The Anesthesiologist's Bookshelf

Edited by MEREL H. HARMEL

Applied Pharmacology. By Andrew Wilson and H. O. Schild. Tenth Edition. Pp. 721, 216 illustrations. Boston, Little, Brown and Company, 1968. $9.60.

This text begins with an introductory historical review of the principles on which prior generations of physicians based their practices of medicine, extending from the empiricism of Galen through the homeopathy of Hahnemann to the present scientifically-based system of therapeutics. The remainder of the book presents a foundation for the rational use of drugs based on the scientific approach. This begins with three chapters devoted to general pharmacologic principles, *i.e.*, drug-receptor interaction, general modes of drug actions, methods of drug testing, the use of dose–response curves, and a discussion of the absorption, fate and excretion of drugs. These chapters are followed by a systematic presentation of drug groups in the classic manner, *i.e.*, pharmacology of the autonomic nervous system, of the circulatory system, of the central nervous system, etc. Most chapters begin with a brief resumé of the applicable physiology, followed by a general discussion of pertinent drug groups and of specific drugs. Specific modes of drug action and specific drug toxicities are cited, but there is little discussion of structure–activity relationships in most areas. The style of writing is clear and pointed and the text is easily read. Numerous line diagrams and reproductions of graphs and pictures add to the clarity of the material presented, but the discussions are more superficial and less detailed than those found in the most widely used American textbooks of pharmacology.

This edition gives the impression of being an updated version of a standard established text, but it lacks the foresight which might be expected in a proven work. In this era of organ transplantation a students' textbook of pharmacology could be expected to present a discussion of graft rejection and of the use of drugs for immunosuppression. One searches in vain for such a discussion. There are other examples where current knowledge of future import has not been included. The chapter on endocrine fails to mention the recent work of Porte on the sympathetic control of insulin secretion and of the effects of adrenergic blocking agents on this mechanism. The chapter on general anesthetics refers to Meyer, Overton and Ferguson in discussing mode of action but fails to mention the more recent theories of Miller and Pauling. The concept of minimal anesthetic concentrations, useful in describing anesthetic potency, has not been mentioned. A page and a half is given to describing chloroform but only a line and a half to methoxyflurane. Ethacrynic acid, furosemide and chlorthalidone share a three-and-a-half-line discussion under the title "Other Diuretics with Similar Actions." The student searching for information about drugs which he meets in use today, during his training, may be disappointed when he looks to these pages for answers. The more important question is whether the limited information contained on these pages is sufficient to prepare him for his practice of tomorrow.

This book will be a welcome addition to a departmental library for it will serve as a source from which one can readily and rapidly gain drug information, but its use requires the availability of a more comprehensive companion text because of the limitations noted above. For those who actively read the English literature it may serve as a source for English–American translation of drug names.

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Pain: Proceedings of the International Symposium on Pain, Paris, April 11–13, 1967. Edited by A. Soulairac, J. Cahn, and J. Charpentier. Pp. 562. London and New York, Academic Press, 1968. $19.50.

This book is a record of the proceedings of the Symposium organized through the Laboratory of Psychophysiology of the Faculty of Sciences in Paris. The Symposium consists of a review of important progress in the physiology, pharmacology, and pathogenesis of pain, with specialists in the various fields reporting on their work. Some fifty scientists attended the symposium and presented papers or took part in the discussions.

The Presidential address by A. Soulairac was excellent. He spoke on "An Experimental Approach to Pain" and summarized in concise fashion the most modern concepts of pain mechanisms. Another presentation of particular interest to anesthesiologists who work with patients in pain is that of Melzack and Wall on "The Gate Control Theory of Pain." They present good evidence that gating and selection of sensory information may occur at successive synapses at any level of the central nervous system. In fact, the entire first section of the symposium, devoted to neurophysiological and psychophysiological bases of pain, is well worth reading for any student of pain mechanisms.

The major portion of the book is devoted to an evaluation of experimental methods for testing analgesics in animals and man, and is of much greater interest to those involved in research than to the anesthesiologist. For a newcomer to the field of pain research, this section would be of great value because of the variety of approaches