

**SCINTILLATION CAMERA LUNG IMAGING—AN ANATOMIC ATLAS AND GUIDE.** Charles H. Mandell. New York, Grune & Stratton, 1976. 191 pp, approximately 148 pp of illustrations, \$28.

This book follows by 6 years the first major nuclear medicine atlas, produced by DeLand and Wagner in 1970. Inevitably, comparisons will be made. In the intervening 6 years, ventilatory assessment techniques have become common and many institutions rely chiefly on the Anger camera to obtain images. This atlas reflects these changes by including appropriate ventilation studies, whereas these imaging studies are all but absent from the 1970 atlas. Similarly, the present atlas is entirely composed of camera images, whereas such images were sparse in 1970. This book makes a strong case for the necessity of the posterior oblique views: it is of interest that this view was not only ignored in the first atlas, but also that its virtues were actually overlooked in Figs. 17a and 17b. Many laboratories not routinely using this view will be surprised to discover how much information they are missing, as amply documented by Mandell's atlas.

The book begins with an abbreviated discussion of anatomy and physiology, radiopharmaceuticals, radiation risk, instrumentation, and imaging. The information is a concise summary of all pertinent facts for lung imaging. Since the atlas is devoted to the camera, I would have liked a more thorough discussion of the techniques and pitfalls of using camera devices for lung imaging, e.g., the advantages of timed laterals for comparison purposes, advantages of using the camera both above and beneath the patient, and pitfalls of various collimators.

The strongest portion of the book is the section dealing with lung models which vividly illustrates segmental defects in a better fashion than do even the well-constructed accompanying diagrams. It is here that the value of the posterior oblique view is driven home. I believe that this section is the most valuable portion of the atlas and will be of interest to all who study it.

The rest of the atlas is devoted to well-selected clinical cases with appropriate emphasis on pulmonary embolic disease and explanation of a variety of pleural, parenchymal, and cardiac diseases. These illustrative cases document the presently accepted concepts of combined ventilation-perfusion studies and use of the chest roentgenogram to arrive at more specific diagnoses. The problem today is not to find the perfusion deficit, but rather to explain it correctly, which often proves discouraging to those of us faced with the task every day. This atlas provides a useful guide for approaching this problem.

Little new evidence is presented for any of the concepts portrayed, but rather the information appears to be a synthesis of others' work for which selected references are provided. The ventilation study on page 117, presented as a part of the study of a patient diagnosed as having congenital absence of the left pulmonary artery, looks exactly like those in cases of Squire-James syndrome with bronchiolectasis. Without bronchography and without attempt-

ing selectively to place the catheter tip in the supposedly congenitally absent pulmonary artery, I would not accept nonfilling as evidence of absence of the pulmonary artery.

*Scintillation Camera Lung Imaging* fills a need in bringing lung imaging as it is presently performed to the practitioner in a concise, easily readable, and practical fashion. The anatomy lessons and clinical hints are of use to all who interpret lung images. Other than the points enumerated at the outset, this atlas does not offer more information than its predecessor, which is really a tribute to the completeness of the pioneering atlas of DeLand and Wagner rather than a criticism of Dr. Mandell. The two atlases sit side by side on my bookshelf.

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**CONGENITAL HEART DISEASE** (audio-visual program, 65 slides with 35-min cassette tape). G. S. Freedman. Westbury, N.Y., Nuclear Associates, \$135.

This program describes the evaluation of congenital heart disease by radionuclide angiocardigraphy. A brief review of cardiac embryology and physiology is followed by discussions and illustrations of cardiac shunts, situs inversus, transposition of great vessels, congenital narrowing of the innominate vein, pulmonary artery stenosis, coarctation of the aorta, atretic tricuspid valve, mitral and aortic stenosis, Ebstein's anomaly, and Fallot's tetralogy.

The slides and the tape are technically well done with excellent drawings. Both residents and clinicians will find this program helpful for the better utilization of the radionuclide angiocardigram, even though it is presented at an elementary level of teaching.

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**IN-VITRO THYROID** (audio-visual program, 72 slides with 45-min cassette tape). D. V. Becker and J. R. Hurley. Westbury, N.Y., Nuclear Associates, \$135.

This presentation is organized in two parts: normal and abnormal thyroid function. Part I presents a review of thyroid physiology followed by discussions of the protein-binding index,  $T_4$  by column,  $T_4$  by competitive binding, and  $T_4$  radioimmunoassay. Part II discusses  $T_4$  binding protein, free  $T_4$ /free  $T_4$  index,  $T_3$  resin uptake,  $T_3$  thyrotoxicosis, and radioimmunoassay of  $T_3$  and TSH. The final portion of the program illustrates how to approach the clinical diagnosis of hyperthyroidism or hypothyroidism. Both the slides and the tape are professionally structured with informative drawings. This teaching program is written at an elementary level and would be an excellent learning aid for both students and clinicians, especially for radiology residents as a supplement to nuclear medicine study.

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