

Color Atlas and Text of Pulmonary Pathology, 2nd edition. Philip T Cagle MD, editor. Philadelphia: Wolters Kluwer Health/Lippincott. 2008. Hard cover, illustrated, 720 pages, \$299.

In general, pathology atlases suffer as beautiful books with limited function. However much this atlas fulfills the role of beautiful, by taking a comprehensive approach and adding text, the authors have expanded its utility. According to the preface, the book's objectives are to help practicing pathologists make timely and accurate diagnoses when signing out cases, and to facilitate rapid, comprehensible study of all topics in lung pathology for students, residents, fellows, and subspecialty board applicants. The book seems to achieve the latter objective. For a respiratory therapist, medical student, pathology resident, or pulmonary or thoracic surgery fellow, browsing this atlas would be a pleasant way to get an overview of pulmonary pathology, and a basic familiarity with histology and cytology images. The inclusion of images of more exotic conditions, as well as the textual features, may make the book useful to more experienced pathologists.

Relative to the first edition, published in 2005, this edition has updated sections on pulmonary hypertension, pulmonary hemorrhage, lung transplantation, and pediatric pulmonary pathology. In other areas new topics and images have been added. The organizational framework and layout have been preserved from the first edition.

This book certainly qualifies as beautiful. A bright orange-red cover makes it conspicuous on the shelf. The images are bright and the colors vivid. The admixed text and images, and a very generous amount of white space, produce a relaxing, esthetically pleasing effect. This is a very fine "coffee-table" book.

The greatest strength of this atlas is its exhaustive content. It is organized into 24 sections, which include normal histology, artifacts and age-related changes, benign and malignant neoplasms, reactive and inflammatory conditions, infections, transplant-related pathology, therapy effects, forensic pathology, metabolic disorders, and pediatric pathology. Each chapter is dedi-

cated to one disease or neoplasm, and there are 155 chapters, most of which are 2-3 pages. A few longer chapters are divided into parts and subparts. This organization is conducive to a browsing review of pulmonary pathology, and in this function the book works well. The up-to-date bibliography at the end provides guidance to additional reading when motivation strikes.

Each chapter begins with a brief narrative summary that includes the condition's definition, demographics, etiologies, prognosis, major histologic features, and differential diagnoses. This is followed by an outline summary of the major cytologic and histologic features. The rest of the story is in the pictures and their legends. The pictures include gross, cytology, and histology images. The 42 contributing authors are from around the United States and the world, and there were 11 editors. The large number of contributors has undoubtedly enhanced the breadth and diversity of the content, and the editors did a commendable job in maintaining consistency in the organization of the content and the quality of the images.

The overall quality of the images is excellent. They are all sharply focused, bright, have excellent tinctorial quality, and are from top-quality histology and cytology preparations viewed with outstanding optics and photography. The photographers did a very good job choosing the appropriate fields to demonstrate the pathology features. Likewise, the photographs of gross specimens are outstanding.

Three aspects of the images offer opportunities in future editions for improving the book's educational function. First, the images are all single-column width, which limits their size. Although in general they are large enough to see the major pathology features, a substantial minority would illustrate the pathology better if they were larger. Related to this criticism is my desire for more low-power views, which work better as larger pictures. Second, the legends could be more consistently revealing. They are all brief one-sentence or two-sentence descriptions of the important features in the image, and many correspond to the outline bullets. In many cases they are well written and succinctly convey the important aspects of the pathology, but some of them waste space with

uninformative phrases such as "higher-power view" and "gross photograph." The legends could be more educational if they included either more histologic descriptors or, better yet, information to correlate the histology with the cytology or pathophysiology. Third, there are no arrows. Many of the pictures show a very limited field, which helps one to identify the pathology without difficulty (at least for an experienced pathologist). However, more low-power views with larger pictures and arrows, and more informative legends, would greatly enhance the book's educational value.

The organizational framework of the sections and chapters is best suited to a browsing review. The wealth of material, including images of many unusual neoplasms and other conditions that are rarely encountered by the general pathologist or other health care professionals, makes the book a valuable study tool for reviewing for board examinations or just enhancing your memory-bank of diseases and corresponding images. For example, in the sections on neoplasms you can encounter every type of neoplasm, including all the variant histologic patterns of individual lung neoplasms. The organization into separate sections for benign, malignant, parenchymal, and pleural neoplasms enhances the sense of completeness.

There are, of course, advantages and disadvantages to any organizational scheme. In this case, the sections on neoplasms do not facilitate comparisons that would be very useful. For example, solitary fibrous tumor of the pleura appears in separate sections (the sections on malignant and benign neoplasms). While it makes sense to place the malignant and benign versions under those headings, it presents a practical challenge to readers who want to compare the 2 versions. Another example is carcinoid tumors in the section on benign neoplasms, diffuse neuroendocrine cell hyperplasia, in the chapter "Metaplastic, Dysplastic, and Premalignant Lesions," and carcinoid tumor, atypical carcinoid, small-cell carcinoma, and large-cell neuroendocrine carcinoma in the section on malignant neoplasms. One does not gain an appreciation of the morphologic and biologic relatedness and distinct characteristics of these cell proliferations when they are so dispersed throughout the book.

