

TEXTBOOK OF NUCLEAR MEDICINE, VOLUME II: CLINICAL APPLICATIONS.

J. Harbert, A.F.G. Da Rocha, Eds. Philadelphia, Lea & Febiger, 1984, 724 pp, illustrated, \$95.00

Drs. Harbert and Da Rocha have again assembled an impressive list of contributors, many of whom did not participate in the first edition. As the editors state in the Preface to the second edition, they have developed a "more comprehensive textbook of nuclear medicine." This edition is over 200 pages longer than the first and has several new components. The increase has been accomplished through expansion of existing chapters as well as the creation of new chapters including parathyroid and ophthalmologic imaging. The only section to be completely deleted was placental imaging, but other sections, such as pancreatic imaging, have been reduced to more realistically reflect today's practice of nuclear medicine. Many areas have changed dramatically in content. For example, the biliary system section has been completely rewritten to reflect changes in practice from rose bengal to IDA compounds. The musculoskeletal section has more than tripled in length owing to a much more detailed description of this subspecialty. There has been a very useful increase in descriptions of correlative imaging alternatives, an area that could be even further expanded in this type of text.

The editors have rearranged the new edition into an organ system approach. This shift has left them with some procedures which do not fit neatly into organ groupings, such as abdominal abscesses in the section on "Intestines," but overall organization is clear and usable.

In addition to these organizational changes, the authors have done a good job of updating and generally expanding the reference lists. The index has been slightly expanded and is adequate. A very useful appendix of radiation dose estimates has been added.

The physical construction of the book remains good. There are acceptably few typographical errors. An occasional figure has been mislabeled or inverted, but despite these minor inconveniences, the demonstrated points remain clear. The authors of several sections have continued to use composite images created from multiple small-field-of-view photos for demonstration of certain scans. It would be useful in future editions to replace these with whole-body scans to give students a clearer overview of tracer distribution. The experienced nuclear medicine physician, however, will not be adversely effected by these images.

Basically, the editors have successfully updated what was already a good general text in clinical nuclear medicine. Their expanded format has greatly increased the information content, increased the length by almost 50%, and unfortunately increased the price by 300%. As a text which is probably most appropriate for physicians in training, this increase in cost makes the second edition somewhat different from the first. The earlier edition (1979) filled an empty niche for a moderately priced, up-to-date, general text in nuclear medicine. Coupled with its companion text on basic sciences, it was a logical choice for many levels of trainees and practitioners. The 1984 edition, however, is competing with several other

recent general texts, and though this competition gives the purchaser more styles and formats to compare, it also makes value judgments more difficult because of the variety of contents and prices. While the authors infrequently make specific references to material in their basic science volume, there is information delegated to that volume which is necessary for the practice of "clinical" nuclear medicine. Therefore the purchaser must consider not only the merits of this very good clinical book but also the relative merits of the basic science volume which also has several good competitors. The combined price of the two volumes, \$175, makes this series at least as expensive as many other combinations of clinical and basic science texts.

In summary, the editors have prepared a very good text for clinical nuclear medicine. As a stand-alone entity, however, this volume has some shortcomings in the basic sciences of the day to day practice of nuclear medicine. In combination with a separate text for basic sciences, it would be excellently suited for resident physicians in radiology or nuclear medicine or for physicians practicing nuclear medicine who need solid support in basic science. However, for imagers or referring physicians who are primarily interested in scan interpretation, these deficiencies, coupled with the overall price to acquire a second book to overcome them, may make another text a better choice for the person who wishes to buy only one nuclear medicine text directed toward clinical topics.

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IMAGING IN PEDIATRIC ONCOLOGY.

J.H. Miller, L. White. Baltimore/London, Williams & Wilkins, 1985, 534 pp. \$85.00

As stated in the Preface, "the diagnostic imaging methods (for) the evaluation of neoplasms in children have become very sophisticated. It is hoped that, through their access to the material in this text, both referring physicians and radiologists will increase their knowledge of the various imaging procedures as they apply to pediatric oncology." The editor and his associates have provided a superb compendium of the specialized imaging techniques currently available in clinical practice and it is a must for clinician, radiologist, and house-staff members. The 31 chapters are divided into nine sections. The first section presents the relevance of imaging techniques to the pediatric oncologist, the pediatric surgeon, and the radiation oncologist. The second section introduces the reader to the modalities of computed tomography (CT), ultrasound (US) and nuclear medicine (NM) with a brief chapter concerning the relative role of each and any significant strengths and weaknesses, with the final chapter introducing the reader to the need for integrated imaging.

