

Chapters 6–9 cover humidity therapy, bronchial hygiene therapy, lung expansion therapy, and airway management. Chapter 10 tackles the highly complex issue of home mechanical ventilation. Chapters 11 and 12 address sleep therapy and apnea monitoring.

In the real world of respiratory home care, patients often have multiple respiratory devices prescribed for specific therapies. Thus, information found in one chapter (eg, on humidity therapy) would often be used in conjunction with information from another chapter (eg, on mechanical ventilation or sleep therapy). The guide's format makes it easy for the home care RT to extract the bits and pieces needed to ensure that all aspects of the care plan are properly addressed. Moreover, when modifications to the care plan are anticipated, the guide can be used to individualize the plan to the patient's specific needs. Since the guide also functions as a reference, one advantage of using the guide company-wide might be a reduction in practice differences between RTs.

In the third section, Chapters 13–19, the authors turn their attention to other somewhat related topics of respiratory home care, but with mixed results. These chapters address some topics and issues seldom seen by the home care RT. For example, in Chapter 13, on pulmonary rehabilitation, there is little other than information extracted from the AARC's clinical practice guideline on pulmonary rehabilitation, followed by a brief list of patient exercises. Chapter 14, on disease management, is 40 pages of tables on the definition, etiology, and treatment options for 41 specific diseases, which afford a cursory overview at best. Chapter 15, on pharmacology, and Chapter 16, on infection control, are somewhat better; both have useful information. Chapter 15 includes a nice list of current respiratory medications and recommended dosages. However, starting on page 15–11, in the table that lists commonly used sympathomimetics, in the adverse reactions/comments column the reader is incorrectly referred to page 13–4 (the correct page is 15–6).

Chapter 17, "Education and Training," provides an excellent overview of the importance of properly planned and provided in-home education and training for patients and family/caregivers. Useful advice is provided to help the home care RT promote patient adherence to the care plan. The authors rightly state that, following the initial assessment of a new home care patient, pro-

viding effective and meaningful patient education is the second most important skill of the home care RT. I couldn't agree more.

There are problems with Chapter 18, on reimbursement. Simply stated, the chapter's contents have been trumped by newer developments. Medicare is now well underway in implementing a radically different reimbursement process from that described here. This is certainly not the authors' fault, but it demonstrates the volatility of the home care industry. One topic in the chapter that remains relevant is the discussion on ethical issues, which is, regrettably, a recurring problem in the industry. I was surprised that 2 important resources on this topic were not included or referenced: the AARC's position statements on ethical and professional conduct and home respiratory care services, which articulate the expected professional behavior of home care RTs.

Chapter 19, "Accreditation and Other Rules," is nothing more than a brief overview of the 3 existing accrediting agencies, and the preponderance of information is on the Joint Commission on Accreditation of Health Care Organizations, at the expense of the other two: the Community Health Action Program and the Accreditation Commission for Health Care. Though there is mention of Medicare's planned mandatory accreditation for home medical equipment providers, there is no mention of the current Medicare Supplier Standards, which will be the basis for the additional service and performance standards to be required for participating home medical equipment providers.

Though this small guide can't provide an exhaustive treatment of this complex topic, it does provide relevant and accurate information that home care RTs will find useful in carrying out their daily home care visits, the net effect of which will be better patient outcomes. It is also an excellent resource for RTs transitioning into home care. It can serve another important purpose as well. In the context of the growing concern that new Medicare reimbursement policies may make it increasingly difficult for home medical equipment providers to continue to offer the "value-added" service of home care RTs, this guide sets forth, in no uncertain terms, just how complex respiratory home care has become, and clearly underscores the fact that without such highly competent professionals, patient care would suffer. As the debate over new Medicare policies intensifies, hopefully the policy makers will look

at this guide and realize how vital it is that new rules do not limit Medicare beneficiaries' access to professional home care RTs, especially for patients with complex medical conditions.

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**Imaging of Diseases of the Chest**, 4th edition. David M Hansell, Peter Armstrong, David A Lynch, and H Page McAdams. Philadelphia: Mosby/Elsevier. 2005. Hard cover, illustrated, 1,220 pages, \$295.

