

The Anesthesiologist's Bookshelf

Edited by HUBERTA M. LIVINGSTONE, M.D.

Neonatal Anaesthesia. By T. N. P. WILTON, M.R.C.S., L.R.C.P., F.F.A.R.C.S., D.A., and FRANK WILSON, M.B., B.S., F.F.A.R.C.S., D.A., D.C.H. Cloth. \$9.50. Pp. 227, 92 figures, 4 tables. Blackwell Scientific Publications, Oxford and F. A. Davis Company, Philadelphia, 1965.

This book is intended to provide the reader with a working knowledge of the apparatus and techniques which are used to anesthetize and resuscitate the neonate. The latter is described as an infant in the first twenty-eight days of extrauterine life. To avoid engulfing the reader in a mass of references, the authors claim they will indulge in dogmatic statements to make the book "more readable and acceptable to the junior anaesthetists." Ten chapters are presented dealing with anatomy and physiology of the neonate, preparation for major surgery, apparatus agents and techniques, tracheal intubation, management of neonates for abdominal, thoracic, plastic and neurosurgery and minor surgery. Two concluding chapters deal with the treatment of laryngotracheal bronchitis and asphyxia neonatorum. There are many roentgenograms and photographs; some of the former are of surprisingly poor quality. There are 20 pages of index for the 207 pages of this text.

This book is disappointing in its superficial approach, lack of organization, and failure to provide a worthwhile critique of agents and methods used in anesthetizing the neonate. Rather than to usefully guide the "junior anaesthetist," it presents him with published and verbal opinions and techniques of administering anesthesia but gives him little suggestion of what is more likely to be reliable. Heart rate and blood pressure in the neonate are ignored except for a statement that blood pressure is rarely over 80 mm of mercury so the "transfusion stand does not have to be unduly high." Muscle relaxants are discussed principally under "Endotracheal Intubation." The treatment of convulsions is considered only as oxygen and muscle paralysis. No attention is paid to the possibility of cerebral damage when this therapy alone is used. The respiratory distress syndrome and retrolentilfibroplasia are virtually ignored, yet both are neonatal problems that may be of much con-

cern to the anesthetist. Some would view with alarm the suggestion that nikethamide and vanilic acid diethylamide beneath the tongue should be used to stimulate the child with asphyxia neonatorum. The chapter on anesthesia for thoracic surgery does contain many worthwhile suggestions.

The "delightfully English" style of writing is noticeably absent. The bibliography is in the main English, a criticism that is usually made of American authors in the reverse direction.

JAMES E. ECKENHOFF, M.D.

Comprehensive Background for Anesthesiology. A Descriptive Outline for Instructors and Residents. By W. FORREST POWELL, M.D., Director, Department of Anesthesiology, University of Tennessee Memorial Research Center and Hospital, Knoxville, Tennessee. Cloth. \$15.75. Pp. 346, with 121 figures. Charles C Thomas, Publisher, Springfield, Illinois, 1966.

This rather unusual volume consists of a series of lecture outlines of material designed to be presented to residents in training in Anesthesiology. There are 53 of these outlines and they cover, mainly, the pharmacology and physiology applicable to the specialty.

These outlines are terse: most of the headings are logical and appropriate, but detailed information has been omitted due to the limitation of space. For example, under the section on "Pharmacology of Volatile Agents," one finds, "C. Trichlorethylene (Trilene). 3. Pharmacological properties. b. Respiration: (1) Tachypnea," as the only statement as to the pharmacologic effect of Trichlorethylene upon respiratory function—there is no hint as to the cause, mechanism or extent of the tachypnea, nor of its effects upon clinical administration. Many of the lecture outlines are followed by a short list of general references, usually to standard textbooks on anesthesia, pharmacology or physiology, but without definitive page references. The volume contains a liberal number of pertinent chemical formulae, sketches, graphs, drawings, tables and illustrations, and concludes with a short but adequate index.

