

program. It could serve as a basis of study for the physics sections on national board examinations.

CHARLES W. COFFEY, Ph.D.
University of Kentucky Medical Center
Lexington, Kentucky

COMPUTED BRAIN AND ORBITAL TOMOGRAPHY, TECHNIQUE AND INTERPRETATION. C. F. Gonzalez, C. B. Grossman, and E. Palacios. New York, Wiley, 1976. 276 pp, \$29.00.

In the burgeoning field of computerized tomography (CT) so much explicit anatomic data are generated that an author is faced with a formidable task in choosing which of his many fascinating pictures to include. This volume is an up-to-date compilation that contains approximately 525 individual photographs and 23 illustrations. Gross pathologic correlation and neuroradiologic correlates are abundantly provided.

There are high points and low points in this volume. It is first of all a practical, informative atlas that will appeal to most clinicians. The scans are excellent; only a few are in the 80×80 matrix format; the rest are 160×160 matrices. The printing quality is similarly excellent and of particular value with the air studies and angiograms. Almost all of the latter are subtracted.

The pages are large and well organized. After a very brief description of the technique, there is an extremely good section on normal anatomy and a relatively complete collection of common artifacts. Numerous case reports follow with appropriate ancillary plain films and contrast studies. The clinical histories are vanishingly brief whereas the radiologic interpretations are thorough and of the highest caliber. Fortunately, the scans are in the logical right-is-right orientation as though one were looking down from above the patient at a section of a gross neuropathologic specimen.

This book is not intended to be a scholarly treatise; only 35 scientific articles are referenced. It is puzzling that even such a brief bibliography would not include G. Hounsfield's 1972 *British Journal of Radiology* paper describing the first EMI scanner; particularly since part II of this article (by J. Ambrose) is cited. The book would be more useful if it had a glossary of CT terms in addition to the list of anatomic abbreviations which is not properly a glossary as stated by the authors.

The reluctance of many American authors to accept the term "computerized tomography" remains unexplained. This term, favored by the British, properly emphasizes the dominant role of the computer in this method. Other terms such as "computed tomography" or "computer-assisted tomography" suggest that this procedure is simply a modification of traditional radiographic tomography and, by implication, diminish the crucial and revolutionary impact of the introduction of the computer. Hopefully, the British will, in this instance, prevail over the Colonists.

This fine collection of well-organized, diverse clinical material should be most effective in convincing those few remaining skeptical physicians of the clinical usefulness of CT.

WILLIAM H. OLDENDORF, M.D.
Brentwood VA Hospital and
UCLA School of Medicine
Los Angeles, California

RADIOISOTOPES IN RADIODIAGNOSIS. A. S. Bligh, K. G. Leach, and E. R. Davies. London, Butterworths, 1976. 230 pp, \$10.00.

The authors state in the preface that the aim of this concise book is to provide an introduction to the use of radioisotopes in radiodiagnosis for clinicians and for those burdened with the task of passing examinations. After a brief history of isotopic imaging, the authors devote three chapters to the fundamental concepts of radioactivity, a relatively brief discussion of radiopharmaceuticals, a more extensive review of instrumentation for isotopic imaging, and an introduction to the principles of radiation protection in radioisotopic investigations. The remaining ten chapters are directed toward a survey of the clinical use of radioisotopes in radiodiagnosis with greater emphasis on imaging application than on functional tests. The central nervous system, liver and spleen, skeleton, respiratory system, kidneys, and endocrine glands are discussed in reasonably adequate detail. Radioisotopic studies of the gastrointestinal tract, placenta, and cardiovascular systems are presented in lesser detail. Recent developments in scanning techniques (bone densitometry, profile scanning, transmission imaging) and new scanning agents (radiogallium and radioindium) are identified and very briefly discussed.

The strength of this book lies in the discussions of clinical applications. The authors emphasize essential facts, defining indications, and limitations of each technique, often reflecting their personal experience and insight in this developing field. The need to correlate radioisotopic studies with radiographic examinations and the complementary nature of radioisotopic studies, radiologic procedures, and ultrasound are stated. Representative illustrations of the various imaging procedures are well reproduced and complement the text. A notable and serious shortcoming in this review book is the absence of references.

This brief review text includes a substantial number of well-established facts and basic principles. It should provide an introduction to nuclear medicine for the general physician and serve as a general review for the radiology or medical resident in training. It can also be recommended as a concise practical overview of the clinical applications of nuclear medicine for medical students and for nuclear medicine and radiology technologists.

ROBERT B. CHODOS, M.D.
Albany Medical Center Hospital
and Albany Medical College
Albany, New York

MEDICAL THERMOGRAPHY, THEORY AND CLINICAL APPLICATIONS. Edited by S. Uematsu. Los Angeles, Brentwood, 1976. 196 pp, \$37.50.

This text, organized into 17 chapters, reports the proceedings of a thermography seminar held in June 1975 at the Johns Hopkins Hospital, Baltimore, Maryland. The early history of thermography is reviewed by R. Bowling Barnes, Ph.D., who was largely responsible for the development of medically useful thermography. The next three chapters deal with the basic physics and technique followed by 13 clinical chapters covering diverse topics from the effect of chronic pain, trauma, and loss of sensation to arterial and venous disease and breast disease. In most of the chapters, a spectrum of clinical cases is presented, illustrating the usefulness of thermography in specific circumstances. Unfortunately, as often has been the case in reports of thermography, the over-all efficacy of the techniques is not evaluated in some chapters. The classification of thermographic patterns in cardiovascular disease, presented by Travis Winsor and David Winsor is particularly useful.

BOOK REVIEWS

Thermographic techniques are described extensively in one chapter and to a certain degree in each of the clinical chapters. The discussions of technique show varying degrees of thoroughness in the clinical chapters as one might expect from a symposium. The full gray scale displayed on the cathode ray tube is difficult to capture with the high contrast films (such as Polaroid) often in thermography. This problem, plus the inevitable loss of gray scale in printing, results in quite high contrast on most of the illustrations that would be undesirable in clinical practice.

There are only a few publication errors noted. In several instances, illustrations have been misplaced in regard to the descriptive legends and several times where the black-white polarity of the images has been reversed with no accompanying comment. This could be confusing to the

uninitiated. The monograph is beautifully bound but the manufacturer's published price does seem excessive.

A number of areas of clinical usefulness was mentioned only superficially, such as the use of thermography in evaluating burns and frostbite, varicosities, thyroid nodules and parathyroid adenomas, metastatic and inflammatory disease of bone and soft tissues, and the effect of drug therapy. Despite these deficiencies, this text is perhaps the best monograph that has been published on thermography and will be of interest to those working in the field as well as referring clinicians. I hope this text stimulates better utilization of thermography in a multitude of clinical and research situations.

CHARLES D. TEATES, M.D.
University of Virginia Medical Center
Charlottesville, Virginia