The 4th edition of **Imaging of Diseases of the Chest** is a welcome update to one of the most comprehensive thoracic imaging texts currently available. The most notable changes are the retirement of previous edition authors Wilson and Dee and the addition of authors Lynch and McAdams. The authorship of each chapter is no longer specified, which suggests more of a collaborative effort. The book has also grown from 1,039 pages to 1,220 pages, which reflects the more detailed text and additional illustrations and references. Although the chapter on interventional techniques has been removed and the order of the remaining chapters has been somewhat rearranged, the overall organization of the book is similar. Despite the changes, the scope of **Imaging of Diseases of the Chest** is the same: it is a single-volume, comprehensive thoracic imaging text focused on the adult patient, with emphasis on complex and rarer diseases rather than on more common, well-understood entities.

The overall appearance of the 4th edition is more polished than the previous editions. Text boxes and tables now have a light gray background. The new typefaces are more pleasing to the eyes, and the figure legends are set in larger type, which I think will reduce eye strain. The outlines that open each chapter are also set in larger type, and the use of bold and italic type better highlights the chapter organization. This new edition has better-quality images and many new ones. Illustrations from conventional tomography (a technique that has been obsolete since the wide availability of computed tomography [CT]) have been aban-

done and replaced by higher quality radiographs and CT images.

The first chapter is a review of thoracic imaging techniques, including conventional and digital radiography, CT, and magnetic resonance imaging. Reflecting newer technology, the emphasis was shifted away from conventional film-screen radiographs to digital radiography. Additionally, the section on CT is greatly expanded, with emphasis on multidetector CT. Conventional high-resolution CT (HRCT) techniques have been moved to this chapter from the introductory HRCT chapter (Chapter 4), and the authors address the pros and cons of traditional HRCT versus volumetric multidetector CT scanning, with regard to information obtained and patient radiation dose.

As in the third edition, the second chapter, "The Normal Chest," is a brief overview of normal thoracic anatomy and assumes the reader is already familiar with thoracic radiographic anatomy. Chapter 3, as in the previous edition, covers basic imaging findings and patterns encountered in thoracic imaging. Some figures have been replaced and others have been added. The most notable change is the expanded discussion on the role of fluorodeoxyglucose (FDG) positron emission tomography (PET) in the evaluation of solitary pulmonary nodules. The algorithm for managing the asymptomatic solitary pulmonary nodule has been removed, presumably because it does not include FDG PET, and consensus has yet to be established.

Chapter 4 presents an overview of patterns and findings encountered in chest HRCT. As previously mentioned, technical considerations have been moved to the first chapter. Discussions have been expanded, and the number of references has grown from 258 to 333. The new schematics of the various patterns described are a nice addition.

Chapter 5 covers the broad spectrum of pulmonary and pleural infections, a topic that could be a book by itself. Additional illustrations have been added, but the overall organization and content are relatively unchanged. The discussion and illustration of pulmonary aspergillosis has been expanded and updated, and the text reflects the now preferred terminology, such as "chronic airway invasive aspergillosis" over "semi-invasive aspergillosis." The large table in the third edition has been removed, replaced by better-organized text.

The authors changed the title of the 6th chapter from "Acquired Immune Deficiency Syndrome (AIDS) and Other Forms of Immunocompromise" to "The Immunocompromised Patient," I believe, to reflect the growing number of patients without AIDS who are immunocompromised because of solid-organ or hematopoietic-stem-cell (bone marrow) transplant, immunosuppressive therapy for autoimmune disease, or chemotherapy for cancer. The AIDS section of this chapter was updated to reflect the recently recognized immune restoration syndrome and the new nomenclature and classification of the *Pneumocystis jiroveci* fungus (formerly called *Pneumocystis carinii* and classified as a protozoan), which causes pneumocystis pneumonia in immunocompromised patients. The subsection on nonspecific interstitial pneumonia in patients with AIDS has been expanded to reflect more clinical information and epidemiologic data. The lung transplant section in this chapter (a topic almost worthy of its own chapter) was greatly expanded. This section now includes more information on surgical technique, donor selection, and recipient evaluation. The discussions of complications, both early and late, are more thorough and are better illustrated.