It is difficult to know for whom this volume was intended; particularly at the listed price of the

book. The subtitle states that it is a "Descriptive Outline for Instructors and Residents," but the material does not really fulfill the needs of either group. The outlines are certainly not complete enough to be a suitable text, or even guide, for the resident in training; and, on the other hand, the competent instructor is apt to find little use for somebody else's lecture outlines, since he will have long since developed his own concepts of the type and extent of material to which residents should be exposed, and his own techniques and methods for the presentation of that material. Presumably this volume could be useful to those without experience in education who wish to institute a residency training program in anesthesiology—But, of course, this is precisely the type of residency which needs to be discouraged, not encouraged, by our specialty today.

DAVID M. LITTLE, JR., M.D.

Local Anesthesia and Pain Control in Dental Practice. THIRD EDITION. BY LEONARD M. MONHEIM, B.S., M.S., D.D.S., Professor and Head, Department of Anesthesia, University of Pittsburgh School of Dentistry, Pittsburgh, Pennsylvania. Cloth. \$9.50. Pp. 308 with illustrations. The C. V. Mosby Company, St. Louis, Missouri, 1965.

It is Dr. Monheim's contention that fear of pain is the predominant reason for failure of most patients to seek dental care. His stated purpose is to educate dental students and practitioners in the control of pain in dentistry. This book, if carefully read by the student, should serve that purpose.

The major portion of the book is devoted to anatomy and its application to the technics of inducing local anesthesia. This section surpasses all others in clarity and usefulness. The author's many anatomic drawings and photographs and his illustrations of technics are excellent. Particularly useful are photographs side by side of a subject with needles placed and of a skull viewed from the same aspect so that bony landmarks can be seen.

Additional sections of the book are concerned with the multitude of available local anesthetic agents, their chemistry, pharmacology and toxicity. The author makes no plea for use of a preferred agent. He does urge conservatism in the use of vasoconstrictors, suggesting that the ideal concentration of epinephrine is 1:100,000, somewhat less than that concentration frequently used by dentists. The necessity for higher concentrations in dental practice has long puzzled me,

and it is reassuring to see this recommendation from a dentist.

There are minor objections to the section on management of complications in that a table of drugs for use in anesthetic emergencies includes several which the reviewer would not have chosen as being very helpful in any circumstance. Furthermore, two steroid preparations are listed, one for "adrenal insufficiency" and the other for "shock." The author does not state how one recognizes adrenal insufficiency, and I question the need for steroids in any state of "shock" encountered in a dental office.

The book on the whole is well done and accomplishes Dr. Monheim's stated purpose. It is recommended to dental practitioners and those anesthesiologists interested in local anesthesia of the mouth and face.

ROBERT T. PATRICK, M.D.

Synthetic Analgesics. Part II. (A) Morphinans. BY J. HELLERBACH, O. SCHNIDER, H. BESENDORF, AND B. PELLMONT, Research Department of F. Hoffmann-La Roche and Co., Ltd., Basle. **Part II (B) 6, 7-Benzomorphans.** BY NATHAN B. EDDY AND EVERETT L. MAY, National Institute of Arthritis and Metabolic Diseases, National Institutes of Health, Bethesda 14, Maryland. Pp. 193 with numerous illustrations, 35 tables. Price: \$12.00. Pergamon Press Ltd., Oxford, London, Edinburgh, New York, 1966.

This volume is the third in a series of monographs devoted to organic chemistry and the second devoted to synthetic analgesics. While the preceding volume dealt with the chemistry and pharmacology of diphenylpropylamines, the present volume contains two monographs dealing with the chemistry and pharmacology of morphinans and 6,7-benzomorphans, respectively. Both monographs were prepared by outstanding authorities in the chemistry and pharmacology of the respective compounds. The authors of the monograph on morphinans were intimately involved in the synthesis and pharmacological testing of various morphinans in clinical use (e.g., levorphanol, levallorphan, 3-methoxy-N-methyl-morphinan). The authors of the second monograph have done much of the original experimental work with 6,7-benzomorphans which led to the introduction of pentazocine, an analgesic free of addiction liability. Both monographs are concise and complete except for the subject index which could be more detailed. Much of the material is tabulated for easy reference. This volume should be of great value

to individuals doing investigative work with narcotic analgesics and should be available as a source of reference to anesthesiologists and other physicians who employ narcotic analgesics and their antagonists in clinical practice.

