JNMT Bookshelf

ESSENTIALS OF NUCLEAR MEDICINE IMAGING

Fred A. Mettler, Jr. and Milton J. Guiberteau, Grune & Stratton, Inc., New York, 1983, 338 pp, $44.50.

"Finally, a nuclear medicine text/reference book for adults in a mature profession!" This was my first reaction to the format and content of *Essentials of Nuclear Medicine Imaging*. Careful evaluation of the book has strengthened this opinion to the level of conviction. This is *the* book that should be kept in the top drawer of every imaging station, as well as in the departmental library. Written primarily for resident physicians in nuclear medicine, it is also an excellent text for senior nuclear medicine technology students and a valuable reference for staff technologists at all levels of expertise because of the practical and up-to-date content, appendices, and topical references.

Little space, if any, is wasted restating the mass of information available from other sources. A multitude of additional information has been clearly and carefully referenced, which enables the authors to concentrate on the *essentials* of nuclear imaging. Rarely is a title so appropriate.

Advertised as a reference book for NM residents, this is one book that lends itself to use as a technical text, more often than a reference, because of the scope of the contents, the didactic nature of the appendices, and the lucid explanations of even the most obscure topics. The complementary nature of other imaging modalities is stressed where appropriate. The references are nearly encyclopedic, allowing several different levels of interest to be addressed without wasting either space or the reader's time. This approach to reference or text preparation allows the depth of study of any topic to be controlled by the reader or assigned by an instructor.

The first appendix is a brief, but strongly scientific glossary aimed at clinicians who are likely to have complete command of the medical aspects covered in the text, but may be weak in the hard sciences, such as physics and computer applications. This plus for the residents does not place the nuclear medicine technologist or student technologist at a great disadvantage since other glossaries and medical texts are available. Several other appendices are included. Possibly the most useful appendix, in terms of using this book as a reference, is the final appendix, "Selected Study Guide of Basic Science Principles in Nuclear Radiology," which is concise, complete, and highlights areas of interest which may be pursued in the various references found earlier in the book.

The hefty price does not outweigh the content of this book. It is both physically and academically strong; built to endure. Reproduction quality of the images and diagrams is excellent. The illustrations are well labeled. When possible, tabular information is provided to speed the use of the book as a reference. These tables are well-organized. The tone of the text is informative without being pompous. This makes for both interesting reading and useful referencing.

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CHROMATOGRAPHY OF TECHNETIUM-99m RADIOPHARMACEUTICALS—A PRACTICAL GUIDE

Philip J. Robbins, SNM, New York, 1984, 48 pp, $12.00 members, $16.00 non-members.

This manual is a valuable update of current chromatographic quality control procedures for Tc-99m radiopharmaceuticals with a needed emphasis on miniaturized chromatography systems. The chapters are divided into six specific sections, including an introduction of miniaturized systems, use and limitations of counting instruments, basic materials and methods of quality control systems, quality control of specific Tc-99m radiopharmaceuticals and standards, and interlaboratory comparisons for chromatography systems. An appendix focuses on concise chromatography procedures.

The author should be congratulated on a job well done. In particular, the summation on radiochemical impurities, counting instrument limitations, and artifact production of quality control systems are excellent. The descriptions of chromatography systems and methods are clear, concise, and relatively easy to follow. The chapter on specific Tc-99m radiopharmaceuticals is very useful. Listing the clinical problems from specific radiochemical impurities is valuable in a clinical nuclear medicine department. The chromatographic scans for specific Tc-99m radiopharmaceuticals are also shown, however, they are somewhat hard to find from the text.

There are two basic points of criticism that I have with this excellent manual. I feel that the concise procedure appendix should have been elaborated so that any quality control procedure could be performed without referring back to the text. The second point of criticism is in regard to the quality control procedure used for hepatobiliary radiopharmaceuticals and HMDP. The author states that spot drying is used for these radiopharmaceuticals. However, in the text, the author rightly explains why spot drying should not be performed prior to strip development (page 12).

In summary, the manual is an excellent practical guide of miniaturized quality control procedures for Tc-99m radiopharmaceuticals and I strongly recommend it for all nuclear medicine departments.

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1984 YEARBOOK OF NUCLEAR MEDICINE

Paul B. Hoffer, Alexander Gottschalk and Barry L. Zaret, eds, Year Book Medical Publishers, Inc., Chicago, 1984, 378 pp, $42.95.

Any physician who has struggled to formulate a report on a difficult lung scan or thallium myocardial perfusion scan will be delighted with Dr. Hoffer's eloquent introduction to this book. Anyone responsible for generating or interpreting nuclear medicine studies will find this book a time-saving addition to their library. With clinical advances ever more closely related to technical and radiopharmaceutical developments, and with so much work published in subspecialty journals not primarily concerned with nuclear medicine, a publication of this sort can be useful for nuclear medicine physicians, general radiologists, technical personnel, and radiopharmacists. Abstracts from 43 scientific, technical, and medical journals as current as July 1983, are presented with representative illustrations in 11 chapters, each pertaining to a certain organ system, and 3 chapters devoted to instrumentation, radiochemistry, and other nuclear medicine-related basic sciences. The accompanying editorial comments are necessarily brief, but appropriately point out work of special significance and articles which present preliminary data or findings which are in conflict with other published data or the editors' own experiences.

Although 11 of the 14 chapters are predominantly clinically oriented, readers with a technical interest may also find this book useful. For example, abstracts of work in cell labeling and acquisition of SPECT images are found within the clinical sections. Subject and author indexes are provided for readers with specific interests.

Inevitably, some readers will feel that certain important articles are not abstracted. Even the Herculean efforts involved in producing this volume could not have a perfect product. Still, this annual will be a useful addition to most department libraries. Certainly, the review of cerebral perfusion imaging, by Thomas C. Hill and B. Leonard Holman should find a large audience.

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