BRIGHAM AND WOMEN'S HOSPITAL HANDBOOK OF DIAGNOSTIC IMAGING.

B.J. McNeil, H.L. Abrams. Boston, Little, Brown and Co., 1985, 450 pp, $18.00

The degree of technical complexity in diagnostic imaging has increased markedly over the past several years. It is true, as pointed out in the preface, that the majority of physicians practicing today were trained long before the development of sonographic, modern nuclear medicine, and cat scanning procedures. In addition, procedures like digital angiography and magnetic resonance imaging (MRI) are making an impact on clinical practice. It is no surprise that clinicians find it very difficult to digest the rapid growth in this field. A single concise book giving basic parameters in the imaging field was long overdue. Barbara J. McNeil and Herbert L. Abrams recognized the need for such a book and have succeeded in assembling it.

Over the years, radiology has developed into various subspecialties. Each subspecialty offers certain tests for a given situation. Most often these tests are complimentary to each other and most useful when performed in the right sequence. When not used appropriately they can yield duplicate information, thus resulting in waste of time and money. In this handbook, there is a successful attempt to educate the practicing physicians from a clinical point of view. Each chapter is based on a diagnostic problem, presenting an algorithm which outlines the most appropriate patient workup. For each indicated procedure, there is a short discussion which includes the type of information obtained, sensitivity, specificity and drawbacks, if any. At the end there is a list of up to date references for those who are interested in specific details.

In the second section, all the conventional imaging procedures are defined along with a short discussion of technical information. This information helps the clinician to prepare the patient before undergoing a given procedure. The following section is an introduction to magnetic resonance imaging, detailing fundamentals of the technique and the type of information it provides.

One important plus from the handbook is a section on radiation dose to critical organs. A quick reference to radiation dosimetry resulting from various diagnostic procedures can guide the clinician to select the most appropriate one and prevent unnecessary radiation exposure. At the end, the editors have attempted to give an approximate idea of the relative cost of all the current radiological procedures. In this day and age of cost emphasis and the prospective payment system, such information is extremely useful.

The editors have fulfilled their commitment to compile a usable, pocket-sized volume containing information that a clinician could refer to before requesting an imaging procedure. Every resident should carry this book and every nursing station should have it available next to the *PDR* as a quick reference guide.

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NUCLEAR MEDICINE ANNUAL 1985.

L. Freeman, H. Weissmann, Eds. New York, Raven Press, 1985, 352 pp, $55.00

Each year I look forward to the arrival of the new volume in this series. The editors have always provided a worthwhile book, and 1985 was no exception. After opening with an historical review of clinical nuclear medicine, the 16 contributors cover a variety of topics, primarily clinical in nature.

The first of these chapters is a lengthy, but well thought out discussion of the use of radiopharmaceuticals for the evaluation of inflammatory processes, organized primarily by organ system or tissue type. This chapter gives sufficient details and practical direction (with correlation to other imaging modalities) to be useful for the novice and the experienced imager.

Following this, updates on the use of cholecystokinin analogs as an adjunct in biliary diagnosis, on pulmonary imaging, and on bone scanning in maxillofacial disorders are mixed with reviews of more established topics such as red blood cell imaging for gastrointestinal hemorrhage detection and pediatric gastroesophageal function evaluation.

Cardiac imaging is discussed in two chapters. The first deals with the "basic science" aspects of cardiac nuclear magnetic resonance (magnetic resonance) imaging, and the second has a similar emphasis on technical factors of single photon emission computed tomographic thallium imaging. Though both of these sections cover clinical applications, the details of the procedures will probably be skipped over by the physician who does not perform them. On the other hand, they offer a very good explanation, by way of review and update, for the imager already involved or soon to be involved in these areas. A very well-written chapter on the therapeutic uses of phosphorus-32 completes this edition.

The chapters' bibliographies are, as always, up-to-date and extensive. Image reproductions are good to excellent, and there has been more use of tables than in previous editions (a real help for any review book). The physical construction and printing style remain near perfect and further contribute to the readability of the authors' texts.

In summary, I strongly recommend the *Nuclear Medicine Annual 1985* to all physicians involved in radionuclide imaging. This book should not be bought and placed in a reference library; it should be read.

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MUSCULOSKELETAL MAGNETIC RESONANCE IMAGING.

