

Recognizing that the primary function of the lung is gas exchange, West devotes half of his book to this area. If other areas are shortened, I personally cannot fault the author's choice. His thoughts flow logically, aided by excellent illustrations and a quantitative foundation offered in the appendix. Sections with questions and answers provide useful learning reinforcement. The main shortcoming is a result of trying to compress respiratory physiology into a small book, a bit like trying to stuff distended bowel into a tight abdomen. Some of the essentials elude the grasp of conceptual understanding. For example, the 6½ pages on acid-base status are best described as "show-and-tell." One concludes that although some "essentials" are more so than others, most of them are here and are communicated pretty well. The book passed the first trial by our students with at least a B+.

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Chest Roentgenology. EDITED BY BENJAMIN FELSON. Philadelphia, W. B. Saunders, 1973. Pp. 574, \$17.00.

Dr. Felson's original textbook, *Fundamentals of Chest Roentgenology*, is a well known and deservedly popular volume used by residents in Radiology, Internal Medicine, and in recent years, Anesthesiology. In shortening the title and lengthening the book, Felson moves it into an unusual category which straddles the boundary between a personal text and reference work, expounding the unique role of chest roentgenology in the evaluation of acute chronic pulmonary disorders. Ben Felson's humor is close to legendary, and in this expanded treatise there is sufficient space for his anecdotes, jokes, and wry commentary. He plays jokes on the reader, engages him in little competitions, tells stories and permits himself to emerge in a far more personal way than is traditional in medical writing. It all helps to sustain attention and is not at all distracting.

Overall organization is based on anatomic considerations, with systematic review of the pulmonary parenchyma, vasculature, airways and nodes, as well as pleura, mediastinum, and chest wall. In all these categories, innumerable case illustrations are employed to demonstrate aspects of normal structure and function, as well as the common and not-so-common clinical disorders. With only a few exceptions, the illustrations are of very good quality, and have complete, meaningful captions. Orderly analysis of images based on anatomic and pathologic principles is stressed throughout the text. Over the years, the author has devised and popularized all manner of diagnostic signs and tricks in detection and clarification of intrathoracic disease. As these signs are revisited and illustrated, their applications and shortcomings are reviewed, debated and rebutted. Techniques such

as tomography, fluoroscopy, angiography, and isotopic scans are employed liberally to illustrate the methods by which greater diagnostic sensitivity and specificity can be achieved in difficult cases.

Trainees and practitioners in Anesthesiology should find this book appropriate in its breadth and depth. Of particular interest will be the sections dealing with pulmonary anatomy, as a basis for detection of atelectasis and infiltration. Disease of the airways, pathologic alterations in pulmonary vasculature, differentiation of pleural and parenchymal opacities; these are all situations that are constantly encountered in the clinical settings of surgical anesthesia and respiratory therapy.

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Anesthetic Uptake and Action. BY EDMOND I. EGER, II. Baltimore, Williams and Wilkins, 1974. Pp. 371, \$19.00.

The rational anesthesiologist must appreciate the factors which govern the delivery of his drugs to and from the central nervous system, the motor endplate, the nerve membrane, and other organ systems, as well as the mechanisms by which they act. This lucidly written volume has a wealth of information in this important area. As might have been predicted, the author presents initially his concepts of anesthetic potency. Attention is then focused on basic neurophysiology, followed by an excellent chapter devoted to current concepts of the mechanisms of general anesthesia. Considerable attention is given to the role of physical factors in the production of the anesthetic state. It is only after this basic information has been provided that Dr. Eger introduces the subject of uptake and distribution. Understanding will be facilitated greatly by the author's use of a hydraulic model. The effects of alterations of pulmonary ventilation, circulation, and the role of biodegradation on anesthetic uptake and distribution are clearly presented. The importance of the anesthetic circuit is stressed and the significance of nitrous oxide in cavities is reviewed in a very understandable manner. It is interesting that drug uptake by placenta and fetus is not mentioned. Final chapters are devoted to the barbiturates, muscle relaxants, and local anesthetics. Again, not only are the pharmacokinetics of these agents explored, but considerable attention is given to their mechanisms of action. Each chapter ends with a number of thoughtful questions, some of which cannot be answered with certainty. Contributions by Drs. R. A. Epstein, M. J. Halsey, R. H. Levy, M. Rowland, and L. J. Saidman add considerable depth to this work. This book will be of considerable utility to novice, practitioner, and basic scientist alike, and will be "eagerly" read by all.

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