapters, and the chapters have an average of 146 citations.

The first chapter covers definitions, epidemiology, and etiologies of COPD. It emphasizes the findings of the Global Initiative for Chronic Obstructive Lung Disease (GOLD), including the GOLD July 2003

update, making this a very timely text. Unlike most other texts, this atlas provides Internet addresses that will help the reader find the most up-to-date information. In addition to the GOLD report, the chapter discusses the merits and validity of the COPD classifications of the American Thoracic Society, European Respiratory Society, and British Thoracic Society. The social and economic burden of COPD is discussed from a global perspective.

Chapter 2 discusses the pathophysiology and pathology of COPD. The several schematic diagrams of inflammatory cells and mediators are good examples of pictures being "worth a thousand words." The authors efficiently used figures to outline the interconnected inflammatory pathways, in a very readable fashion. The discussion of pathology is supported by illustrations and photomicrographs of histology slides. The chapter ends with a good description of the similarities and differences between COPD and asthma.

Clinical aspects of COPD are covered in Chapter 3. Complete history and physical findings, including assessment of chronic bronchitis, emphysema, and disease severity, are discussed. Also covered are the differential diagnosis and the indications for various pulmonary function tests and blood work. The chapter includes radiologic, electrocardiographic, echocardiographic, polysomnographic, and other diagnostic findings, as well as information on nutritional assessment and muscle strength testing.

Chapter 4 is devoted to emphasizing the importance of smoking cessation in the care of patients with COPD. It provides an excellent discussion of smoking-cessation medications. The chapter provides a systematic approach to smoking cessation and a long list of Web sites (of many different international organizations) that provide other smoking-cessation protocols and patient educational materials.

The longest chapter, Chapter 5, is devoted to drug therapy of stable COPD. New drug combinations, such as long-acting β_2 agonists with tiotropium, and long-acting β_2 agonists with inhaled corticosteroids, are included. Excellent discussions and diagrams of various delivery systems provide information not usually covered in other texts and articles. Diagrams of molecular

pathways, alongside the results of clinical studies for each class of drug, make for a well-rounded chapter. No mention is made of the role, or lack of a role, for oral corticosteroids for COPD. The chapter is otherwise inclusive of all drug classes and is rounded out by a short discussion on vaccination, mucolytics, and antioxidants.

Chapter 6 covers management of COPD exacerbations, beginning with definitions, clinical features, etiology, and evaluation of hypoxic and ventilatory respiratory failure. A stepwise approach to treatment and an excellent discussion on the use of antibiotics are provided. Also discussed is a protocol for initiation of noninvasive ventilation and there are brief discussions of nutritional supplementation, low-molecular-weight heparin, antivirals, and opiates. Indications for invasive mechanical ventilation are provided, but there is little mention of ventilator management or how to deal with the dynamic hyperinflation that COPD patients often suffer.

Chapter 7 reviews a potpourri of modalities, tools, and treatments, including pulmonary rehabilitation, tools to measure exercise capacity and quality of life, and treatments for nocturnal desaturation, obstructive sleep apnea, and depression. Oxygen therapy and delivery systems are well covered. Noninvasive ventilation for stable COPD is only briefly mentioned but is well referenced. The three pages dedicated to surgical treatments (bullectomy, lung-volume-reduction surgery, and lung transplant) allow the reader to compare and contrast these options for individual patients.

Chapter 8 is dedicated to new and potential COPD drugs. It provides a great deal of insight into the molecular and cellular pathophysiology of the disease and systematically reviews compounds that target each of the components of the inflammatory pathways. Lung regeneration and remodeling and new techniques for studying potential new drugs are briefly reviewed.

In general, the authors have provided a discussion suited for worldwide—not just a British—readership. The authors are international leaders in the field, having previously published hundreds of reviews and original studies of COPD and its treatment. They have included guidelines and information from around the globe, and P_{aCO_2}

and P_{aO_2} values are given in both kPa and mm Hg.

Taken in total, this atlas is well written and organized in an easy-to-use format. It covers the latest basic science and provides very practical and comprehensive clinical information. It is therefore a practical reference on COPD for a diverse readership, from respiratory therapy students to experienced specialists.

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Tobacco Dependence and COPD: A State-of-the-Art Series. (Reprint of the 'Thematic Review Series' published in *Respiration*, volume 68, 2001, and volume 69, 2002). Basel, Switzerland: S Karger. 2003. Soft cover, illustrated, 96 pages, \$24.50.