E.J. Easton, J.A. Powers. Thorofare, NJ, Slack, Inc., 1985, 166 pp, $39.50

The book is a very basic presentation with illustrative magnetic resonance images of musculoskeletal magnetic resonance imaging. It would be fine as an introductory review for medical students, residents, or clinicians that are first

starting in the subject. The discussions are brief, to the point, and with very little expansion or further analysis of the presented statements. The magnetic resonance imaging (MRI) scans are acceptable, but below current published standards. The chapter on "Basic Principles of MRI" is simple and to the point. It would be good for the beginner. The chapter "Disease of the Hip and Pelvis" emphasizes the hip almost exclusively with very little on pelvis. Discussion and presentation on "Avascular Necrosis (AVN)" is excellent. The chapter on "The Extremities" is acceptable, but it concentrates on knees and with little on the other extremities. The chapter on "Evaluation of the Soft Tissues" has many brief generalities with no meat. The chapter on "The Spine" has little in-depth discussion of the problems. It does have some interesting cases but the MRI scans are generally of poor quality.

In summary, this book is valuable only to the very basic learner. It promises MRI of musculoskeletan, but delivers a narrow approach. There is case illustration with a good section on AVN, but other areas are not as complete as the title implies.

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RADIOLOGICAL PHYSICISTS.
J.A. Del Regato. New York, American Institute of Physics, 1985, 188 pp

Today, educators place increasing emphasis on attainment of attitudinal objectives as well as knowledge objectives to facilitate the learning process. For learning or reviewing modern physics, this volume would be a perfect supplementary text to develop insight into the human side of scientific endeavor. Juan del Regato, in providing an in-depth look at the personalities and lives of Roentgen, M. Curie, Planck, Rutherford, Bragg, Duane, Bohr, Joliot, Compton, and Fermi has also charted the scientific development just prior to and during the first half of the century in what is the foundation to radiological physics. Practicing or aspiring chemists, physicists, and physicians in radiology and nuclear medicine as well as general readers will be inspired by this look into the lives of these scientists.

In addition to the biographies that are an expansion of ten earlier articles in the *Intl J Radiat Oncol, Biol and Phys*, del Regato has included biographical paragraphs on 69 scientists who collaborated extensively with the principle subjects. A notable omission from this list (as indeed from the list of biographees) is the name of Einstein. The biographies, however, include numerous accounts of Einstein's involvement in the lives and work of these scientists. Perhaps most interesting to professionals in nuclear medicine is the biography of Jean Frederic Joliot—as well as that of his wife Irene Curie—who jointly won the Nobel Prize for Chemistry for the discovery of the synthesis of radioactive isotopes.

This book is well-written and is easy to read. Its general appearance suggests that it might be purchased as a gift. The occasional expositions of science are easy to understand, and photographs and interesting sketches and diagrams add a special flavor. Repetition of some events or encounters is noticeable, but this is perhaps to be expected considering that often these scientists were close in time, locale, and goal. An index and additional cross referencing through the subject notes would be helpful to the reader who wants to retrieve an interesting account from another point in the book. An adequate number of references are included. This book is a pleasure to read. I would recommend that you read and then share it.

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Books Received

1986 Year Book of Diagnostic Radiology. *D.G. Bragg, Ed. Chicago, Year Book Medical Publishers, 1986, 599 pp, $44.95*

Basic Imaging in Congenital Heart Disease, 3rd Ed. *L.E. Swischeck, D.W. Sapire. Baltimore, Williams and Wilkins, 1986, 312 pp, $58.95*

Computed Tomography. *J. Alexander, W. Kalender, G. Linke. Berlin, Siemens, 1986, 175 pp, $45.00*

NMR in Biology and Medicine. *S. Chien, C. Ho. New York, Raven Press, 1986, 275 pp, $56.00*

1986 Year Book of Nuclear Medicine. *P.B. Hoffer, J.C. Gore, A. Gottschalk, Eds. Chicago, Year Book Medical Publishers, 1986, 411 pp, $44.95*

Nuclear Medicine in Urology and Nephrology, 2nd Ed. *P.H. O'Reilly, R.A. Shields, H.J. Testa, Eds. London, Butterworth & Co., 1986, 291 pp, $135.00*

Diagnostic Nuclear Medicine: Patient Studies. *H.N. Wagner, J.W. Buchanan, D. Espinola-Vassallo. Chicago, Year Book Medical Publishers, 1986, 430 pp, $54.95*

Nuclear Magnetic Resonance Imaging in Medicine and Biology. *P.G. Morris. New York, Oxford University Press, 1986, 388 pp, $59.00*