

BOOK REVIEWS

RADIOISOTOPES IN CARDIOLOGY. M. Salvatore, E. Porta, Eds. New York, NY, Plenum Press, 1983, 329 pp, \$45.00

Radioisotopes in Cardiology constitutes the proceedings of a nuclear cardiology meeting held in Naples, September 21–23, 1981. The book is multiauthored and, as so frequently occurs, the contents are not uniform. Some chapters are very brief whereas others are quite comprehensive, but all are well referenced. A decided limitation is the sparsity of illustrations. There are a number of typographical errors, especially in the initial chapters.

The chapter on positron emission tomography of the heart is excellent. There are, however, some deficiencies in the book. Several of the authors are not critical of controversial issues, such as phase image. Diastolic left ventricular function is not covered, and cold pressor radionuclide ventriculography, a procedure of dubious utility in clinical cardiology, is presented unilaterally. Conventional radiology, digital radiography, transmission computerized tomography of the heart, and nuclear magnetic resonance probably will be outside the immediate domain of the nuclear cardiologist and, therefore, the space devoted to these subjects appears to be of questionable value except as information items.

I must admit that I find it difficult to define the audience for this book.

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1983 YEAR BOOK OF NUCLEAR MEDICINE (The Year Book Series). Paul B. Hoffer, Alexander Gottschalk, Barry L. Zaret, Eds. Chicago, IL, Year Book Medical Publisher, Inc., 1983, 458 pp, \$42.00

The *Year Book*, now in its third year of new editorial staff, begins to reflect the individuality of this group. This volume covers 62 journals, so the current literature is extensively reviewed. In the present edition, NMR is recognized as an emerging diagnostic entity with review of the current state of NMR imaging. There is an appropriate, stronger emphasis on cardiovascular nuclear medicine—64 articles reviewed in 1981, 73 articles in 1982, and 85 articles in the 1983 *Year Book*. Only superficial attention, however, is given to the peripheral vascular system. Review of the pulmonary system is complete, and the editorial comments are quite pertinent. The chapter on bone, joints, and muscles includes a variety of interesting clinical applications. The endocrine system is addressed only superficially, but this may reflect the present state of this area of interest. The gastrointestinal system is largely represented by hepatobiliary imaging—additional review of applications of gastric emptying and gallbladder contractility studies could have improved this section. As documented by inclusion of pertinent literature from emission tomography, NMR and PET scanning, there is renewed interest in the application of nuclear medicine to central nervous system studies.

Overall, the 1983 *Year Book* successfully accomplishes its purpose—that of a critical review of the nuclear medicine literature together with pertinent editorial comments, suitable for “bite-size” bedtime reading. It remains an absolute must for final review for

candidates of forthcoming specialty board examinations.

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SEGMENTAL ANATOMY: APPLICATIONS TO CLINICAL MEDICINE. M. Wagner, T. L. Lawson. New York, MacMillan Publishing Co., 1982, 650 pp, \$95.00

The authors state that their goal was “to provide students, residents, and practitioners of surgery, radiology, and medicine with a detailed knowledge of sectional anatomy, both normal and pathologic.” To accomplish this end, sections of the body are presented in axial, coronal, and parasagittal perspectives, accompanied by corresponding images of transmission computerized tomography and ultrasonography as indicated. For correlation, labeled leaders of the body, sections, and images are placed on facing pages. When indicated, portions of the anatomic sections are enlarged for a better appreciation of the detail. With each set of anatomic sections and images, there is a description of the important anatomic relationships. For orientation, a miniature line drawing showing the approximate plane depicted accompanies each study.

A total of 440 studies are included under eight units: head and neck; thorax; abdomen; male pelvis; female pelvis; extremities; lumbosacral spine; and neonate. There are color photographs of the most significant black and white anatomic sections. The photographs of the sections are excellent, clearly delineating the required detail. The correlative images (transmission computerized tomography or ultrasonography) appear to have been obtained from early generation instruments, and the reconstructed sagittal and frontal computerized tomographs show the lack of resolution expected.

Of particular benefit are the sections of the extremities, frequently lacking in many similar atlases, and the detail devoted to the lumbosacral region. The unit on the “Segmental Anatomy of the Neonate” will be particularly beneficial to those clinicians and scientists working in that area. The important differences in the anatomy and relationships between the neonate and the adult are emphasized.

In summary, this is an excellent anatomical work, presenting correlative information required for interpretation of diagnostic images and also providing concise descriptions of the sections and the relationships. This book is highly recommended to students, residents, and clinicians.

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DIAGNOSIS AND TREATMENT OF BONE TUMORS: A TEAM APPROACH. Franklin H. Sim, Ed. Thorofare, NJ, Slack, Inc., 1983, 298 pp, \$39.50

This book presents, in a readable fashion, a multidisciplinary review of benign and malignant bone tumors. The tone is set by

the doyen of orthopedic surgery at the Mayo Clinic, John C. Ivens. His foreword states that the team approach was initiated by the Doctors Mayo and was based on the concept that "the combined wisdom of man's peers is greater than that of any individual."

