

Chronic Obstructive Lung Diseases. Norbert F Voelkel MD and William MacNee MBChB MD, editors. Hamilton, Ontario, Canada: BC Decker. 2002. Hard cover, illustrated, 428 pages, includes CD-ROM, US \$99.95.

This book was co-edited by Norbert Voelkel, a professor of emphysema research at the University of Colorado, and William MacNee, a professor of respiratory medicine at the University of Edinburgh. The text reflects an impressive list of contributors, many of whom are well recognized in the field of chronic obstructive lung disease. Many of the chapters are written by multiple authors, reflecting the combined thoughts of up to 5 individuals. A trivial but irritating point in the author index is the attribution of qualifications, which should be standardized.

The text contains several interesting and innovative chapter headings. Although it is somewhat unclear whether the book is designed for an audience beyond the respiratory specialist, many of the chapters would be of value to general internists and family physicians with a special interest in chronic obstructive pulmonary disease (COPD). Nonphysician health professionals such as respiratory therapists, nurses, and physical therapists would also find educational value in several parts of this text, although this is clearly a reference work rather than a text to study in sequence.

The material is selected and organized broadly into 2 parts. The first 13 chapters address the pathobiology of COPD, ranging from prenatal lung development through genetic risk factors and perinatal stress to the inflammatory pathogenesis of COPD, mucus-secreting cells, and the role of surfactant in small airway diseases. These chapters combine detail with readable text in an effective, engaging way.

Chapters 13 and 14 discuss other causes of airflow limitation, including other large airway diseases that limit airflow and the influence of interstitial diseases when their pathology also affects the airway wall. These 2 chapters lend color to the text by reminding us just how interesting and varied clinical presentations can be.

The remaining chapters (16–29) tackle various clinical aspects of COPD, with ex-

cellent contributions from several of the recognized experts in the field. This section is of greater interest to clinicians, as it addresses infections, imaging, pulmonary function, and ventilation-perfusion mismatching. The statements appear to be accurate and concise. The chapters progress logically and are easy to return to for a second look.

Unfortunately, the book becomes somewhat unbalanced by a research summary on animal models of emphysema (15 pages of text and 119 references); though that summary is excellent, the extent of its detail is unnecessary in this book; an abbreviated format would offer more appealing reading to active clinicians. Many readers will find the chapter interesting but will tire in the sections on genetic models of emphysema and gene-targeted mice, which is a pity, as these subjects are on the cutting edge of COPD research.

I was disappointed that the book's superb overview of clinical management (10 pages of text and 97 references) was not developed in a more expanded form, especially as it was written by a recognized authority on that subject. Other chapters on smoking cessation, COPD exacerbations, and respiratory muscle function complement the discussions of clinical management but are lacking in clinical case examples that might enliven their clinical messages. They also lack variables that might predict morbidity and mortality among COPD patients and outcome measures that highlight the growing importance of health-related quality of life. An excellent chapter on COPD as a wasting disease highlights recent studies on the role of wasting in morbidity and impaired health status, emphasizing that reversal of wasting is a prerequisite for improved health status among some COPD patients.

Throughout the book the font, figures, tables, and illustrations are of high quality, making it a pleasure to read. Mercifully, the paper doesn't glare. The figures and illustrations are up to date for the most part. Where old friends surface again, it is because there has been little new work on the subject. The accompanying CD-ROM is also useful.

The authors have worked hard to create a thoughtful reference text on COPD. I look forward to further editions to include the newer pharmacologic and nonpharmacologic

approaches to COPD that are currently the subjects of clinical trials, as well as to the shift in emphasis to outcome measures that include health-related quality of life.

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Pulmonary Rehabilitation Video Series. American Association of Cardiovascular and Pulmonary Rehabilitation. Timonium, Maryland: Milner-Fenwick. 2002. Set of 5 videos for in-facility use: \$445. Home video guide for pulmonary patients: \$19.95.

The American Association of Cardiovascular and Pulmonary Rehabilitation and Milner-Fenwick Incorporated have produced an excellent series of videos for pulmonary rehabilitation patients. The many different facets of pulmonary disease are often overwhelming to the patient, and these short, well-done videos present many aspects of pulmonary illness and techniques of coping. The series has 2 parts: a 5-video series created for in-facility use, and 1 home-use video tape that is a compilation of the other 5 tapes. The 5-video series tapes are titled "Breathing Training and Pulmonary Illness," "Pulmonary Medications and Hygiene," "Stress and Relaxation Techniques for Pulmonary Patients," "Exercise for Pulmonary Patients," and "Healthy Choices for Managing Your Pulmonary Illness." The compilation home video is titled "Living with Your Pulmonary Illness," and it comes with a printed list of the chapters, for easy reference.