This soft-cover book is a reprint of 14 thematic review articles published in the journal *Respiration* in 2001 and 2002, on tobacco dependence and chronic obstructive pulmonary disease (COPD). The authors are well known European and American physicians who are experts in their fields. The book is in 2 sections: the first 7 articles address epidemiology, pathogenesis, management, and advances in COPD, and the final 7 articles address smoking-cessation, addiction, and future advances in treating tobacco dependence. The articles were intended to promote interest and provide information to the readers of *Respiration*. A few of the articles contain advanced content that may be difficult reading for some allied health professionals, but overall the articles provide a very good resource for physicians, respiratory therapists, nurses, and health care workers who assist in providing COPD education or smoking cessation.

The initial article, by Gustafsson, "The World Galloping Into Breathlessness," aptly summarizes the review series. He clearly makes the point that much is known about COPD and smoking cessation, yet much remains to be discovered. This is particularly important because of the delayed effects of cigarette smoking on the health care system: many of today's smokers will be lung-disease patients in the coming decades.

The next 2 articles describe the epidemiology and pathogenesis of COPD. These 2 reviews provide an outstanding summary of current data on COPD. The information in both articles is clearly presented and augmented well with graphs, charts, and pictures. These 2 articles are an excellent resource for COPD information.

The fourth article, "How and Why Exercise is Impaired in COPD," forwards the somewhat controversial view that COPD exercise is more limited by leg fatigue than dyspnea. The information is well presented and supplemented nicely with graphs and charts. My only argument with the chapter is that many of the studies that reported leg fatigue as the main limiting factor during maximal exercise testing used on bicycle ergometry,^{1,2} and bicycling may not be as relevant to daily living skills. A recent study by Man et al³ compared limiting factors during a walking test with COPD patients and found that breathlessness limited walking in 81% of patients tested, whereas leg fatigue limited 34%. A comparable test by Killian et al¹ on a cycle ergometry found limiting factors of 26% dyspnea versus 43% leg fatigue. I believe further study is needed to adequately determine the specific causes of exercise limitation in patients with COPD.

The article, "Management of COPD: Surgical Options," briefly reviews lung-volume-reduction surgery. Unfortunately, at the time the article was published, its author did not have the benefit of the (recently published) National Emphysema Treatment Trial, so more recent information on lung-volume-reduction surgery can be readily found.⁴ Nevertheless, the article's information is clearly presented and useful. I would have suggested including more information on lung transplantation, which, though limited by resources and availability, is still a viable surgical option.

The final 2 reviews cover COPD future advances and perspectives and summarize current thoughts on the potential to identify COPD and improve treatment. These chapters are clear and easily understandable. There are few graphs or diagrams but in this context there is little need.

Guest editor Karl Fagerström initiates the second half of the review on smoking cessation with his chapter, "What Is New With Tobacco Dependence," which provides a concise summary of the remaining articles on tobacco treatment, cessation, and future advances. I enjoyed the comparison that if 80% of all lung cancer and COPD cases

were created by a biological factor, such as alpha-1 antitrypsin deficiency, how many resources would we expend to find treatment? Should nicotine dependence, which is considered more of a psychosocial phenomenon, afford the same kind of treatment? It's an interesting point which begs for more thought.

The ninth article is "The Neurobiology of Tobacco Dependence: A Commentary," by Balfour, which is an excellent review of neurological response to nicotine. While doing research on smoking cessation for a recent article in *RESPIRATORY CARE*, I reviewed numerous articles on the neurology of nicotine dependence, but I could have saved much time by starting with Balfour's review. His commentary is concise and straightforward. Illustrations would have augmented the discussion, but overall the lack of illustrations did not diminish the quality of the review.

Computerized smoking-cessation assistance is the topic of "Using New Information Technology to Treat Tobacco Dependence." Information technology can assist in smoking cessation, but, as the author acknowledges, such computer assistance is limited to those who have computer access and know how to use computers.

The chapter "A Vaccine for Nicotine Dependence: Targeting the Drug Rather Than the Brain," reviews this exciting new research topic. The objective of the vaccine is to blunt the effects of nicotine on the "reward system." The author concludes that a vaccine for nicotine dependence may be helpful but clearly requires many accompanying therapies for smoking cessation (eg, counseling and medications). In this chapter it might have been helpful to use graphs or charts. Overall this review succeeds in providing a clear understanding of a complicated subject.

"Smoking During Pregnancy: A Way to Transfer the Addiction to the Next Generation?" is the next chapter. It discusses the neurobiology of the transference of nicotine from a smoking mother to an in utero fetus. It is clear that smoking mothers should be encouraged to quit, to prevent risk of low birth weight or preterm delivery. Further evidence demonstrates a relationship between prenatal exposure to smoking and behavioral problems such as attention deficit, hyperactivity, learning disabilities, and tobacco dependence later in life. These relationships are well referenced and convincing, though the authors correctly note that there are other

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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REFERENCES

1. Killian KJ, Leblanc P, Martin DH, Summers E, Jones NL, Campbell EJM. Exercise capacity and ventilatory, circulatory and symptom limitation in patients with chronic airflow limitation. *Am Rev Respir Dis* 1992;146(4):935-940.