Chapter 7 focuses on pulmonary vascular disease and edema and opens with a very "hot" topic in thoracic imaging: evaluation for suspected acute pulmonary embolism. With the advancement of multidetector CT technology, CT pulmonary angiography has become the diagnostic test of choice for evaluating acute pulmonary embolism. However, the authors correctly address the phenomenon of "technology creep," in regard to CT pulmonary angiography; the surge of interest in its use and applications in clinical practice have outpaced the collection of evidence of its superiority over existing tests. Nevertheless, the discussion of CT pulmonary angiography is greatly expanded, with more discussion on technique and many more illustrations of acute pulmonary embolism and its pitfalls. The in-patient-out-patient algorithm presented in the third edition has been replaced with the 2003 guidelines from the British Thoracic Society, which reflect the availability of D-dimer assay, low-molecular-weight heparin, and the fact that many facilities do not have ventilation/perfusion scanning available. The rest of the chapter focuses on pulmonary arterial hypertension and edema, and many new illustrations are included.

The eighth chapter, "Inhalation Lung Disease," opens with a section, new in this edition, on smoking-related lung diseases. Recently, the relationship between several lung diseases and cigarette smoking has become more evident. The authors appropriately group together Langerhans cell histiocytosis, desquamative interstitial pneumonia, and respiratory bronchiolitis/respiratory bronchiolitis-interstitial lung disease in this section. In the previous edition those were scattered among the chapters on airways disease and idiopathic lung disease. Hypersensitivity pneumonitis has also been moved from the section on immunologic diseases of the lung to this section, and more illustrations have been provided. The section on pneumoconiosis has been updated to reflect the new International Labor Organization classification scheme for chest radiographs, and the discussion on asbestosis has been revised from a detailed table of imaging findings to standard prose. As in many other sections, more and newer examples have been added. The new subsections on flock worker's lung and flavor worker's lung provide information on these 2 newly recognized entities.

Chapter 9 is on drug and radiation induced lung disease, and the authors have expanded the discussion on mechanisms and injury in the introduction and have reorganized specific drugs into cytotoxic and non-cytotoxic categories. More examples of radiation-induced lung disease have been added, and the number of references in this chapter increased from 144 to 347.

Chapter 10 tackles the difficult and incompletely understood topic of idiopathic pneumonias and immunologic diseases of the lungs. The authors greatly expanded on the idiopathic interstitial pneumonias, employing the newest classification scheme proposed by the joint committee of the American Thoracic Society and European Respiratory Society. Numerous additional examples have been added, and up-to-date references are provided. The topics of amyloidosis and eosinophilic lung disease have been moved from this chapter to Chapter 11, which also addresses sarcoidosis, eosinophilic lung disease, neurocutaneous syndromes, and other miscellaneous lung diseases. Thoracic manifestations of storage disorders and inflammatory bowel disease have been added, and the number of illustrations was increased.

Chapter 12 covers diseases of the central and peripheral airways, including tracheal

disease, bronchiectasis, small airways diseases, and chronic obstructive pulmonary disease. In this edition the authors moved the topic of cystic fibrosis from the chapter on congenital disorders to this chapter and expanded the text on the topic. The revised section on bronchiolitis reflects a better understanding of small airways disease, and the authors have added a subheading for neuroendocrine hyperplasia, an uncommon and recently recognized cause of constrictive bronchiolitis.

Chapter 13, "Neoplasms of the Lungs, Airways, and Pleura," has new information on population screening for lung cancer, the new World Health Organization classification of pre-invasive and malignant lung tumors, and expanded coverage of FDG PET in lung cancer staging. Survival data have been updated to include a large series from Japan, and a relatively recently described neoplasm, atypical adenomatous hyperplasia, has been added to the text. The topic of "missed" lung cancer is also presented. The lymphoma section has been restructured to include the new World Health Organization classification of Hodgkin lymphoma and lymphoid neoplasms excluding Hodgkin lymphoma, and staging of mesothelioma has been added.