"Breathing Training and Pulmonary Illness" (11 min). This video shows the importance of using breathing techniques to gain more control of everyday tasks. A simple explanation of the anatomy and physiology of the breathing cycle is presented. The demonstration of diaphragmatic and pursed-lip breathing is well done. A simple explanation is given of the difference between restrictive and obstructive respiratory diseases, and the best techniques are described and demonstrated for each class of

disease. This provides the patient useful guides to treatment planning.

"Pulmonary Medications and Hygiene" (16 min). The explanation of oxygen therapy is not thorough enough. The qualifications for oxygen therapy are not mentioned. This is important because many patients don't understand that shortness of breath is not the qualifier. A review of pulse oximetry would be helpful, as oximetry is used so frequently in patient evaluations and pulmonary rehabilitation. The short discussion of bronchodilators, antibiotics, and steroids includes an excellent demonstration of various metered-dose inhaler delivery techniques. Stronger emphasis on the importance of spacers would be helpful. Bronchial hygiene is discussed and several methods are demonstrated. The review of postural drainage is well presented.

"Stress and Relaxation Techniques for Pulmonary Patients" (15 min). The importance of smoking cessation and avoidance of second-hand smoke is emphasized and several approaches to smoking cessation are given. The presentation about the stress caused by the physical and emotional impact of pulmonary illness is well done. A simple diagram of the physical stress cycle is shown and explained. Stress factors and the results of stress are explained in simple, understandable language. Stress management is also well presented. This section emphasizes the importance of having a time to relax each day. The use of muscle relaxation, diaphragmatic and pursed-lip breathing, and imagery techniques are well demonstrated. Several examples of how to simplify daily routines are given and there is a discussion of the importance of enjoyable activities. The tape ends with this strategy to manage stress: Pace, Plan, Enjoy.

"Exercise for Pulmonary Patients" (12 min). This video provides a simple explanation of the physical importance of conditioned muscles and advocates using a pulmonary rehabilitation program as a starting place to begin an exercise program. Important points about exercise are explained: the safety of the exercises, oxygen monitoring while exercising, adaptation of physical limitation to the exercise regimen, and slow starts and gradual increases in the program. Warm-ups and stretches are discussed and demonstrated. The increase in a sense of well being and the social aspects of a pulmonary rehabilitation program are mentioned.

"Healthy Choices for Managing Your Pulmonary Illness" (14 min). This video is designed for patients following a pulmonary rehabilitation program. Many helpful subjects are presented in this video. Smoking cessation is emphasized and several cessation methods are described. The signs and symptoms of illness are well presented, including changes in mucus amount and color, increased coughing, and shortness of breath. Thorough hand-washing is stressed. Flare-ups are explained, and the video stresses the importance of having a treatment plan to manage them promptly. A short segment on nutrition is included and small, more frequent meals are recommended. Suggestions for a balanced diet and simple food preparation are well presented. A couple is shown talking about their coping methods for maintaining intimacy. The video discusses advance directives to physicians, and there is a well-done section on community support, which emphasizes continuing activities and the importance of staying active.

This video series was enhanced by the selection of the patients who appear in the videos. It is so much easier for the viewer to identify with people who have similar problems.

The video designed for home use, "Living with Your Pulmonary Illness," will be a treasured resource for patients. One of my active pulmonary rehabilitation maintenance group members (for 11 years), Gloria Myers, reviewed the videos and thought they were all excellent, especially the illustrations and portrayals of patients. She found the patients shown in the videos "real" and very credible—not actor types. Gloria also thought the tapes extremely informative and very clear and concise. She appreciated that the sound quality was good; people in the video spoke slowly and calmly and were easy to understand, partly because they spoke in a "nonmedical" fashion. Gloria thought the videos would be an asset for pulmonary rehabilitation programs and that they would be especially good for our graduates (people in the maintenance program), as review material, since "many of us have attended for a long time and forgotten to pay attention to some important information."

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Diagnosis and Management of Pulmonary Embolism (CD-ROM). Stavros Konstantinides MD, Annette Geibel MD, and Wolfgang Kasper MD. 2002. Stuttgart, Germany: Thieme Medical Publishers. \$99.

Diagnosis and Management of Pulmonary Embolism is an interactive CD-ROM for teaching clinical decision-making regarding pulmonary embolism. The program on the CD-ROM describes 8 patient cases and guides the user through diagnostic dilemmas, therapeutic options, and outcomes—all with appropriate references. Additionally, there are radiographs, electrocardiographs, and echocardiographic and angiographic videos with each case, which show commonly-used diagnostic modalities and captivate one's attention. The program is intended for an audience of medical students and practicing physicians, but it would also be appropriate for nurses interested in critical care, emergency room care, or the management of pulmonary embolism in particular. However, the content focuses more on the diagnosis of pulmonary embolism rather than the management of critically ill patients with pulmonary embolism. There is very little discussion of the respiratory care or ventilator management of such patients, so this CD-ROM may not appeal to respiratory therapists.