2. Hamilton AL, Killian KJ, Summers L, Jones NL. Symptom intensity and subjective limitations to exercise in patients with cardiorespiratory disorders. *Chest* 1996;110(5):1255-1263.
3. Man WD, Soliman MG, Gearing J, Radford SG, Rafferty GF, Gray BJ, et al. Symptoms and quadriceps fatigability after walking and cycling in chronic obstructive pulmonary disease. *Am J Respir Crit Care Med* 2003;168(5):562-567.
4. Fishman A, Martinez F, Naunheim K, Piantadosi S, Wise R, Ries A, et al; National Emphysema Treatment Trial Research Group. A randomized trial comparing lung-volume-reduction surgery with medical therapy for severe emphysema. *N Engl J Med* 2003;348(21):2059-2073.
5. Fiore MC, Bailey WC, Cohen SJ, et al. Treating tobacco use and dependence. Clinical Practice Guideline. Rockville, MD: US Department of Health and Human Services. Public Health Service, June 2000.

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

also include details regarding transplantation for specific disease processes. Although this information overlaps somewhat with the information in the second section, the chapters are written coherently, so the repetition is not overbearing. I was surprised that there are 4 chapters devoted to pulmonary hypertension, an uncommon lung disease that is not the major indication for lung transplantation. Also, the chapter on explant pathology is interesting but appears to be a topic of its own and does not tie in well with the other pulmonary diseases discussed. Overall, this first section provides a complete overview of the 6 major lung diseases and the rationale for considering transplantation. Though this text does not appear to be intended to provide a comprehensive review of any of those 6 lung processes, it does provide the novice with an understanding of end-stage lung disease and the rationale for transplantation.

Part II reviews the basic patient selection criteria, the lung and heart-lung transplant procedure, postoperative management, long-term management, and potential post-transplantation complications. Again, the book provides a complete review of the basics of transplantation. The chapters on immunosuppression and transplant pathology are excellent and on par with almost any other transplantation book on the shelf. The hematology chapter was slightly repetitious and may be better served in the chapter on medical management or in a separate chapter discussing post-transplantation complications. I found the chapter on psychology particularly interesting, since most texts on transplantation do not devote much space to this important aspect of transplantation. The chapters are concise, reader-friendly, and fairly comprehensive.

Part III, "Future Directions," consists of 3 chapters that review tissue engineering, xenotransplantation, and the artificial lung. These chapters were slightly more complicated and difficult to understand, presumably because of the novelty of the topics. However, I found the chapter on the artificial lung particularly exciting, since much of the information remains novel to the medical community.

Overall, I found the book easy to read and understand. I believe it is intended for physicians, but other medical personnel who care for patients with end-stage lung disease will benefit by reading this book. In addition, much of the information is geared toward a transplantation fellow or new trans-

plantation attending physician, but is too basic for an experienced lung-transplantation physician. The book carefully avoids delving too much into the basic immunology of transplantation but does review the basic mechanisms of immunological graft injury with more of a clinical flair.

The chapters are well organized and the material is relevant to lung transplantation. The majority of chapters are well referenced and written by experts in their respective fields. I believe this text is a good general guide to the clinical aspects of transplantation. There are important references included in each chapter and the 422 references for the chapter on immunosuppression represent probably one of the most comprehensive reviews on the topic. The references are appropriate and span the last 2 decades, during which lung transplantation has evolved substantially. The details provided will bring the reader up to date on the latest issues in particular transplantation topics, and the references direct the reader to more detailed materials.

The book is colorfully hard-bound. The print and paper appear to be of good quality. The chapters include appropriate tables, diagrams, and illustrations, but one drawback is the lack of glossy pages for illustrations. In the chapter on transplant pathology the images of biopsy material are not as clear and sharp as I would have liked. Likewise, in the chapter on imaging, many of the chest radiographs, tomograms, and ultrasound images are hazy and poorly reproduced.

Given the relative paucity of information available on lung transplantation, this book will be a welcome addition to any library for medical personnel interested in thoracic organ transplantation. Priced at \$140, the book is competitive with the other currently available transplantation texts. I found the information to be a nice refresher course on the basics of end-stage lung diseases and the indications for transplantation. The book is comprehensive enough to be useful for medical personnel becoming acquainted with lung transplantation. Overall, this book is a useful and comprehensive text that does the job of familiarizing the medical community with lung transplantation.