The challenge of making comparisons with this book is further complicated by a somewhat cumbersome cross-reference system and index. When cross-references to related sections are provided, the references do not include page numbers. Thus, in comparing minute meningothelial-like nodule with primary meningioma of the lung, one is directed from Chapter 20 to Chapter 24, Part 4, Subpart 4.5. Furthermore, many of the pages are not numbered. This can add up to a lot of page-turning to find things. The index can also induce some head-spinning, because the page numbers are frequently listed under acronyms. In looking for pulmonary hypertension, I started with hypertension, which directed me to pulmonary, under which I found hypertension, then primary, and then was directed to PPH, where I found a page number. I also discovered a few errors. The page number listed for *Coccidioides* in both the index and the table of contents directs you to a section on *Legionella* (although the heading was *Coccidioides*). The section on *Coccidioides* turned out to be in the fungal infection chapter, where it belongs, but under the heading *Acanthamoeba*.

The sections on reactive and inflammatory conditions are similar to those on neoplasms, in the high quality of the images and comprehensiveness. In the section on large airways I learned about “middle lobe syndrome” and “tracheobronchopathia osteochondroplastica,” as well as more common diseases such as chronic bronchitis, asthma, and allergic bronchopulmonary aspergillosis. The reactive and inflammatory conditions are more difficult to present than the neoplasms. The best understanding and diagnoses of these diseases are based on lung architecture, which makes low-power views and text descriptions critical. This is an area where the book doesn't quite meet its potential value. There are not enough low-power views in these sections, and not enough discussion of architectural features. For example, in the section on pulmonary hypertension, a brief review of the pulmonary microcirculation and comparisons of normal and abnormal vessels at different locations would be very helpful. As another example, the section on usual interstitial pneumonia would benefit greatly from a low-power view of a complete lobule, to show pleural and septal fibrosis with central sparing.

To sum up my impressions of this book in a few words I would choose “compre-

hensive,” “pretty,” and “some missed opportunities.” In the traditional genre of atlases, this one is excellent. Images are what atlases present, and this one does an outstanding job of that. There is an added bonus of helpful text to guide you in studying the images. The comprehensive content increases its utility relative to many atlases. As a study tool it is functional and pleasant. However, at the end of my review, I found myself still wishing for this atlas to take the next step toward even greater utility as a reference book that would help me understand and diagnose diseases. Maybe that is not to be expected from an atlas, but this book raises my hopes about what can be done. Filling more of the ample white space with pictures, diagrams, and cogent text might detract from the beauty, but it could tremendously enhance its educational value.

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Transbronchial and Endobronchial Biopsies. Philip T Cagle MD, Timothy C Allen MD JD, Keith M Kerr FRCPath, FRCPEd, editors. New York: Wolters Kluwer Health/Lippincott. 2008. Hard cover, 168 pages, illustrated, \$199.

In **Transbronchial and Endobronchial Biopsies** the authors focus on the pathology of bronchoscopic biopsies. The book is well organized, beginning with chapters that provide an overview and discuss artifacts and nonspecific changes, then proceeding through 38 chapters on specific lung pathologies, and finishing with a chapter on the legal aspects of interpreting biopsies. The book is intended to be a succinct, “hit the important points” reference, not an in-depth encyclopedia of all the facts. Each chapter is written clearly and is an easy read. The text is relatively brief. There are no major grammatical or typographical errors. All the chapters contain numerous sharply focused color figures that appropriately represent the lung diseases under discussion. Where fitting, the authors included tables that expand on, but do not repeat, material in the text. Finally, each chapter ends with a list of suggested readings, instead of references. The

book has 168 pages, including the table of contents, preface, and index. As stated in its preface, the text is published as a companion to the *Color Atlas and Text of Pulmonary Pathology*. The intended audience is practicing pathologists.

The first chapter is an overview of specimens from endobronchial or transbronchial biopsies. It is somewhat general in nature. A few more details would be informative, such as what constitutes a “good” transbronchial biopsy (seeing alveoli) and how many biopsies (ie, pieces of specimen) may be needed to accurately diagnose a given condition. Chapter 2 describes artifacts and non-specific changes in biopsies, and explains reasonably well how to identify them and their importance. What became apparent after these 2 chapters is that the authors do not use footnotes and references to support their statements. Instead, they provide suggested readings at the end of each chapter. This is true throughout the book. In my opinion that practice detracts from the book. Relevant footnotes and references evidence the scientific basis of statements and allow the reader to research deeper on particular points. This can be especially important in discussions of controversial topics.

The next 6 chapters cover malignant and benign airway tumors. Each provides an excellent, succinct picture of a specific type or group. Chapter 5 provides a superb description of immunostains and explains how they can help establish whether the lung is the primary malignancy site or a site of metastasis.

A problem that first becomes apparent in Chapter 3 and remains a problem throughout the book is that many of the figures lack pointers (eg, arrows) to clearly identify the aspect described in the legend. For example, in Figure 3.3C, which concerns the formation of a keratin pearl and intercellular bridges in squamous-cell carcinoma of the lung, an arrow to the features in question would have been helpful for less experienced pathologists and non-pathologists. Another example is Figure 3.6, regarding TTF-1 (thyroid transcription factor) and CEA (carcinoembryonic antigen) staining. In some instances the features of interest are obvious and markers are not needed (eg, Fig. 23.3, which shows lipid material and “foamy” macrophages). And in some instances the authors did include pointers: Figure 18.1 has arrows that point to granulation plugs in the airways in organizing pneumo-