This CD-ROM works only with the Windows operating system (Windows 95 or higher). The minimum required central processing unit speed is 333 megahertz, and there must be at least 5 megabytes of free space on the hard drive and 64 megabytes of random-access memory available. A 12× compact disc reader is necessary, and monitor resolution must be set at 1,024 × 768 pixels and 32 bits color depth to view all the images and videos. If the resolution is not set properly, the program will automatically guide you through a few easy steps to change the settings. I tested the software on a computer that has a 900 megahertz Athlon processor and had no difficulty.

The program appears with a split screen and is extremely easy to use. On the left side is a list of the 8 patient cases, each with a one-sentence description. Each case can be clicked to open and the case appears on the right side of the screen. By clicking on the arrows and directions, the user can navigate through each case with ease. Images are clear, videos begin without additional prompting, and interpretations of the studies are readily available once the user has had an opportunity to review the studies.

Furthermore, any of the cases or portions of cases can be skipped, and it is simple to exit the program and then re-enter it at the same point.

The 8 patient cases demonstrate the protean manifestations of pulmonary embolism. The cases range from a patient with a relatively minor pulmonary embolism and no hemodynamic compromise to a patient with acute pulmonary embolism and right ventricular overload. Also included are 2 cases with diseases that can mimic pulmonary embolism: acute mitral regurgitation and atrial septal defect. When a case is opened, a list of case segments appears, including history, physical examination, laboratory data, electrocardiogram, and other relevant information. Images such as chest radiograph, duplex ultrasound, chest computed tomography, and echocardiography are then available with a click. The case concludes with any further diagnostic procedures that were ordered, followed by a description of the patient's treatment and clinical course and a brief discussion of the case's management. In general, the cases are well described, clear, and easy to learn from. I think the cases are appropriate for the intended audience. One of the best features of the program is that it allows the user to be a diagnostic sleuth, as it does not present the next step in the case until the user has an opportunity to formulate an answer.

However, there are several flaws with the presentations and discussions that could mislead practitioners. This program was written by a group of physicians who are researchers of echocardiography for diagnosing and managing pulmonary embolism, and they advocate echocardiography extensively, which is not agreed upon by all experts in this field. Every case includes an echocardiogram as part of the workup, and the echocardiography results are heavily relied on for management decisions. For example, studies have found that patients with pulmonary embolism who have signs of right ventricular strain on echocardiogram have increased mortality, and it has therefore been hypothesized that reducing right ventricular afterload with thrombolytic therapy might improve survival, even in cases where there is no hemodynamic compromise.^{1,2} Many experts would agree, however, that, despite numerous investigations, thrombolytics have not been proven to provide a clear survival benefit in that situation. One of the cases presented in this CD-ROM is of a patient

who has an acute pulmonary embolism and right ventricular overload on echocardiogram. The patient receives thrombolytics, possibly leading the user to believe that obtaining an echocardiogram and administering thrombolytics is the correct decision with all patients of that type.

Additionally, many of the 8 example patients were included in study protocols and therefore received many diagnostic procedures. Several of the patients had positive chest computed tomography angiogram, duplex ultrasound of the extremities, and pulmonary angiogram, in addition to echocardiogram. Seeing the correlation between those different studies is interesting, but this CD-ROM could give the reader the impression that all of those tests should be performed, when in practice pulmonary embolism only needs to be diagnosed with a single positive study.

I think the program places too much emphasis on the complicated technology used for diagnosis of pulmonary embolism and not enough emphasis on identification of patients, simple diagnostic algorithms, and treatment. Nothing is mentioned about the utility of D-dimer testing. There is no discussion of the most appropriate diagnostic study to order first, which is usually a ventilation-perfusion scan or a chest computed tomography angiogram, not an echocardiogram. Also not referenced are the data comparing low-molecular-weight heparin and unfractionated heparin, the duration of anticoagulation therapy, or the appropriateness of a hypercoagulability workup in some patients.

Overall, **Diagnosis and Management of Pulmonary Embolism** is an interesting tutorial on pulmonary embolism, but it focuses too heavily on diagnostic modalities and new technology. With its interactive design and outstanding graphics, the program is entertaining while providing education on a limited approach to the diagnosis and management of pulmonary embolism. However, some information in the program can be misleading and too little time is spent on the relevant and practical clinical aspects of caring for patients with pulmonary embolism. As part of a library, this CD-ROM might be useful for some practitioners, but I would not recommend purchasing it for personal use.

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Pulmonary/Respiratory Therapy Secrets, second edition. Polly E Parsons MD and John E Heffner MD, editors. Philadelphia: Hanley & Belfus. 2002. Soft cover, illustrated, 539 pages, \$34.95.

As a respiratory care educator, I cannot overstate the value of a good reference text. As the ever-expanding titles in my library vie for premium shelf space, more and more, natural selection takes over and those works with unturned pages are relegated to the back of the pack. I am pleased to say that **Pulmonary/Respiratory Therapy Secrets** has found its place not only among the front-runners, but also frequently occupies a seat in my book bag.

