

**ATLAS OF PEDIATRIC NUCLEAR MEDICINE.** Philip O. Alderson, David L. Gilday, and Henry N. Wagner, Jr. (with the assistance of Julia Buchanan and Wendy North) The C. V. Mosby Company, St. Louis, MO. 296 pp. illustrated, 1978, \$44.50.

The rapidly expanding use of radionuclides in the evaluation and management of pediatric diseases has afforded the opportunity for many to encounter an interesting case or accumulate a limited series of unusual cases. Few if any institutions, however, are able to singularly accumulate material from the wide spectrum of current applications. By combining material from several large institutions, each with considerable experience in pediatric nuclear medicine, the authors have assembled a representative collection of pediatric case material that may be impossible for any single institution to match. Ranging from the now well-accepted search for osteomyelitis to the innovative thallium myocardial scan in a newborn, the case material illustrates both the newest and oldest applications from major areas of clinical use. The book begins with a cursory technical section, followed by sections organized according to anatomic area. Each new section contains introductory comments preceding the illustrative cases. The skeletal and pulmonary sections are particularly comprehensive. The cardiovascular and genitourinary sections make reference to quantitative material, but details on generation of data are sketchy.

A problem-oriented format was selected, and each case study begins with a problem statement and clinical presentation. The indication for each study is discussed and accompanied by illustrative images with interpretation. Documentation of subsequent clinical data with pertinent comments establishes the diagnosis given in the conclusion. The material is organized in a concise, easy-to-read manner. The illustrations are of good quality and are adequately labeled. The reader can follow the case through its evolution and interpret the scan as an "unknown" if desired. Should one choose to use the atlas as a reference starting with a diagnosis, the table of contents and index are comprehensive and enable easy identification of the representative case(s).

Those in nuclear medicine practice but who have limited pediatric experience, should find the book a helpful reference. Although some tables and references are found with case material, more references would have improved the value of the text for this group of users. It is difficult to predict the appeal of a problem-oriented book for general pediatricians and pediatric specialists. I suspect the publication will be of more interest to those actively working in the field of nuclear medicine or in training to enter the discipline.

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**Progress in Nuclear Medicine, Volume 5. Newer Radioactive Gases in Practice.** A Donath, Eneve H. Roseler, Aldo N. Serafini, series eds. M. Guter, volume ed. Basel, München, Paris, London, New York, Sidney, S. Karger AG, 1978, 244 pp, illustrated, \$83.50.

Through collation of a series of papers, this publication seeks to present an overview of radioactive gases, old and new, into one comprehensive work. It even includes a chapter on the use of radioactive aerosol in the examination of the lungs, for which the radioactive gases are primarily used.

The topics range from the production of the radioactive gases to the mathematical concept of multicompartamental analysis. There are sixteen chapters divided into five sections: (a) Basic considerations—dealing with the physics of gases, preparation, administration, disposal, and whole-body retention of radioactive gases; (b) Gas as a ventilation radioagent—dealing with Xe-133, Xe-127, Kr-81m, N-13-N<sub>2</sub>, O-15-O<sub>2</sub> and radioactive aerosol; (c) Gas as a perfusion radioagent—describing the use and display of Xe-133 in the study of cerebral circulation, perfusion study administered by inhalation of the gases, and subsequent compartmental analysis; (d) Tracers excreted as gas—discussion of C-14 compounds and the stable isotope C-13; (e) Sublimation—concerning radioactive iodine as gas.

Authors of various backgrounds were drawn from the international community of nuclear medicine. Herein lie the strong and apparent weak points of this book. The strong point obviously is the international composition of the contributorship and the expertise derived therefrom. The apparent weak point, as the volume editor points out in his introduction, is the resultant divergent or even contradictory opinions that appear. Readers may be confused, but certainly the facts are clear. There is considerable overlap in the organization. For example, there are two chapters each on Xe-127 and Kr-81m at different points in Section 2.

Notwithstanding the faults described, the book achieves its overall aim of being the first comprehensive review on the clinical applications of radioactive gases. The bibliography is excellent, and this alone is no small measure of value.

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### BOOKS RECEIVED

*Biological Effects and Characterizations of Ultrasound Sources*] D. G. Hazzard & L. M. Litz, Ed. 215 pp. illustrated. Castle House Publications Ltd. (Distributed exclusively by International Ideas Inc.) 1979. £ 17.

*Physicians' Desk Reference for Radiology and Nuclear Medicine*] Leonard M. Freeman and M. Donald Blaufox, Editorial consultants. 205 pp. illustrated. Medical Economics Co. 1979. \$12.50.

*Practical Nuclear Cardiology*] James Sprengelmeyer and Calvin L. Weisberger. 171 pp. illustrated. Lippincott Harper & Row (Distributor. Harper & Row) 1979. \$30.00.