FRANCIS F. FOLDES, M.D.

Anesthesia from Colonial Times. A History of Anesthesia at The University of Pennsylvania. By JAMES E. ECKENHOFF, B.S., M.D., F.F.A.R.C.S., Professor and Chairman of the Department of Anesthesia, Northwestern University, Chicago. Cloth. Pp 95 with 25 illustrations. J. B. Lippincott Co., Toronto and Philadelphia, 1966.

This fascinating, superbly written and excellently illustrated monograph contains the well-documented history of the pioneering efforts, many humiliations and frustrations, crushing work-load and responsibilities suffered by several physicians who attempted, over a period of many years, to bring better and safer pain relief to patients at the University of Pennsylvania Hospital. These pioneering efforts, plus the excellent clinical practice, teaching and research accomplishments of the present anesthesia faculty, in 1965 eventually culminated in an autonomous University department, and the establishment by Mr. and Mrs. Robert Lincoln McNeil of the Robert D. Dripps Professorship of Anesthesia. This same year marked the Bicentennial Anniversary of the University of Pennsylvania School of Medicine, the first Medical School in the United States.

The present eminent anesthesia department at that institution, owes its development in no small measure to the far-sighted vision, infinite wisdom, deep interest and loyal support over a period of many years of three outstanding physicians. They are: one of America's greatest surgeons, Dr. I. S. Ravdin; and the eminent physiologically minded pharmacologists, Dr. Alfred Newton Richards (who eventually became Vice-President in Charge of Medical Affairs), and Dr. Carl F. Schmidt, Professor of Pharmacology.

This timely monograph serves as an excellent illustration of the numerous and at times seemingly insurmountable challenges, harassments and frustrations suffered by several other over-worked and little appreciated pioneer anesthesiologists who attempted the development, at other universities, of Departments of Anesthesia composed of physicians having clinical and research competence, and professional stature outside as well as within the operating room.

This historical publication will serve for many years as an extremely valuable guide for other

institutions attempting to develop outstanding Departments of Anesthesia.

H. M. LIVINGSTONE, M.D.

Fundamentals of Hyperbaric Medicine. Prepared by the Committee on Hyperbaric Oxygenation, Division of Medical Sciences, Publication No. 1298, National Academy of Sciences-National Research Council. Cloth. \$6.00. Pp. 178, with illustrations. Printing and Publishing Office, National Academy of Sciences, Washington, D. C., 1966.

This comprehensive review of principles and practice in hyperbaric medicine was prepared by a committee whose members have experience in naval, industrial, and university high pressure installations. It is an inexpensive compilation intended to help the newcomer to avoid, or deal with some dangers and inconveniences to patients and personnel, in the operation of chambers and equipment. Its best features throughout are its intensely practical details and suggestions, many of which are not published anywhere else.

A superficial review of gas physics precedes thorough sections on uptake, transport, distribution, metabolism, toxicity, and elimination of nitrogen and oxygen. Decompression, the bends, and recompression are discussed at length. These sections occupy two-thirds of the book, and include, perhaps unnecessarily, many pages of tables reprinted from the U. S. Navy Diving Manual. A chapter on anesthesia and patient care is followed by a useful coverage of maintenance, administration, operation, and personnel for hyperbaric facilities and equipment. Safety is emphasized in each chapter, and bibliographies are included.

The committee has avoided the repetition often found in books having chapters prepared by various authors, but this does not make the quality of writing uniform. As usual, no sentence of Laphier's terse, lucid writing could be omitted, while in some chapters facts must be plucked from a thicket of useless phrases and cliches. "Existing information is inadequate for generalizations concerning whether important differences exist in . . ." means, approximately, "We don't know much about . . ."

Errors in spelling, grammar, and typography, especially transposition of parts of columns on pages 126 and 130, are distracting evidence of short-cuts in preparation and publication, but do not lessen the usefulness of the book to persons who need an introduction to the field of hyperbaric medicine.

DAVID E. LEITH, M.D.