Pulmonary/Respiratory Therapy Secrets is a clinical reference for pulmonary and critical care medicine. The text presents numerous topics from a diverse and prolific group of authors, written in a question-and-answer format designed to function with the stated goal of the text: "Pulmonary clinicians and respiratory therapists must first pose proper questions before they can formulate effective solutions to their patients' respiratory problems." The intended audience is experienced clinicians, medical students, residents, and fellows. The question-and-answer format works well, because it utilizes and reinforces the critical thinking skills needed to be an expert clinician.

In general, the design of the book is visually appealing. The book is small enough to be kept handy, though not quite small enough to be comfortably kept in a lab coat. The paperback binding is sturdy, and my copy shows no signs of wear, even after being carted around town in my bag. The book's cover art is very basic and leaves something to be desired. That fact has some impact on the immediate visual appeal of the text—but the old adage about not judging a book by its cover still holds true! The book's use of illustrations, tables, and radiographs enhance the wealth of informa-

tion in the text. The editors used art sparingly and wisely, where needed; for example, flow volume tracings and other graphics to illustrate pulmonary functions. The illustrations will greatly enhance the reader's understanding, and there are excellent illustrations in many chapters, such as the chapters "Mediastinoscopy" and "General Approaches to Interstitial Lung Disease." The radiographs and computed tomography images, though not abundant, adequately demonstrate specific and important clinical findings. Image quality is important to illustrate points effectively, and I found the images to be of high quality and easy to view. The references are complete and current for each chapter. The table of contents is clearly organized and the index is comprehensive.

The organization of the subject matter departs from the traditional division of management and pathophysiology. Disease processes are presented categorically and include comprehensive corresponding chapters on treatment. This approach works nicely, as the reader can move quickly from readings on respiratory failure to ventilatory strategies and weaning. An example is the section "Airway Disease," in which the chapters flow from asthma and chronic obstructive pulmonary disease to oxygen therapy and smoking cessation.

The book's ease of use and convenient size create a text that is valuable in the clinical as well as didactic setting. The versatility of the text and the wide variety of subject matter make this a good reference for frequent use in various patient care settings. An entire chapter devoted to procedures in pulmonary medicine adds a lot of utility to the reference as a whole. The authors provide instructions for and clarify many points about specific procedures such as bronchoscopy, and they address questions such as "What are the indications for bronchoalveolar lavage?" and "What are palliative bronchoscopic therapies?" Posing these questions with succinct and current answers offers respiratory therapists a better understanding of the procedures we see every day and aids residents when asked for a consult.

A critical care reference must contain sound advice, and this text uses current standards of evidence-based practice. With all the current excitement surrounding acute respiratory distress syndrome in critical care, naturally this was the first section I read, considering the contemporary nature of the

material. I found that the book is supportive of the current National Institutes of Health recommendations for treating acute respiratory distress syndrome. I was also encouraged to see a discussion on multiple-organ dysfunction syndrome, as well as information on risk factors, morbidity, and mortality. Another nice facet of this book is its discussions of current controversies in acute respiratory distress syndrome management. In the section on mechanical ventilation there is an informative discussion on the basics of mechanical ventilation, as well as an interesting discussion on the mechanisms of permissive hypercapnia. In the section titled "Alternative Invasive Ventilatory Strategies," I found some unusual ideas that I have not heard much about in recent years, including thoracic gas insufflation, inverse ratio ventilation, proportional-assist ventilation, and partial liquid ventilation. Though these ventilation methods are fraught with pitfalls, they are also thought-provoking alternatives for those times when we need to pull a proverbial "rabbit out of our hat."

Pulmonary/Respiratory Therapy Secrets covers a comprehensive list of topics in pulmonary medicine. In addition to the topics in critical care and mechanical ventilation, an entire section is devoted to infectious processes, and the list of infectious processes is impressive. This section remains true to the rest of the text in that each chapter is current and contains valuable, up to date, and interesting information for the clinician. The chapters revolve around the current standards of practice but they also open up some interesting debates. One nice example is the controversy over tracheal aspirate versus bronchoalveolar lavage, discussed in the section on nosocomial pneumonia. Though the gamut of pulmonary infections receives a lot of attention in the section on infectious disease, it's nice to see an informative chapter on pneumonia prevention. There is also extensive reference to lung cancer, vascular disease, interstitial disease, and other topics too numerous to list here. For each disease category the book provides pertinent information on diagnosis, radiographic and clinical presentation, and treatment.

The question-and-answer format teaches practitioners to ask the right questions about patient care—one of the primary goals of the text. This is a nice alternative to the standard textbook format. The arrangement of questions allows the introduction of new concepts and text without the cumbersome

style of a traditional textbook. The reader can pause and formulate his or her own answers before proceeding to the text's answers. In practice it is easy to disseminate the required information, which adds to this text's utility as a reference. The design of the text stimulates the evaluation of a problem and the formulation of creative, effective solutions for patient care. Teaching critical thinking in this way creates better clinicians, which benefits our patients.