Chapter 14 covers mediastinal diseases, including those of the thoracic aorta. There is a new section on differential diagnosis of mediastinal masses that has helpful tables for each mediastinal "compartment." The section on aortic disease has also been lengthened, and there are many new examples that highlight the role of magnetic resonance imaging in aortic disease.

Chapter 15 is a minor update on pleural disease, with newer, additional, and higher-quality images. Chapter 16 discusses congenital anomalies of the lungs and airways. Cystic fibrosis was appropriately moved from this chapter to Chapter 12.

Chapter 17 focuses on chest trauma. The authors clearly demonstrate the central role of CT in evaluating chest trauma, with numerous new illustrations and expanded text, particularly on the topic of traumatic aortic injury.

The shortcomings of the 4th edition of **Imaging of Diseases of the Chest** are few. There are very few typographical errors, and the information provided is up to date. Controversial issues are presented as such, and the authors, while expressing their own opinions, avoid a dogmatic tone or approach. A few of the older figures, despite having been

reprocessed, are still less than ideal, and some figures are too pixilated or have too much contrast. The authors excluded the previous edition's chapter on thoracic interventions, which allowed them to fill those pages with more figures and longer discussions of other topics, which, in my opinion, will be more useful to the majority of radiologists. The topic of thoracic intervention may better belong on its own or in an interventional radiology text.

In summary, the authors of the 4th edition of **Imaging of Diseases of the Chest** have kept true to the aim of previous editions: to produce a single-volume comprehensive text on thoracic imaging. This book is by no means an introductory text on thoracic imaging and is best suited for individuals who have a good understanding of thoracic imaging and anatomy. Though targeted primarily at radiologists, many pulmonologists and thoracic surgeons may find it useful.

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**High-Resolution Computed Tomography of the Lungs: A Pattern Approach.** D Karthikeyan DMRD DNB. London: Hodder Arnold/Oxford University Press. 2005. Hard cover, illustrated, 223 pages, with CD ROM, \$110.

**High-Resolution Computed Tomography of the Lungs: A Pattern Approach** attempts to provide an overview of lung disease, with an emphasis on high-resolution computed tomography (CT). Unfortunately, shortcomings in the book's organization, limited discussion of a pattern approach, dearth of high-resolution images, and the low quality of images included disappointed us. The paper, printing, and binding quality are fair.

The book has 3 sections and an appendix. The first section reviews anatomy and fundamentals of high-resolution CT. The diagrams of lung anatomy are clear. The illustrations of segmental and bronchial anatomy are especially good. However, the figures of airways and secondary lobule anatomy are small and grainy. The discussion on fundamental high-resolution CT is

limited to basic protocol, indications, and technique.

The book's second (and shortest) section describes lung disease patterns and concomitant differential diagnoses and gives short descriptions of specific pathologies. This section is hampered by lack of CT images, though included schematics present the material adequately. As pattern of lung disease is the focus of the text, the second section proves to be the most disappointing aspect of the book, and, at best, it may be helpful as a primer for reading a more in-depth text.

The third section presents cases of commonly encountered disease. Though not exhaustive, the cases are of adequate scope and complexity for resident radiologists and clinical physicians. However, the images are of low quality, and many are not high-resolution, which is unacceptable, given the availability of modern printing techniques and digital technology. In addition, the organization could be improved. Rather than an alphabetical approach, specific subcategories would have been more helpful. The appendix is completely text, mainly consisting of differential diagnoses and pearls.

**High-Resolution Computed Tomography of the Lungs: A Pattern Approach** is worth reading after other similar texts have been perused. Its format is easy to read, but it lacks good organization. Its appeal is that it can be digested without a major time commitment. It should be recognized, however, that this is not an exhaustive text. Overall, this book has many shortcomings, compared to other comparable works.

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**IASLC Textbook of Prevention and Detection of Early Lung Cancer.** Fred R Hirsch MD PhD, Paul A Bunn Jr MD, Harubumi Kato MD PhD, and James L Mulshine MD, editors. Boca Raton: Informa/Taylor & Francis. 2006. Hard cover, illustrated, 396 pages, \$149.95.

Lung cancer is the leading cause of cancer deaths, with over one million annual deaths worldwide. Despite decades of research and advances in treatment, lung cancer remains highly lethal; over 90% of lung