Practical Differential Diagnosis in CT and MRI

E.C. Lin, E.J. Escott, K.D. Garg, A.G. Bleicher, and D. Alexander, eds. New York: Thieme; 2008, 304 pages, 85 tables, \$49.95.

It is tempting to be skeptical of a radiology text that is devoid of images. However, in the case of the new book entitled, *Practical Differential Diagnosis for CT and MRI*, the intent is to provide a concise, readily accessible source of differential diagnoses to which a radiologist can refer during interpretation of CT and MR imaging. The presumed audience is the general practicing radiologist, insofar as the text covers the entire human body, but there is usefulness to both the subspecialized radiologist and the radiologist in training as well.

The book is organized first anatomically, with 7 sections entitled, "Brain," "Head and Neck," "Chest," "Abdomen," "Pelvis," "Musculoskeletal," and "Spine." Within each of these sections are subsections, predominantly organized by anatomy, though the brain section is organized by type of pathology: "Tumor and Tumorlike Lesions," "Vascular," "Infection," and "Miscellaneous." Finally, each subsection includes chapters organized by anatomy, disease process, or characteristic findings. Each chapter includes a few short paragraphs covering the most common differential diagnoses, and most chapters contain a table highlighting the features differentiating between each diagnosis. At the end of many of the chapters,

there is also a list including some of the less common entities in the differential. Finally, each chapter provides a short list of references.

The flexibility in organization is, for the most part, a strength of this text. Rather than attempting to divide the book into categories solely on the basis of anatomy, the authors have written several stand-alone chapters, each around a single radiologic sign. This is especially useful

the "Chest" section, where an entire subsection is devoted to various "Patterns and Signs," with a chapter for each of 7 common radiologic findings in the lungs, such as "Ground Glass Opacity," and "Halo Sign." In a similar fashion, in the "Brain" section, there are chapters covering such findings as "Restricted Diffusion" and "Hyperattenuated and Calcified Lesions on Computed Tomography." This style allows for quick access to a group of differential diagnoses.

Neuroradiologists may find the text lacking in a few major categories. For example, the variable style of organization leaves the topic of CNS infectious disease somewhat disjointed. In the "Brain" section, the subsection entitled "Infection" is sparse, containing only 1 chapter, in which the manifestations of HIV are addressed collectively. Additional discussions of infectious diseases of the brain are found elsewhere, predominantly in the "Tumor and Tumor-Like Lesions" and "Miscellaneous" subsections. Moreover, there is limited discussion of congenital malformations of the brain or spine. Particularly in neuroradiology, CT and MR angiography are indispensable techniques, and the text lacks attention to them. There is no discussion of advanced MR techniques either, such as diffusion tensor imaging, CSF flow, or functional imaging, but these are, arguably, beyond the reasonable scope of a book such as this.

As the title proclaims, the book is practical. It is not, nor does it attempt to be, comprehensive. Rather, a main strength of the text is its brevity. Most of the entities encountered in the day-to-day practice of radiology are included, and if further reading is desired, references to peer-reviewed literature are current. Insofar as the book is intended to serve as a quick resource, there is a thorough, 36-page index, enabling the reader to readily search terms. Chapters are concise, with paragraphs, lists, and tables that are well organized. For the subspecialized radiologist reading predominantly neuroradiology on a day-to-day basis, this text may prove useful as a starting place to round out some differentials and to guide further search. This book is best suited, though, for radiologists in training, general radiologists, or subspecialized radiologists reading outside of their specialty. *Practical Differential Diagnosis for CT and MRI* is a useful adjunct to the work environment as a manageable and quick resource during a busy day at the workstation.

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