Book Reviews

B. Raymond Fink, M.D., Editor

Cerebral Vascular Smooth Muscle and Its Control. Ciba Foundation Symposium 56. Amsterdam, The Netherlands, Excerpta Medica, 1978. Pages: 408. Price: $35.50.

This book presents the proceedings of a small symposium sponsored by the Ciba Foundation that took place in London in July 1977. The purpose of the symposium is adequately reflected by the title of the book, and was admirably adhered to by all of the participants. Each participant is an internationally recognized authority in his particular area of interest. Each presents his material in a clear, concise fashion, followed by an open discussion among all of the participants. No other book has succeeded so well in synthesizing the diverse (and at times contradictory) available information about the control of the cerebral vasculature. The careful reader will fully grasp where we have been, where we are now, and where we should be going—in sum, the state of the art.

Somewhat unusual (and welcome) for a book of this sort is the considerable critical attention and space given to a variety of methodologies now in common use for examining cerebral vascular physiology. This includes discussion of various micro-electrode techniques, the elegant [^{14}C]deoxyglucose method for measuring local cerebral metabolic events (Sokoloff), methods for "manipulating" the blood–brain barrier (Rapoport), and histochemical techniques for studying neurotransmitters (Owman and Edvinsson). There is a brief but excellent chapter by McDowall, in which he summarizes and discusses, in a most lucid fashion, the influence of anesthetics on cerebral vascular control. The recurring dilemma presented by the anatomically-demonstrable rich innervation of the cerebral vasculature (by both an extrinsic and intrinsic system) and the difficulty in demonstrating a physiologic "purpose" for such innervation are again confronted and again not resolved. Some evidence is presented that neural influence on the cerebral vasculature may be important in extreme circumstances such as severe hypertension. All of the material in the book is generously illustrated and referenced. A subject index provides for quick access to specific points.

Upon completion of this book, the reader will still not know what controls the cerebral vascular smooth muscle. If you are comfortable in the belief that hydrogen ion concentration in the extracellular fluid of the vascular smooth muscle is the major determinant, then you will be unsettled. The participants conclude that either vascular control is determined by multiple factors (H^+, K^+, Ca^{++}, CO_2, adenosine, prostaglandins, neuronal, etc.) or, if there is a common messenger, it has not even been conceived of yet.

JOHN D. MICHENFELDER, M.D.
Department of Anesthesiology
Mayo Clinic
Rochester, Minnesota 55901

Clinical Anesthesia Procedures of the Massachusetts General Hospital. EDITED BY PHILIP W. LEBOWITZ. Boston, Little, Brown and Company, 1978. Pages: 437. Price $10.95.

This paperback is made up of contributions from the recent house staff of the Department of Anesthesia of the Massachusetts General Hospital. The book is intended, as the preface states, "For the inexperienced and incompletely trained anesthetist."

The early sections of the book describe preoperative evaluations, preparation before induction, and techniques of induction, followed by techniques of anesthesia for the different types of surgical procedures. In addition, the book has chapters dealing with common anesthetic problems, emergencies complicating anesthesia, and anesthesia and diseases of specific organ systems. In other words, the book covers the entire range of anesthesia.

Its strong points are that the book is pocket-sized and thus, can be always available, and that the chapters are well organized, with the information presented in a brief and concise fashion. In the chapters about anesthesia for specialty areas, there are descriptions of not only common anesthetic procedures, but also uncommon procedures. One good example of this is in the chapter on thoracic anesthesia, in which management of tracheal reconstruction and resection, an uncommon procedure in many hospitals, is done in excellent fashion. The tables and graphs are well done and easy to read.

The book's weak points are definitely fewer in number than its strong points. However, the print is small and few references are listed.

All in all, the book is an excellent handbook of anesthesia for the medical student, nurse anesthetist, and junior anesthesia resident. In fact, we are recommending that all new residents in Anesthesiology obtain a copy.

GEORGE PSARRAS, M.D.
M. RAMEZ SALEM, M.D.
Department of Anesthesiology
Loyola University Stritch School of Medicine
Maywood, Illinois 60153

Enzymes in Anesthesiology. EDITED BY FRANCIS F. FOLDES. Berlin–New York, Springer-Verlag, 1978. Pages: 368. Price: $34.80.

This volume can be recommended on several grounds—one, it does fill a void. It consists of a compilation of basic enzymology rounded out by, naturally, the effects of various anesthetics on the function and integrity of those various enzyme systems that have been investigated in this regard. It is unfortunate that, as practicing anesthetists, we have not progressed to the point where we can perform on-line measurements of subtle yet life-sustaining biochemical reactions with the sophistication and ease with which we perform pulmonary function tests and determine cardiac outputs and other physiologic variables. Thus, in the day-to-day existence of the clinical anesthetist, enzymatic kinetics seem as remote as electron-stripped compressed atoms in the centers of white dwarf stars. Dr. Foldes' book reminds us that there are more than EKG and blood pressure changes occurring in our art.

On the other hand, the text is somewhat of a filler. It is too comprehensive to be classified as elementary, but certainly not as inclusive as that in the classic *Deutscher Handbüch*. The author admits many readers will not read the book cover to cover, and has directed each chapter towards independence. To be fair, this is generally true, with the exception of Dr. Aszalo's seven chapters. These chapters are well written and a keystone of the volume. Paradoxically, however, many of the best-worked-out enzyme kinetics are ones to which little attention has been given by researchers