

JNMT Bookshelf

TECHNIQUES, DIAGNOSTICS, AND ADVANCES IN NUCLEAR CARDIOLOGY

Mary D. Osbakken, William C. Reeves, and Fred W. Flickinger, eds, Charles C. Thomas, Springfield, IL, 1983, 402 pp, \$53.50

The efforts of 23 authors have resulted in an excellent overview of the field of nuclear cardiology. This text, comprised of 17 chapters divided among four sections, admirably fulfills the editors' promise of presenting the "'how to's,' 'why's,' and 'when to's' of each nuclear cardiology diagnostic technique." The first section deals with the technical and methodological aspects of common nuclear cardiology examinations and is an easy-to-read introduction to computer methods, radiopharmaceuticals, and cardiac anatomy and physiology. The chapter on quantitative thallium scanning is an exemplary discussion of what computers can do without swamping the novice reader with complex explanations of how they do it.

The use of infarct imaging, myocardial perfusion studies, and gated radionuclide blood-pool examinations in clinical practice, presented in the second section, is a well-written guide to the appropriate selection of nuclear cardiology procedures, their interpretation and diagnostic significance. The usefulness of radionuclide angiography in the evaluation of congenital heart disease is exaggerated, but in general this section is an objective look at the current status of nuclear cardiology. The potential role of nuclear medicine in evaluating inflammatory aspects of myocardial disease and in infarct quantitation is also discussed.

The text's third section is a sound though nonrigorous introduction to the principles of, and early experience with nuclear magnetic resonance and positron emission tomography as well as other new techniques.

A self-evaluation examination with answers and discussions comprises the final section.

This nonencyclopedia but extremely well-referenced introduction to nuclear cardiology is recommended for all but the most experienced technologists and nuclear medicine physicians. It is informative, yet easy to read and practical in its approach, and will be valuable to the interested technologist. Physicians who refer patients for nuclear cardiology examinations will also find this text well worth reading, and the extensive bibliography is particularly valuable for nuclear medicine, radiology, and cardiology housestaff.

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NUCLEAR MEDICINE: QUANTITATIVE PROCEDURES

Heinz W. Wahner, ed, Little, Brown and Company, Boston, 1983, 432 pp, \$42.50

This book is designed to provide a reference and protocol source for in vivo quantitative tests. There are six general

areas: laboratory procedures and handling of isotopes, tests related to the endocrine system, tests related to the gastrointestinal tract, tests related to the hematopoietic system and blood, tests related to the kidney and urinary tract, and miscellaneous tests. Forty-one authors have contributed to the 23 chapters in these six areas. Each chapter thoroughly discusses the background information for the specific tests covered in that chapter. Following the discussion is an explicit procedure that can be followed, a section on interpretation of data, and information on clinical applications. Wherever applicable and necessary, discussions of procedure validation and quality control as well as additional technical background information and procedure worksheets are included. Although each test has been designed for use in the author's specific institution or department, the protocols are relatively universally applied and additional test options are mentioned. References abound in all chapters.

Unlike previous books on in vivo nuclear medicine, this one includes many new procedures established in the past few years such as indium-111 leukocyte labeling, indium-111 platelet labeling, esophageal scintigraphy and gastric emptying, skin graft viability, fibrinogen leg scanning, etc.

This text represents a valuable department library reference for nuclear medicine technologists, physicians, and students. It is a worthy resource that provides information on procedures and contains enough discussion and references to lead the reader to very specific further information regarding each test.

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DIGITAL IMAGING: CLINICAL ADVANCES IN NUCLEAR MEDICINE

Peter D. Esser, ed, Society of Nuclear Medicine, New York, 1982, 320 pp, \$25.00 SNM members, \$35.00 nonmembers

Early each year the Society of Nuclear Medicine sponsors its Midwinter Symposium, frequently in conjunction with the Technologist Section. The 1982 SNM Midwinter Symposium chose digital imaging as its theme and the papers presented were compiled into this book. The 26 papers it contains span a very broad and diverse range but have been effectively organized by the editor. This effort is consistent with Dr. Esser's past performances in providing successful editorial services for similar symposium publications.

The papers are grouped by topic into four major sections. "Digital Imaging Technology" contains seven papers with emphasis upon computer architecture, mass memory, and networks. "Digital Radiography" has three papers dealing with digital subtraction angiography and its impact upon nuclear medicine. "Advances in Nuclear Medicine Data Processing

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and Instrumentation” contains seven papers and is concerned primarily with image processing, array processors, and single photon emission computed tomography. The last section, “Advances in Clinical Nuclear Medicine,” is actually an extension of the previous section on data processing although clinical validation is an evident concern here. Again, cardiac imaging and SPECT are the major topics.

This book is not for everybody, which should not be too surprising since the meeting from which it stemmed provided

a forum of exchange for research results and clinical advances. Thus the material is scientific and intended for a scientific audience. As one can grasp from the title, the emphasis of the book is towards the computer and digital imaging sciences. If you count yourself among this group, then this book belongs on your personal bookshelf. In any case, it does belong in the nuclear medicine department’s library.

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