Overall, **Pulmonary/Respiratory Therapy Secrets** is informative, enlightening, and interesting. I integrated the book's information into my daily routines and found it to be a convenient reference. Of particular note is the union of older interesting ideas with exciting new ones. The text is not an instructional work, but rather a resource for clinicians seeking answers to questions about management, pathophysiology, and the theories behind what we do. I found the format refreshing and supportive of our roles as investigators in the clinical setting.

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Understanding Lung Sounds, third edition. Steven Lehrer MD. Philadelphia: WB Saunders. 2002. Soft cover, illustrated, 145 pages plus audio CD (operates with Windows or Macintosh operating systems), \$49.

Listening is a magnetic and strange thing, a creative force. The friends [and caregivers] who listen to us are the ones we move toward. When we are listened to, it creates us, makes us unfold and expand.

—Karl Menninger MD

Understanding Lung Sounds is designed to provide background on chest auscultation and interpretation skills to medical and allied health students and practitioners. The book is divided into 5 chapters, the first three of which comprise half of the 124 pages of the text; these 3 chapters review (1) fundamentals of pulmonary anatomy and physiology, (2) the physics of sound, hearing, and the stethoscope, and (3) history and physical examination. The final 2 chapters provide detailed discussion on normal and adventitious breath sounds. The accompanying audio compact disc contains 22 tracks of lung sounds described in the text, as well as 6 tracks to test the listener's skills. At the end of each chapter a series of questions

review the content, and several of the questions are of the critical-thinking type. The chapters are referenced and there is a bibliography, a section with the answers to chapter questions, a glossary, and an index.

Chapter 1 begins with a very brief overview of pulmonary anatomy and physiology and concludes with a section on pulmonary disorders, including paragraphs on atelectasis, emphysema, consolidation, pneumothorax, and pleural fluid problems. Although the content in this section is extremely basic, readers without this fundamental information would probably not be able to connect the pathologies to specific lung sounds.

Chapter 2 provides an introduction to the basic physics of sound, describing the characteristics of frequency, intensity, duration, and timber (or quality). The text reviews the capabilities of normal human hearing; the various ranges of musical instruments are used in this discussion, as well as sound levels of breath sounds. Of interest is that most breath sounds fall into the range (below 500 Hz) in which the human ear is least sensitive. The author provides a brief but fascinating history of lung sounds in ancient medical practice, including the contribution of René Théophile Laënnec. The chapter concludes with a “nuts and bolts” discussion of the types and components of stethoscopes, including which sounds are best heard with the bell versus the diaphragm.

Chapter 3 reviews the basics of history and physical assessment, including inspection, palpation, and percussion. Again, although this information is rudimentary, without this background the book’s discussion on connecting lung-sounds to disease entities would be incomplete.

The book’s major topics are covered in Chapters 4 and 5. Chapter 4 provides instruction in chest auscultation and discusses normal breath sounds. A table early in Chapter 4 relates alterations in normal breath sounds with the major pulmonary disorders, describing expected alterations in inspection, palpation, and percussion. The chapter concludes with sections that provide interesting reading on details such as breath sounds variations based on location/region of the chest wall, heartbeat, and in children. (Readers with further interest might enjoy Robert Loudon and Raymond Murphy’s classic “state of the art” article on lung sounds.¹) The chapter then reviews more recent technical advances of chest auscul-

tation by Victor McKusick and David Cugell, discussing phonopneumograms from the standpoint of teaching auscultation skills. That research led to techniques such as time-expanded waveform analysis, later promoted by Raymond Murphy, in which adventitious sounds are stored by a computer and replayed slowly. The chapter briefly discusses subtraction and automated phonopneumography, which has been employed by Dennis O’Donnell and Steve Kraman. These techniques involve multiple recordings of lung sounds made from various locations on the chest wall and have revealed the areas of loudest sound transmission and the relative nonuniformity of sound intensity across the chest. Information on the latest computer-based technologies can be found in other articles on these topics.^{2,3} The chapter in **Understanding Lung Sounds** concludes with a short discussion of dual chest-mounted stethoscopes and stethoscopes inserted into the breathing circuit during anesthesia to detect tracheal versus esophageal intubation.

Chapter 5 covers adventitious sounds and abnormal voice sounds. The text first deals with the troubling issue of terminology. In the days of Laënnec this topic became a problem, and continues to be. Laënnec originally used the word *râle* (Latin for “rattle”) generically for all sounds. To add detail for the various lung-sound characteristics, he applied adjectives, describing a “sounds-like” approach. For example, Laënnec creatively described types of rhonchus (Greek for “snore”) as sounding like cooing pigeons, croaking frogs, or snoring (“*râle sec sonore ou ronflement*”), because of the foreboding connotation of *râle* for the *death rattle*. Confusion about these terms continues today and has been the source of much research and editorializing.⁴⁻⁷ In the mid-1970s the American College of Chest Physicians and in 1980 the American Thoracic Society tried to clarify the muddy waters by categorizing 3 sounds: crackle, wheeze, and rhonchus.^{8,9}

The British, however, later simplified the terminology to crackle (course and fine) and wheeze (high-pitched and low-pitched); wheeze includes rhonchus. In **Understanding Lung Sounds** Steven Lehrer uses the British terminology approach.

