

The anesthesiologist seeking readily available information to assist in designing optimum anesthetic care for the aged and high-risk patient will not find this book a reliable, authoritative source.

RICHARD P. FOGDALL, M.D.
Cardiovascular Anesthesia Service
Stanford University School of Medicine
Stanford, California 94305

Respiratory Failure. Second edition. BY M. K. SYKES, M. W. MCNICOL, AND E. J. M. CAMPBELL. Oxford, England, Blackwell Scientific Publications, 1976. Pages: 461. Price: \$34.00.

This second edition of a popular text is very worthwhile and is probably the single most complete compilation of information relevant to respiratory failure. To a large extent, the authors have succeeded in their stated objectives of adopting a more international viewpoint than was the case with the first edition. Major sections are devoted to the Pathophysiology of Respiratory Failure, General Principles of Treatment, and the Treatment of Specific Conditions. Information is provided on such topics as the measurement of blood-gas values, conversion tables to SI units, equations for the derivation of data, and standardized sizes for endotracheal tubes and connectors. The various chapters are well referenced.

The authors have elected to provide broad coverage of their topic, and it is refreshing to see excellent sections on basic physiology and topics not directly related to the adult respiratory distress syndrome. In fact, the de-emphasis of this entity is probably taken too far, and the authors discuss it only in terms of "shock lung," a somewhat outmoded term in the United States. The section on the management of patients with chronic obstructive pulmonary disease is outstanding and, as one would expect, the conservative management of this condition is covered by one of the best descriptions currently available.

With respect to overall format, the book is extremely readable. It will be confusing to many American readers with respect to the use of SI units, although their more usual equivalent values are also given. Further, the type used is small, and this is particularly difficult in the case of the captions for figures and the bibliography. This is probably a false economy.

This reviewer noted a few aspects of respiratory failure in which current North American thinking would be at variance with that of the authors. For example, the flow-directed balloon-tipped catheter is widely recommended in the United States for the evaluation of left heart function and the collection of mixed venous blood. The authors indicate they believe that because this item has sufficient complications associated with its use it should be left in place only for a few hours! A table is presented with the purpose of demonstrating the effect of changes in mixed venous oxygen tension on arterial oxygen tension, in the presence of a right-to-left shunt. The figures are theoretically derived and the assumption is made that shunt fraction stays constant while mixed venous oxygen tension changes due to cardiac output change. It is now recognized that shunt fraction changes directly with cardiac output on many occasions, and that this assumption is therefore invalid.

Significant among the omissions in a generally comprehensive text was any reference to the effects of pulmonary elasticity on closing capacity and arterial oxygen tension at ages up to adolescence, or the effect of position on pulmonary blood flow distribution, particularly changes from side-to-side in patients who have unilateral pulmonary disease, and any reference to the

very difficult problem of when to withdraw respiratory support. The problems of prognostication are not addressed.

I strongly recommend this volume to all those with any involvement in intensive respiratory care.

H. BARRIE FAIRLEY, M.B.
Department of Anesthesiology
San Francisco General Hospital
San Francisco, California 94110

Basic and Clinical Immunology. EDITED BY H. H. FUDENBERG, D. P. STITES, J. L. CALDWELL, AND J. V. WELLS. Los Altos, Lange Medical Publications, 1976. Pages: 653. Price: \$12.50.

This book is an attempt to present material that will bridge the areas of basic and clinical immunology. As outlined in the foreword, the aim of the book is to serve as a text for medical students, house officers, graduate students, practicing physicians, and others interested in learning more about immunology.

The text has 40 chapters arranged into four main sections. The first describes adequately basic immunologic concepts, immunochemistry, and cellular immunology. The first chapter, dealing with historical background, is thorough and very informative, and thus a pleasant surprise, and should be particularly interesting for the student in immunology. The second section consists of a rather good discussion in the area of immunobiology. Of particular value is the third section, on laboratory methods, which is outstanding. It is written in a comprehensible style with numerous illustrations, helpful to both the novice and the serious student in immunology. In contrast, the fourth section, on clinical immunology, which could be intended for house officers and practicing physicians, is mostly descriptive and thus the weakest section of the book. As the editors caution, the latter section is not intended to serve as a manual of clinical treatment.

The editors have succeeded in avoiding the pitfalls inherent in multiauthored texts. In general, the chapters are coherent and easy to read. The style is pleasant and there is very little overlapping of information, which in a text of this size is commendable. In the majority of chapters, the illustrations are especially enlightening and very useful. The appendix has a fairly complete list of terms and abbreviations commonly used in immunology, certainly a great help to the uninitiated in the field. In contrast, a persistent flaw in the majority of chapters is the rather sparse bibliographies, which lead one to believe that controversies are presented according to the individual author's bias.

However, the book is not specifically written for anesthesiologists, particularly those whose background is totally lacking in immunology. Anesthesiologists interested in a concise introduction to basic immunology might refer to simpler texts, such as Roitt's *Essential Immunology*, published by Blackwell Scientific Publications, or, for topics directly related to the fields of anesthesia and surgery, to Matheiu and Kahan's *Immunologic Aspects of Anesthetic and Surgical Practice*, published by Grune and Stratton, New York. Fudenberg *et al.* make no attempt to relate immunology to surgical and anesthetic practice, but overall, their book is a worthy undertaking, and the editors are to be congratulated.

MARCELLE MATHIEU, Ph.D.
Department of Immunology
Tufts University
ALIX MATHIEU, M.D.
Department of Anesthesia
Harvard Medical School and
Massachusetts General Hospital
Boston, Massachusetts 02114