The third through the eighth sections are a detailed review of pediatric neoplasms and comprise four-fifths of the book. Individual sections deal with: central nervous system; head, neck and thorax; abdomen; genitourinary tract; musculoske-

letal and soft tissue tumors; and multisystem malignancies. Each of the 20 chapters provides the reader with basic information regarding the incidence of specific neoplasms, the modes of spread, the common therapeutic approaches and a succinct description of the US, CT, and NM findings of primary and metastatic disease. The text is well illustrated throughout with significant effort having been made to provide correlated images from the various modalities. Numerous algorithms are presented for the evaluation of specific problems and/or tumors and each chapter contains an extensive bibliography for reference and further study.

The final section deals with the imaging of complications. Chapter 30 discusses the toxicity of anticancer agents and associated organ/system complications while Chapter 31 reviews the application of the three modalities and their ability to detect the associated infectious complications by site of involvement.

In summary, this text is a must for every physician involved with pediatric patients regardless of their expertise. Although it may not be the last text written about integrated imaging, it sets a high standard for any that follow it, by virtue of its clear, concise, discussion and illustration of major diagnostic problems.

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PRINCIPLES AND PRACTICE OF NUCLEAR MEDICINE.

P.J. Early, D.B. Sodee. St. Louis, C.V. Mosby Co., 1985, 983 pp, \$59.95

This book is a direct outgrowth of the *Textbook of Nuclear Medicine Technology* and its companion volume *Technology and Interpretation of Nuclear Medicine Procedures* (which in its last edition was titled *Mosby's Manual of Nuclear Medicine Procedures*). The purpose of this book is to serve as a reference for the technologist and physician on the current practice of nuclear medicine. This book is divided into two parts—the principles of nuclear medicine (538 pages) and the practice of nuclear medicine (391 pages).

In the first part of the text are the basic physics, radiopharmaceuticals, computer fundamentals, quality assurance, and radiation health safety. The second part presents anatomy, physiology, nuclear medicine technical procedures, and clinical applications with interpretation information for each organ system.

This book is well organized and illustrated. It is surprisingly easy to read for a multiauthor text, and contains no obvious factual flaws. This book gives a brief, simplified and fundamental overview of nuclear medicine. Although this book does discuss, to some degree, all commonly used and available diagnostic tests in this field, it can be considered neither comprehensive nor current for the clinical practice of nuclear medicine. Some recent imaging procedures such as parathyroid scan using thallium-201 and technetium-99m (^{99m}Tc) subtraction technique, [^{99m}Tc]MAA infusion study, and muscle or skin perfusion study are not included. In addition, preclinical studies including positron emission tomographic imaging and radioimmunoassay are not mentioned.

In general, each section is clear, succinct, and manages to introduce rather specifically many of the important examinations used in clinical nuclear medicine. In particular, the step-by-step details of many examination techniques are well described in clinical application. General bibliographies are given after each chapter. When used, specific references are found on the page where the reference occurs. The images chosen for illustration help clarify various areas of the text and seem appropriate in number.

In summary, this book is a delightful mixture of technical and clinical information concerning basic nuclear medicine. It is the best text for nuclear medicine technologists who might want an overview of the procedures nuclear physicians might perform. Schools of nuclear medicine or radiologic technology should have this book in their libraries. I can also recommend this book for beginning radiology residents, providing a fairly concise overview for the basic sciences and clinical utilizations of nuclear medicine. For a discussion of any significant differential diagnosis, the reader must refer to another book. This book is not a substitute for familiarity with the more detailed texts and more current journal articles. This book costs \$59.95, which is probably money well spent for anyone who wants to be introduced to nuclear medicine.

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TECHNIQUES IN DIAGNOSTIC RADIOLOGY.

G.H. Whitehouse, B.S. Worthington, Eds. Boston, Blackwell Scientific Publications, 1983, \$58.95

This well-illustrated book is a useful collection of basic radiological techniques (barium studies, bronchography, urethrography, etc.) which may be overlooked in the present climate of high technology imaging. The description of the techniques is arranged by body systems—the gastrointestinal tract, the cardiovascular system, the respiratory tract, the genitourinary tract, the central nervous system, and a miscellaneous collection of techniques such as arthrography, mammography, pediatric procedures, and sinography. Each particular method is considered not only from a technical aspect but indications, contraindications, variations on the basic technique, complications and relationship to other imaging modalities are also mentioned.

The book includes some techniques such as intravenous cholangiography and pneumoencephalography, which have been supplanted for the most part by noninvasive imaging but still may be performed by some radiologists. There are chapters on contrast agents (barium sulfate and water-soluble contrast media) and anesthesia and analgesia, subjects generally neglected in the radiological literature.

Although the quality of the illustrations is excellent, the quality of the text is rather uneven as one might expect in a multi-authored book. A reader might not always agree with some of the details of a particular technique as described in this text but the majority of the technical descriptions in this book should result in few disagreements. I believe the editors have done a very creditable job in collecting basic radiological procedures into one handy volume. I would recommend this book to residents, practicing radiologists, and radiology tech-