The author carefully describes the sound characteristics and presumed acoustic causes of crackles (both fine and coarse) and then describes the disorders normally associated with these adventitious sounds. He provides a table that summarizes findings, and fig-

ures that further describe the types and relative incidence of crackles in diagnosis. Wheezes receive similar treatment. However, the author makes no distinction between (and there is little discussion about) high-pitched wheeze (sibilant rhonchus) and low-pitched wheeze (sonorous rhonchus). The section on wheezing does not seem to have as much review of potentially associated pathologies as does the section on crackles. This chapter includes a paragraph on stridor and hoarseness, with a review of possible causes of each. The section on adventitious sounds concludes with brief discussions on pleural friction rub, mediastinal crunch, bronchial leak squeak, and the inspiratory squawk. There is a brief review of abnormally transmitted voice sounds. The chapter ends with a short discussion on auscultation methods to quantitate loudness of breath sounds in the context of abnormally low and/or declining forced expiratory volume in the first second (FEV₁) associated with emphysema and chronic obstructive pulmonary disease. What I did miss in this book was a summary table of all types of adventitious sounds, summarizing mechanism, sound origin, acoustic pattern, and clinical relevance. Such tables have been developed in other publications.^{2,9}

The audio CD is a combination of narration and breath sounds. Beginning students of chest auscultation will find the narrative quite helpful to keep the sounds in context. The narrator makes connections between sounds, their physical causes, and the associated pathologies. The script of the narration is printed in the accompanying booklet in the CD’s case. That booklet includes some material not covered in the book, such as amphoric (cavernous) breath sounds. It also helps with the use of the confusing term *rhonchus*. The final 6 sounds on the CD are for listener skill-testing, and there is immediate feedback.

The recordings are of high quality and are repeated enough to provide instruction without inflicting boredom. Using the CD requires that your computer have a sound card and separate speakers. Computers running Windows operating systems require Windows 95 or higher, the central processing unit must operate at at least 166 megahertz, and the system must have ≥ 8 megabytes of random access memory.

Overall, **Understanding Lung Sounds** is a wonderful aid for learning the basics of auscultation. The combination of a compact textbook and audio CD makes effective use

of both media. The level of the material appears to be targeted to physicians, nurses, and respiratory therapists who are in the beginning of their education about physical examination or who desire a refresher. The CD allows easy playback of any specific sound, in contrast to audio tapes, which are difficult to cue up to the right spot.

On the Internet there are some free lung sounds sites, but few sites provide background equivalent to Dr Lehrer's text. There are Web sites that for a subscription fee provide color graphic analyses along with the sounds, but they cannot compare to the modest (\$49) price of **Understanding Lung Sounds**, which I would recommend to any educational program or hospital, medical, or department library. My only concerns relate to the author's use of British descriptive terminology—specifically, the omission of the controversial term rhonchus, as that term does appear on some American board exams. However, the CD does include a lovely rhonchus sound and it is described as “sonorous rhonchus” as well as “low-pitched wheeze.”

A summary table of all adventitious sounds and their associated pathologies would be helpful for both the text and the pamphlet accompanying the CD.

Over the years it seems that the overall value of chest auscultation has taken a back seat to chest radiography and other imaging techniques, but auscultation is a time-honored bedside technique that can provide immediate, cognitive, and sometimes life-saving information at low cost. As we listen to their bodies it can bring us closer to our patients.

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Patterson's Allergic Diseases, 6th edition. Leslie C Grammer MD and Paul A Greenberger MD, editors. Philadelphia: Lippincott Williams & Wilkins. 2002. Hard cover, illustrated, 830 pages, \$125.

As a practicing allergist, I am always looking for an up-to-date summary of the latest developments in the diagnosis and management of allergic conditions. After thrashing the binding of the fifth edition of this series from heavy use during fellowship training, I was pleased to see this sixth edition released. The sixth edition is named for the late Roy Patterson, who was the Ernest S Bazley Professor of Medicine and the Chief of the Division of Allergy-Immunology at Northwestern University Medical School.

The book has an attractive black hard cover, with a solid binding and good-quality paper. The typeset is easy to read and the text in this edition is arranged in narrower, easier-to-read columns, which is a marked improvement from the fifth edition. Tables are well utilized and the black-and-white photographs of pollen and radiographs are clear. There are very few typographical errors.

