

The Anesthesiologist's Bookshelf

Edited by MEREL H. HARMEL

Special Problems of Anesthesia in Infants. By ARTHUR ZDZISKOW RONDIO. Warsaw, Poland, Polish Medical Publishers, 1971. Pp. 146, \$4.75.

Care of the Critically Ill Child. By R. S. JONES AND J. B. OWEN-THOMAS. Baltimore, Williams and Wilkins, 1971. Pp. 323, \$20.75.

These two books are recent additions to the rapidly increasing pediatric anesthesia literature. Dr. Rondio's monograph, an English translation from the original Polish, is a synopsis of the author's approach to the management of the infant requiring anesthesia. Its use as a handbook is greatly limited by the lack of an index. Anesthesia techniques for delivery and the reactions of the infant to drugs and temperature changes are emphasized, while no mention is made of specific surgical problems such as tracheoesophageal fistula repair, diaphragmatic hernia repair, etc. Dr. Rondio does present a very scholarly and complete discussion of Ayre's T-piece and its modifications, as well as other types of nonbreathing circuits, however. The references included in the body of the text are very complete and greatly increase the value of the book to anyone working in the pediatric anesthesia field. There are numerous spelling errors, as well as problems in sentence structure resulting from the translation, but these detract very little from the value of the monograph.

The second book, *Care of the Critically Ill Child*, is designed to "set out the principles and practice of modern intensive therapy in pediatrics," and is written not only for clinicians but for physiologists, biochemists, and the nursing profession. The core of the text is a basic procedure manual used at the intensive care units at the Alder Hey and the Royal Liverpool Children's Hospitals. To this has been added the essential background in physiology and pathology necessary for rational treatment of patients. The mathematical bases for many clinical concepts are carefully discussed. The value of this book is greatly increased because of this approach, which makes it more useful to house officers than a simple treatment manual. Cardiorespiratory failure in the infant is the principal topic discussed. Unfortunately, many controversial aspects of the clinical therapy of the sick child are stated as absolute, e.g., the use of nasotracheal tubes in acute epiglottitis. Some techniques which are fairly well accepted in the United States, such as the use of racemic epinephrine in the management of laryngeal tracheitis, are not mentioned. Despite this,

the book is a welcome addition to the pediatric literature and deserves a place on the bookshelf in the pediatric intensive care unit.

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Blood Volume and Extracellular Fluid Volume. (Second edition.) EDITED BY SOLOMON N. ALBERT. Springfield, Ill., Charles C Thomas, 1971. Pp. 295, \$16.75.

This concise, readable monograph from the "American Lectures in Anesthesiology" series represents a compilation of the experience of Dr. Solomon Albert and his group at the Washington Hospital Center. Dr. Albert obviously believes that blood volume determinations are extremely useful clinically, and to this end he and his associates have devoted a great deal of effort toward the perfection of their techniques of measurement, manifest in this volume. The book is divided into two parts, the first concerned with the physiologic principles of blood volume regulation. It is lucidly written and generally sound, although somewhat scanty. The application of these principles to clinical situations in patients undergoing anesthesia and surgical procedures is then pursued vigorously. An extensive list of diseases and the usual aberrations in blood volume accompanying them is presented, and a number of very good case illustrations are included.

Part 2 is concerned solely with technique, and the extensive detail on blood volume and extracellular fluid measurement justifies the existence of the book. The author carefully points out the vagaries and misadventures which may befall anyone who measures blood volume and is unaware of the technical problem. The influences of these and the inappropriate conclusions which may be associated with numbers are more than adequately considered.

It has been my impression and that of most of my colleagues at the Duke University Medical Center that the values obtained from an accurately performed blood volume determination provide a far less reliable guide to patient management than measurements of more dynamic variables, such as central venous pressure, or the use of a Swann-Ganz pulmonary artery catheter plus good clinical judgment. While I cannot disagree with Dr. Albert that blood volume determinations may be valuable, I think the case would be

sounder if more of his own data correlating blood volume determinations, CVP, and pulmonary arterial diastolic pressure were presented.

The importance of adequate mixing time in various circulatory states is properly emphasized, and this is to be commended, since many of the early reports on so-called "extracellular fluid deficits" and circulatory shock appear to represent slow equilibration of the isotopes used for measurement. The implications in fluid overload under these circumstances are obvious.

Blood Volume and Extracellular Fluid Volume is certainly worthwhile reading for physicians caring for surgical patients, especially those interested in clinical cardiovascular research. It belongs in the libraries of those individuals determining or interpreting blood volumes or extracellular fluid volumes in the clinical setting. The bibliography is quite adequate, and the illustrations and tables are well done and organized for maximum convenience.

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Pulmonary Diffusing Capacity on Exercise.
EDITED BY MAX SCHERRER. Bern, Switzerland,
Hans Huber Publishers, 1971. Pp. 213, \$7.20.

This book records the papers and discussions of the 1970 conference held at Berne, Switzerland. It is probably the most complete and informative source on the subject of pulmonary diffusing capacity during exercise, and will have special appeal to the pulmonary physiologist. Others may find the scope somewhat limited.

Haab and colleagues present the initial two papers, describing their model of diffusing capacity of the lung at rest and during exercise, in the course of which a theoretical analysis of the effects of the inhomogeneity on diffusing capacity during

exercise is developed. While Haab's model is for study of diffusing capacity, his analog may not be acceptable to all. Descriptions of both steady-state and single-breath techniques for measuring diffusing capacity and critical discussion of the use and interpretation of the two methods are provided.

Studies of diffusing capacity during exercise in various pulmonary disease states, for example, sarcoidosis, silicosis, interstitial fibrosis, and chronic obstructive pulmonary disease, and the effects of age are presented with clearness and well illustrated by graphs and tables. Cotes presents two mechanisms accounting for reduced diffusing capacity in patients with normal pulmonary mechanics. There is further discussion of the presence of arteriovenous communications as a mechanism, which undoubtedly will provoke controversy. The study of the time course of change in pulmonary diffusing capacity at rest or during exercise is an important statement of this problem. There are two additional studies of the components of diffusing capacity. One would like to see more articles on this complex aspect of the subject. A final paper on the Monaghan respirators seems misplaced and should have been omitted.

For those desiring information about diffusing capacity during exercise, this book is highly recommended. The articles cover the subject well and are clearly written and concise. No similar compilation of this specific material is available. The only criticism, and this is minor, is an occasional inappropriate choice or misspelling of an English word in the articles, especially in the discussions. Four articles are written in French, the remaining 13 in English.

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Books Received

A number but not all of these volumes will subsequently be reviewed. It is hoped that this listing will serve as a reference source for anesthesia and related literature—*M.H.H.*

Principles and Practice of Obstetric Anaesthesia. Third edition. By J. SELVYN CRAWFORD. Philadelphia, F. A. Davis Company, 1972. Pp. 328, illus. \$16.50.

Medical Emergency Manual: Differential Diagnosis and Treatment. EDITED BY M. E. MOORE.

Baltimore, The Williams & Wilkins Co., 1972. Pp. 160. \$8.95.

Modern Trends in Radiotherapy—2. The Modern Trends Series. EDITED BY THOMAS J. DEELEY. New York, Appleton-Century-Crofts—Educational Div. Meredith Corp., 1972. Pp. 315, illus. \$27.00.

Surgery: A Concise Guide to Clinical Practice. Third edition. EDITED BY G. L. NARDI, G. D. ZUDEMMA. Boston, Little, Brown & Company, 1972. Pp. 1168, illus. \$12.50 paper, \$17.50 cloth.