Computed Tomography and Magnetic Resonance of the Thorax, second edition. David P. Naidich, Elias A. Zerhouni, and Stanley S. Siegelman, Raven Press, New York, 1991, \$125, 606 pages.

This textbook is the updated edition of Computed Tomography of the Thorax, originally published in 1984 and containing 326 pages. The current edition is an outstanding and comprehensive discussion of the principles and application of CT and MRI to imaging of the chest. The text is organized into chapters by anatomic regions, and each chapter is divided into sections on technique, normal anatomy, disease entities, indications, and clinical correlation. The individual chapters are extensive, but at the same time not overly wordy. The CT and MR images are universally excellent, and there are enough images and diagrams in the text to convey the teaching points contained within. Many original studies are described, and each chapter has a large list of references. The index is easy to use and complete.

The chapters are arranged in an orderly progression. "Principles and Techniques" describes a rational, comprehensible approach to choosing CT and MR protocols, with advantages and disadvantages of various permutations. "Mediastinum" contains a superb discussion of the complex anatomy contained in this location, with a nice description of the use of MRI in lymphoma. "Airways" details bronchial anatomy nicely, but the discussion of bronchiectasis is somewhat confusing. "Lobar Collapse" is notable for the use of CT and MRI to detect centrally obstructing masses, and has excellent images in this area. "Hila" describes normal anatomy well, but does not delve deeply enough into vascular disease of the chest.

One of the new chapters, "Lung Cancer," is an excellent discussion of staging and the impact CT and MR have upon medical and surgical decision making. "Focal Lung Disease" and "Diffuse Lung Disease" have replaced the former chapters on pulmonary nodules and parenchyma. The former gives a good discussion of solitary nodules, but still leaves one unclear about how to investigate ambiguous nodules. The latter chapter dramatically expands the characterization of diffuse lung disease with a superb discussion of high-resolution CT. This includes a close correlation between pathophysiology, microanatomy, and imaging findings.

"Pleura and Chest Wall" focuses more on anatomy than pathology, and well describes the axilla. The chapter on the Diaphragm is, however, only adequate. Another new chapter, "Pediatric Thorax," written by Jerald P. Kuhn, is a complete discussion of application of CT and MR in the pediatric population, and parallels the topics covered in the rest of the text without unnecessary duplication of material. The last chapter, "Heart and Pericardium," gives an overview of pericardial and myocardial disease. As the stated goal is only an introduction to cardiac CT and MR, the authors have left a more comprehensive approach to this extensive topic to other texts.

Computed Tomography and Magnetic Resonance of the Thorax is an excellent, in-depth, completely up-to-date presentation of cross-sectional chest imaging. The text is well written and well organized, and the images are plentiful and of the finest quality. The latest clinical applications and techniques have been added in updating the first edition, and this textbook is a must for radiologists, residents, and anyone else interested in chest radiology.

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Nuclear Medicine in Gastroenterology.

H.J. Biersack and P.H. Cox, editors, Kluwer, Dordrecht, 1991, \$125.00, 253 pages.

The text of this multi-author book is divided into three sections. The first describes radionuclide studies of the hepatobiliary system; the second, of the stomach and intestines; and the third, periotoneovenous shunt patency, esophageal motility and radioimmunoscintigraphy.

The book's stated purpose is to "present the entire spectrum of Nuclear Medicine in Gastroenterology" to internists and surgeons, with the realization that although ultrasonography and CT will "rule the field of Radiology," nuclear medicine can respond to some of the open questions. This is a measured and reasonable conclusion.

In general, the book is well written and amply illustrated. References are current through early 1989. Particularly good chapters illustrate the use of HIDA in postoperative evaluation and intra-arterial chemotherapy. Much of this data is not otherwise available from a current single source.

Many of the applications described have established only scattered use in actual clinical practice. Examples include sucralfate imaging, esophageal motility studies, and abdominal radioimmunoscintigraphy, although the latter remains in rapid evolution. Some of the conclusions, however, were somewhat unrealistic. For instance, most gastroenterologists and surgeons do not rely on quantitative biliary scintigraphy to make clinical decisions, although this may be true in isolated institutions. The chapter on the detection of GI bleeding fails to clearly state that in vitro labeled red cells are more sensitive for this purpose than is sulfur colloid.

This book is expensive, but will be useful for those who perform a significant volume of gastrointestinal radionuclide studies.

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