The goal of the sixth edition is the same: to provide a current summary of the diagnosis and management of nearly every allergic condition encountered in a typical allergy practice. It addresses the common traditional topics of asthma, allergic rhinitis, sinus disease, food allergy, anaphylaxis, drug allergy, latex allergy, urticaria, angioedema, contact dermatitis, and atopic dermatitis. In addition it has chapters on less common conditions such as immunodeficiency, hypersensitivity pneumonitis, allergic bronchopulmonary aspergillosis, occupational lung disease, Stevens-Johnson syndrome, and eosinophilia. Chapters are

also devoted to more difficult clinical problems, such as wheezing in infants, sleep apnea, severe asthma, and asthma in pregnancy, as well as chapters on the use of allergy medications, such as antihistamines, corticosteroids, leukotriene antagonists, cromolyn, theophylline, and delivery devices for inhaled medications. One editorial deficit of the book is that the treatment of certain subjects is divided and separated; for example, the allergic rhinitis chapter and nonallergic rhinitis chapter are 9 chapters apart. The asthma chapter and the severe asthma chapter are 5 chapters apart. The asthma chapter and the asthma medication chapter are 11 chapters apart. Still, this is only a slight inconvenience, as the index is complete.

The clinical topics were well chosen, and I found it extremely difficult to think of a question that would arise in an allergy practice that is not addressed in this text. The chapters are loosely arranged into sections of epidemiology, pathophysiology, clinical manifestations, laboratory diagnosis, and treatment. There is some variability in the depth and order of these sections, which affects chapter length. For example, the urticaria and allergic rhinitis chapters have 1–2 pages devoted to pathophysiology, whereas the asthma chapter has 6 pages devoted to pathophysiology. The asthma chapter has an additional 6 pages on the classification of asthma. As a result of the variability in section depth, the asthma chapter and drug allergy chapter are each roughly 70 pages long, which will be helpful for a specialist or interested provider but might be challenging for a busy nonspecialist trying to obtain quick guidance during a busy clinic day. A more uniform chapter structure and a “key points” section (which was present in the fifth edition) might be helpful to limit repetition and shorten chapter length.

The asthma chapter begins with the epidemiology and pathophysiology of asthma. A clinical overview section presents information on history, physical examination, pulmonary function tests, radiologic findings, and complications. A 6-page classification section presents the differences between allergic asthma and other types of asthma. A detailed pharmacology section is followed by a clinical management section, which presents an approach to managing exacerbations, status asthmaticus, and respiratory failure. The recommendations are well supported and well referenced; there are over 300 cited references, though many

of them are at least 3 years old. Although the "stepped" therapy found in the National Asthma Education and Prevention Program guidelines is not explicitly presented, the management recommendations are based on those guidelines. There are additional chapters covering topics such as asthma in infants, severe asthma, and controller medications. A section summarizing points from the 7 separated asthma chapters might help those interested in a quick overview.

The drug allergy chapter is the one of the most comprehensive references available and is considered by many to be one of the premier sources of information. It details the epidemiology, classification system, and organ-specific signs and symptoms associated with drug allergy. A suggested diagnostic and management strategy is presented and is followed by a section discussing specific drug allergies. At roughly 70 pages it is an excellent resource for a specialist or a very interested primary care provider. A non-specialist trying to answer the question "Should I refer this patient for skin testing?" may want to refer to reviews of this specific clinical problem for additional guidance.

The chapter "Diagnosis of Immediate Hypersensitivity" is excellent and I wish it had been expanded in this edition. The listed questions to ask in the history are very helpful and are worth incorporating into a provider's list of questions. Allergy testing is somewhat a mystery for some referring providers, and spending more time on the specific techniques and details would have been helpful. Four pages were devoted to skin test technique, interpretation, and diagnostic performance characteristics. One page was used to discuss in vitro tests. Second-generation in vitro tests with improved sensitivity and specificity are available and specific guidance on the use of these tests might be helpful. However, since it is easy to obtain that information elsewhere, this does not detract from the overall excellent quality of this book.

Another excellent chapter that the non-specialist may refer to often is the chapter on immunotherapy. It contains an example of an immunotherapy schedule and an approach to managing systemic reactions. Although more information could be included in this chapter, allergists often provide information and guidance to primary care physicians who administer immunotherapy. In addition, the American Academy of Asthma, Allergy, and Immunology is in the process

of standardizing the administration of immunotherapy, and guidelines have been published.

The reviews on specialized topics, such as allergic bronchopulmonary aspergillosis, Stevens-Johnson syndrome, and idiopathic anaphylaxis, will be very useful to the specialist, because the coverage is comprehensive and the writing concise. These chapters help demystify the diagnosis and management of these less common conditions. For example, there are 2 excellent tables in the chapter on allergic bronchopulmonary aspergillosis: one describes diagnostic criteria and one summarizes management of this condition.

Although this book presents an extremely solid approach to diagnosis and management, it is important to realize that it is not necessarily the only approach. For example, the book recommends that "animal dander immunotherapy should be restricted to veterinarians and laboratory personnel whose occupation makes avoidance practically and financially impossible." That viewpoint is not universally accepted. Another example is the recommendation to wash bedding at 140° F. Some allergists recommend 130° F, or even 120° F, to prevent burns from hot water. However, all recommendations in the text are well referenced.