There are three major sections. Section 1 deals with general information, Section 2 describes benign bone tumors and lesions that may simulate these tumors, and Section 3 is a comprehensive account of the malignant conditions. The book ends with a crescendo outlining the rehabilitation of bone tumor patients as part of the team approach.

Great emphasis is placed upon the surgical approach, not unexpected in view of the expertise of the editor. His section on limb salvage and reconstructive technique is concise and informative. Similar treatment is provided for other aspects of surgical management of benign and malignant tumors. The sections on pathology are co-authored, by among others, Dahlin and Unni, recognized authorities in their field. Their descriptions are a synopsis of their many publications.

The illustrations are of excellent quality, but, unfortunately, on occasion I found that several were misnumbered and at variance with the text. The photomicrographs are of good quality, and it is a pity that they were not accompanied by brief descriptions, which however, are available in the text.

The book has several major defects—the most glaring is the paucity of information relating to the chemotherapy of bone tumors. For example, while the Mayo Clinic may not necessarily concur with the concept of treatment with chemotherapy in osteosarcoma, the latter, nonetheless, is advocated by many other investigators. The regimens of chemotherapy for Ewing's sarcoma and multiple myeloma were not presented. Finally, the references, while current, are not comprehensive.

This text will provide guidance and understanding of orthopedic principles for bone tumors. The approach is primarily institutional and reflects the concepts of the Mayo Clinic. As such, the monograph will be of interest to students in orthopedic surgery, advanced trainees, and specialists. It is to be understood, however, that this is not a reference textbook. Those desiring additional information, particularly on chemotherapy, which in some institutions constitutes a major component of treatment, will have to seek advice elsewhere.

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DIGITAL RADIOGRAPHY: A FOCUS ON CLINICAL UTILITY. R. R. Price, F. D. Rollo, W. G. Monahan, A. E. James, Jr., Eds. New York, NY, Grune & Stratton, 1982, 425 pp, \$39.50

Despite the title, this book is primarily concerned with digital subtraction angiography (DSA), describing both elementary physical principles and clinical applications. Although the technique has become widely available, books on DSA are relatively scarce. This volume is a welcome addition, since it is comprehensive and up-to-date, representing the state of the art in mid 1982. Sections on legal and economic issues, application to art history (?), and the future of diagnostic medical imaging are included. The book represents the proceedings of a symposium at Vanderbilt University co-sponsored by Humana Corporation and Technicare Corporation.

There are 23 chapters by 48 authors. The quality of the presentations is variable, but there are several high points, especially the excellent introduction to the basic physical principles by Price and James. A valuable overview of the original DSA systems at the Universities of Wisconsin and Arizona is included. The early experience with DSA at Vanderbilt with Technicare equipment constitutes a substantial part of the book. This experience, reported in detail, allows the reader to assess the current level of development of DSA in a clinical environment.

Clinical experience with digital vascular imaging in neuroradiology, pulmonary, aortic and cardiac studies is covered by experts. Peripheral angiography is not described. The quality of the images presented is average, and this is a definite advantage. Using typical images instead of the very best provides one with a more realistic expectation of DSA system performance.

The interested reader may judge for himself or herself what the future of DSA will be. There has been very little application of digital fluoroscopic functional imaging in comparison with the current level of parametric imaging development in nuclear medicine. Cardiac subtraction angiography is not likely to supplant nuclear cardiology with the present generation of DSA systems. Only limited first-pass studies, which on many systems require gating, are routinely available with the equipment described here.

This is the single, most comprehensive book on the physical and clinical aspects of DSA that has appeared. If only one book on this subject is considered for a personal or departmental library, *Digital Radiography* is the obvious choice.

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BOOKS RECEIVED

Mammography, Thermography, & Ultrasound in Breast Cancer Detection. L.W. Bassett, R.H. Gold, Eds. New York, NY, Grune & Stratton, Inc., 1982, 172 pp, \$48.00

Advances in Magnetic Resonance (Volume 10). John S. Waugh, Ed. New York, NY, Academic Press, 1982, 223 pp, \$35.00

Clinical Ultrasound Reviews (Volume 3). Fred Winsberg, Ed. New York, NY, John Wiley & Sons, 1983, 388 pp, \$75.00

Bone Metastasis: Monitoring and Treatment. Basil A. Stoll, Santilal Parbhoo, Eds. New York, NY, Raven Press, 1983, 428 pp, \$65.00

Vascular Radionuclide Imaging: A Clinical Atlas. Joseph T. Ennis, David J. Dowsett. New York, NY, John Wiley & Sons, 1983, 239 pp, \$85.00