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Textbook of Pleural Diseases. Richard W Light MD and Y C Gary Lee MBChB PhD, editors. New York: Arnold/Oxford University Press. 2003. Hard cover, illustrated 553 pages, \$149.

Textbook of Pleural Diseases is a multi-author book written by international experts. It is an up-to-date, definitive reference that provides in-depth knowledge about the basic and clinical science of pleural diseases. This book will serve as a comprehensive resource for health care professionals caring for patients with diseases involving the pleura. It is primarily useful for physicians and trainees in the pulmonary and critical care disciplines. The chapters on spontaneous pneumothorax, nonspontaneous pneumothorax, and drainage and biopsy techniques are excellent resources for respiratory therapists and nurses.

The book is organized into 2 main sections. Section 1 comprises 13 chapters on basic science, and section 2 comprises 30 chapters on clinical science. Well-organized chapters and a comprehensive index allow the reader to quickly find selected topics. I found the glossary of abbreviations preceding the chapters very useful for reading through individual chapters. Unfortunately, the abbreviations glossary is by no means complete; some complex abbreviations, such as ICAM-1 (intercellular adhesion molecule) and VCAM-1 (vascular cell adhesion molecule), are not included, whereas simple abbreviations such as IL (interleukin) are. The book's particularly unusual and useful features are (1) the highlighted summaries, presented as "take-home messages," at the ends of the chapters, and (2) the highlighted references for readers who wish to pursue further reading.

Section 1 (Chapters 1 through 4) covers embryology and gross structure, cells in the pleural cavity, liquid and protein exchange, and physiologic effects of pleural air or fluid of the normal pleura. My favorites in this section are Chapters 1 and 4, which are very clearly written and useful resources for medical students learning pleural anatomy and physiology.

Chapters 5–10 deal with the basic science of the abnormal pleura, including pleural inflammation, cytokines in pleural diseases, pleural infection, pleural fibrosis, pleural reaction to mineral dust, and genetics of malignant mesothelioma. These chapters are compilations of extensive basic science research performed over the years, yet

are accessible and up to date. Chapter 11 is an informative discussion of the pharmacokinetics of antibiotics and antineoplastic agents. However, the chapter's first table contains errors in antibiotics groupings.

Chapters 12 and 13 are devoted to experimental models of pleural disease and mesothelioma. Chapter 12 provides a comprehensive review of various animal models of pleural diseases, and is an excellent resource for young investigators.

Section 2 (Chapters 14–19) provides a practical approach to the management of patients with undiagnosed pleural effusions. These chapters deal with the approach to the patient with a pleural effusion, pleural fluid analysis, diagnostic radiology, interventional radiology, pleural histology, and pleural cytology, tumor markers, and immunohistochemistry. The color plates of cytology and pathology specimens are useful additions to the black-and-white illustrations. Although most of the imaging figures are well labeled, for the benefit of nonradiologist readers, the ultrasound images warrant improved marking. In addition, the technique described for pleurodesis, which requires the patient to change positions every 15 min for 2 hours, is out of date.

The next 16 chapters are devoted to pleural effusion associated with various systemic diseases, obstetric and gynecologic conditions, and malignancies (including mesothelioma), followed by spontaneous and non-spontaneous pneumothorax. Where possible, individual chapters are clearly organized around the disease's incidence, etiology, clinical manifestations, management, and complications. And children are not left out; one chapter is devoted to pediatric pleural diseases. The next 3 chapters cover drainage and biopsy techniques, medical thoracoscopy, and surgery of the pleural cavity, followed by a chapter on gene therapy. The authors cover individual topics in great depth, making this a truly comprehensive reference textbook. In the final chapter both editors made daring predictions about future directions for basic science research and the diagnosis and treatment of pleural diseases. Those predictions reasoned from scientific evidence may promote further research, but some of the predictions are based on trends in current practice, intuitions, or speculations.

At first glance I thought that **Textbook of Pleural Diseases** might be redundant to the book *Pleural Diseases*, which is a single-author book by Richard Light, who is one of the editors of **Textbook of Pleural Diseases**. But I found **Textbook of Pleural Diseases** far more comprehensive,

and I predict it will replace the *Pleural Diseases*. For a textbook, **Textbook of Pleural Diseases** is small enough to carry around as a handy reference. Although the book contains several unfortunate typographical errors and incorrect words (eg, undiagnosed "diffusions" instead of "effusions"), the references are up to date and include classic articles, and the illustrations are of high quality.

In summary, this book is intended for health care professionals, scientists, and medical students who have an interest in pleural diseases. The book not only has served its proposed goal, as a reference textbook, but also has amassed a distinguished list of contributors whose various perspectives represent much of the best in current practice. To my knowledge, this is the first comprehensive textbook on pleural diseases that covers both basic and clinical science.

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