The book is addressed to specialists, fellows-in-training, and primary care providers, who will appreciate the extremely solid, well referenced material on the diagnosis and management of allergic conditions. The comprehensiveness and arrangement of the material makes it a bit challenging to use the text to make point-of-care decisions, unless one is familiar with the text's layout. Respiratory therapists and clinical nurses will find the chapters on allergy medications useful in educating patients. Patients with allergic conditions typically have many questions, as there is conflicting information available in the media and Internet. Residents and students interested in allergy as a field can get a sense of what allergists see and do, which can assist students in considering allergy and immunology as a career.

This book will find a comfortable niche in most clinicians' libraries as the incidence of allergic conditions and the need for readily available treatment information are rising at an alarming rate. The practice of allergy also changes at a rapid rate; during the time of the writing of this review, monoclonal anti-immunoglobulin E was approved by the Food and Drug Administration for the treat-

ment of asthma. Therefore, it is wise to use **Patterson's Allergic Diseases** in conjunction with updated databases and established journals in order to deliver the best care possible. As for my copy of the text, the binding is starting to strain and creak from heavy use, and I am depending on it to hold together until the release of the seventh edition.

In summary, **Patterson's Allergic Diseases** provides a solid, well-referenced approach to the diagnosis and management of allergic diseases. The book is comprehensive, especially in areas of asthma and drug allergy, the narrower columns make the text more easily readable than the previous edition, and the book offers concise reviews of specialized topics such as allergic bronchopulmonary aspergillosis. For the future edition I see the following opportunities for improvement: the coverage of a given subject should be organized in one section (not scattered in various sections); the sections on skin testing and in vitro tests should be expanded; and pediatric allergy topics should be discussed separately.

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Radiological Imaging of the Neonatal Chest. Veronica Donoghue MD, editor. (Medical Radiology - Diagnostic Imaging and Radiation Oncology Series, AL Baert, HP Heilmann, F Molls, and K Sartor, editors) Heidelberg, Germany: Springer-Verlag. 2002. Hard cover, illustrated, 195 pages, \$99.

Dr Donoghue, a pediatric radiologist at the Children's Hospital in Dublin, Ireland, has, with the help of chapter authors from Canada, Ireland, England, Norway, and Switzerland, edited a broad overview of the imaging of the full range of neonatal chest abnormalities. The book primarily discusses chest radiography but also includes computed tomography, magnetic resonance imaging, and angiography. Following an initial chapter on the embryology and anatomy of the neonatal chest, an update on clinical management of various neonatal conditions is provided. There are chapters on neonatal respiratory distress syndrome (formerly known as hyaline membrane disease), transient tachypnea of the newborn, meconium aspiration, and neonatal pneumonia, followed by chapters describing various chest malformations, first from the antenatal im-

aging perspective, then from post-natal imaging findings. The final 3 chapters cover congenital disease of the heart and great vessels, congenital anomalies of the upper airway, and chest wall abnormalities that may produce respiratory distress. Altogether there are 196 figures in 331 separate illustrations and 6 tables.

The book was developed primarily for pediatric radiologists and radiology residents and fellows in training. The secondary intended audience is neonatologists, other pediatricians involved in the care of newborns, and pediatric surgeons. This book will also be of considerable value to nurse specialists involved in newborn care, especially of the premature neonate.

The book is part of the series *Medical Radiology: Diagnostic Imaging and Radiation Oncology*, edited by, among others, Dr Albert Baert, of Leuven, Belgium, and Dr Klaus Sartor, of Heidelberg, Germany. The book's hard cover is somewhat flimsy, creas-

ing with only moderate stress. However, I think the book will stand up well with proper care. The paper used seems high quality and durable, the print is very sharp and easy to read, and the illustrations are of very high quality and easy to understand, with sufficient and appropriately distributed labeling. There are remarkably few typographical errors, indicating careful review of the manuscripts and pre-publication proofs. The use of British rather than North American spellings (eg, haemorrhage instead of hemorrhage; oedema instead of edema; ischaemia instead of ischemia) should not cause any confusion in understanding the text.

The chapters' reference sections differ in the number of citations and their timeliness, the best being Chapter 2, "Update on Clinical Management of Neonatal Chest Conditions." However, the references in general are relatively comprehensive and appropriate. An excellent feature is the book's consistently close placement of figures and il-

lustrations near to their accompanying text, which saves the reader having to turn pages to find the images described in the text. The index is more than satisfactory.

The pediatric radiology literature has not had a new text focused on the neonatal chest for a long time. This overall excellent and relatively comprehensive book is a welcome addition to the pediatric radiology imaging literature, and I highly recommend it to any radiologist who has neonatal chest imaging as part of his or her work load. The book is also an excellent resource for the radiologist-in-training as well as neonatologists, pediatric surgeons, and any pediatrician caring for the newborn. The authors have quite admirably accomplished their goals.

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