

BOOK REVIEWS

OBSTETRICAL DIAGNOSIS BY RADIOGRAPHIC, ULTRASONIC, AND NUCLEAR METHODS. John A. Campbell, ed. William & Wilkins Co., 1977, 207 pp

The considerable value of this brief text derives to a great extent from the clear overview of the editor. Thus, in the instances where two or even three of the diagnostic modalities are competitive, the relative merits and deficiencies of each are clearly discussed. Since radionuclide imaging is by far the "poor relation" in obstetrical diagnosis, the bulk of the competition is between sonographic and radiographic techniques; to the credit of the editor the relationship between these modalities is intelligently analyzed.

Although this book should be of value to the large numbers of radiologists engaged in either radiographic or ultrasonic obstetrical diagnosis, for the physician exclusively concerned with nuclear studies it is of limited value. This limitation results from the inappropriateness of nuclear techniques to the problems of obstetrics, rather than from any deficiencies in the excellent nuclear section by Dr. Mishkin.

Since the text is relatively terse and most of the illustrations quite clear, this volume is most welcome in an age of ever-expanding medical tomes.

ZACHARY GROSSMAN, M.D.
Upstate Medical Center
Syracuse, New York

PULMONARY MACROPHAGE AND EPITHELIAL CELLS. Proceedings of the 16th Annual Hanford Biology Symposium, September 27-29, 1976 (CONF 76027), Technical Information Center, Energy Research and Development Administration (1977). C. L. Sanders, R. P. Schneider, G. E. Sagele, H. A. Regen, eds.

The study of the causes and treatment of chronic lung diseases is an increasingly important research area, closely linked with choices of energy sources, environmental protection priorities, and appreciation of the effects of habits that lead to lung diseases. The 43 papers included in this volume report recent experimental investigations of the physiology and pathophysiology of the lung. An emphasis of the symposium was isolation of the physiologic processes of individual cell types selected from the 40 or more recognized types. In over half the papers, preparations of specific types of cells, particularly macrophage and epithelial cells, were studied *in vitro*. Bactericidal, phagocytic, chemotactic, cytochemical, biochemical, immunological, and other indices of cell physiology were studied in model systems. Toxins studied for effects include cigarette smoke, metal oxides adsorbed on fly ash, cotton dust, carbon, metals, asbestos, plutonium dioxide, oxygen, ozone, cadmium, and radiation. Other papers describe technical aspects of the isolation and observation of the cell suspensions.

Additional papers report indices of whole-lung function such as mucus organization, surfactant effects, particle clearance, and other indices of toxic effect that cannot be productively studied in cell preparations.

In an interesting contribution, C. Feldman, P. Bodor, L. J. Perez, Jr., and S. Henry report a mathematical model for calculating Pu-238 dose-rate spatial distribution in the alveolar tissue of the lung. Their method uses data obtained through measurements performed on photomicrographs of the alveolar region. These data allow straightforward consideration of localized alpha ray effects and allow for consideration of particle size and uneven particle distribution in a model for estimating local dose rate in the lung.

Cursory consideration of the possible permutations of experiments using the several cell preparations, pathophysiologic models, and the possible combinations of toxin exposures included in this volume suggests that a staggering amount of experimental work could be performed in this field without necessarily leading to clinical benefits. Future research progress should, however, lead to formulation of clinically relevant hypotheses that can be tested using the cell systems described. The papers in this volume show that a substantial basic science foundation is evolving as background for effective clinically directed research.

This volume should interest researchers and others who seek a broad sampling of lung cell and physiologic compound research or a reference source for standard methods. The book will not directly help the physician or scientist who is seeking information of obvious immediate clinical value.

EDWARD A. EIKMAN, M.D.
Veterans Administration Hospital
Tampa, Florida

ATLAS OF RADIOLOGIC ANATOMY. Lothar Wicke, with the assistance of Wilhelm Firbas and Roland Schmiedl. Baltimore-Munich, Urban and Schwarzenberg, 1978, 234 pp, \$15.00.

The authors state that their intention was to produce a book to supplement teaching material in anatomy, not a complete atlas for specialized radiologic projections, which technicians and radiologists can find in more complete radiology texts. With this book they accomplish their aim of publishing a guide to clinical radiology useful to students and house staff alike.

The atlas contains reproductions of excellent quality, but they are the reverse of the standard radiology reproduction used in the United States, and therefore a minor adjustment of one's viewing habits is required. In addition, most of the anatomic labeling is done in Latin ("Nomina anatomica"), as opposed to the use of English in American atlases. A labeled, line drawing accompanies each radiograph so that it is completely free of extraneous marking, and thereby the distractions that could interfere with the study of the original are avoided. The original radiographs were electronically contrast-enhanced and converted to positives because the authors felt that this allowed for the best reproduction of detail. Small drawings indicate the positioning of the anatomic part and the central ray of the x-ray tube.

The atlas provides anatomic analyses of plain radiographs, as well as special studies, such as carotid and vertebral angiograms and ventriculograms in the skull and myelograms with the spine. Arteriograms and venograms are illustrated along with many of the general radiographs of various parts of the body. Examples of tomograms, bronchograms, and angiograms are presented for the chest. The gastrointestinal tract anatomy as evaluated by radiopaque contrast agents and by angiographic procedures is well delineated, and the urinary tract is similarly covered. Included also are sections on the lymphatic system and on gynecologic radiography.

Some minor errors in labeling have occurred, but these oversights will undoubtedly be corrected when this excellent atlas is reproduced and perhaps expanded for future editions. The present atlas should become a useful reference tool for physicians and technicians.

HYMAN GILDENHORN, M.D.
City of Hope National Medical center
Duarte, California