

# Book Reviews

## PEDIATRIC NUCLEAR MEDICINE

S. T. Treves. New York, Springer-Verlag, 1985, 338 pp, \$74.50

This work is the latest in a series of publications which have surveyed pediatric nuclear medicine during the past 2 years. It is divided into 17 chapters that review the special considerations that are important in dealing with pediatric patients. These include dose, radiation exposure, mechanism of uptake, and imaging technique. Normal findings are described and common pediatric disorders are reviewed. The illustrations are appropriate and satisfactorily reproduced.

While much of the material may be gleaned from other texts, two chapters, "Skeletal Scintigraphy for Assessment for Mandibular Growth and Asymmetry" and "Dacroscentigraphy" provide insight into physiologic applications which may be underutilized clinically. Also, the editor and his contributors have provided an excellent discussion of the use of the computer to derive quantitative measurements of renal and cardiac studies.

In summary, *Pediatric Nuclear Medicine* adequately surveys its topic and provides useful insight into several areas not addressed in similar texts. It will serve as an excellent resource for any physician whose nuclear medicine practice includes children and will provide excellent background material for residents interested in understanding the mathematical approach to evaluating renal and cardiac function. Its coverage of clinical applications will provide useful information to the referring physician, however, the lack of significant discussion of complementary imaging modalities and their relative value diminishes its overall value.

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## SENSITIVITY AND SPECIFICITY OF COMMON SCINTIGRAPHIC PROCEDURES.

M. L. Goris. Chicago, Year Book Medical Publishers, 1985, 127 pp, \$29.95

According to his introduction, the author, with assistance from Dr. J. Bretille, has attempted to create an aid for clinicians in assessing the usefulness of radionuclide procedures in answering specific clinical questions. As pointed out in the Foreword, "... absolute completeness (of patient workup) is neither a possible nor a desirable goal," and Dr. Goris reiterates this principle throughout the book in critically evaluating selected topics and providing useful reminders of other competing modalities.

The topics selected for consideration are: detection of coronary artery disease by radionuclide ventriculography and thallium perfusion imaging, pulmonary emboli by ventilation/perfusion scintigraphy, renovascular hypertension using split renal function determination, malignant disease and acute osteomyelitis by skeletal scintigraphy, acute cholecysti-

tis with technetium-labeled IDA agents, active infectious processes with indium-labeled whiteblood cells, malignant lesions with gallium citrate, and hepatic metastases using scintigraphy, ultrasound, and transmission computerized tomography. The introduction and an epilogue chapter briefly address the basics and some clinical considerations of sensitivity, specificity, and Bayes' Theorem.

Before commenting on how this book meets the stated goals, it is worthwhile to look at what the book is not. As mentioned above, it is not a review of general nuclear medicine. It is not a review of statistical principles or methods. The average physician, after completing the introduction and the chapter on Bayes' Theorem, will understand the mathematical and practical definitions of sensitivity, nonspecificity, and predictive value but may be unenlightened by the discussion of the difficulties of applying these principles to everyday clinical problems.

What this book is designed to do, and in general does fairly well, is identify a clinical problem and determine how well a particular radionuclide procedure will answer that question. Though the summary of each chapter usually indicates quite reasonable uses for the radionuclide study in question, Dr. Goris provides some insightful, though not necessarily unique, comments as to the way these studies are accepted and used in the practice of medicine. I found these comments, though true, to be more a negative comment on the quality of statistically useful information in medical literature than a constructive aid for the practicing physician.

To the author's credit, this book has several features which would appeal to its intended audience. It is short (119 pages of text including 20 pages of references), affordable, and easy to read from a typesetting standpoint. The decision to evaluate only a single test for a specific application serves as a very good framework for the thoughtful consideration of each clinical problem. The results of these evaluations are primarily displayed in numerous tables. To the experienced reader, these tables contain a wealth of information, but they are frequently not clearly described in the text. This may pose a problem for the reader who is less experienced in the clinical application of statistics.

The major purpose and appropriately the major contribution of this book is the dissemination of its statistical analyses, and as such its tables and references are a valuable collection. Its description of procedures and other textual content, however, contain little new insight for experienced analysts of medical decision making and are too incomplete for the casual clinical reader. The introductory material in each chapter, though important for the referring physician, adds little to the book's value for the imaging practitioner. The book's content could have been even more economically provided as a series of two or three review articles in the imaging literature.

In summary, this book is a useful starting point for imaging professionals or for clinicians already experienced in decision making, but it will be of limited usefulness to its intended reader, the referring clinical physician.

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