

# The Anesthesiologist's Bookshelf

Edited by HUBERTA M. LIVINGSTONE, M.D.

**Selective Vulnerability of the Brain in Hypoxaemia.** BY J. P. SCHADÉ, Netherlands Central Institute for Brain Research, and W. H. McMENEMEY, The Maida Vale Hospital for Nervous Diseases, London. Cloth. \$14.00. Pp. 395, with illustrations. F. A. Davis Co., Philadelphia, 1963.

If there were any one problem of primary importance in anesthesia it would be the selective vulnerability of the brain in hypoxemia. This was the subject of a four day symposium held in 1961 as a prelude to the Fourth International Congress of Neuropathology. Sponsored by the Council for International Organizations of Medical Sciences under the joint auspices of UNESCO and WHO the symposium is now available in handy book form. There is no other compilation like it. The contributors, apparently authorities in their respective fields, are physiologists, pathologists, neurochemists, histochemists and electron-microscopists. Some of them such as S. S. Kety, G. S. Dawes, W. F. Windle, W. Haymaker and R. W. Brauer are well known to anesthetists for their basic contribution to our field.

Interest in this problem dates perhaps from publication in the 1920's of Joseph Barcroft's classification of anoxia. In this volume hypoxia is defined as the physical disturbance, while hypoxidosis is the pathophysiological abnormality produced. The material is well presented in sections with designated and general discussions interposed, an interesting innovation is symposia. The major subjects are as follows: circulation, blood flow, oxygen diffusion and metabolism; central nervous system tissue, cellular and subcellular aspects; pathogenic and systemic factors in central nervous system vulnerability; systemic factors and central nervous system vulnerability; and, pathogenic factors in relation to cyto- and histochemistry. Each of the chapters under these headings requires careful reading and concentration. Not all will immediately interest the clinician, but they certainly are of basic importance to our practice. Of particular note from our standpoint is the chapter by M. Schneider on critical blood pressure in the cerebral circulation, the chapter by S. S. Kety on the regional circulation of the brain under physiological conditions, that by G. Thews on implications to physiology and pathology of oxygen diffusion at the capillary level, a provocative chapter by R. Lindenberg on patterns of central nervous system vulnerability in acute hypoxaemia, including anesthesia accidents, and the final chapter by M. Wolman on the effects of hyperoxia on the central nervous system.

There is surprisingly little repetition of material in this symposium. The major contribution, as

hoped, is the delineation of still unsolved problems. While the field has shown considerable progress since 1961, particularly on studies relating to anesthesia, the bibliography appended is an excellent one. For the truly interested anesthetist this volume will be a valuable addition to his reference shelf of books.

LEROY D. VANDAM, M.D.

**Endotracheal Anesthesia.** THIRD EDITION. BY NOEL A. GILLESPIE, M.D. Revised and Edited by Betty J. Bamforth, M.D., and Karl L. Siebecker, M.D. Cloth. \$5.50. Pp. 235, with 54 figures. The University of Wisconsin Press, Madison, Wisconsin, 1963.

In preparing the third edition of this well-recognized classic, the authors, Drs. Bamford and Siebecker, have successfully retained the charm, philosophy and sound attitudes that Dr. Noel Gillespie expressed in the first (1941) and second (1948) editions. As a measure of the efforts devoted to bringing information regarding endotracheal anesthesia up-to-date it is worthy of note that the first edition encompassed 187 pages while the third edition has been expanded to 235 pages. The first edition had a foreword by Magill, Waters and Guedel, names to conjure in anesthesiology. To those of us old enough to have known these men in their prime, inclusion of their foreword along with the preface to the first and to the second edition would have seemed completely appropriate and of interest to present and future generations of students in anesthesiology.

On page 74 of the third edition one finds the following: "Nowadays, chloroform is used chiefly as an adjuvant to mixtures of nitrous oxide. . . ." On page 41 of the first edition this same thought was expressed as follows: "chloroform is rarely used nowadays except as an adjuvant to mixtures of nitrous oxide and oxygen." This same thought is repeated on page 98 of the first edition. It is hoped that in a prospective fourth edition, discussion of chloroform will be limited to the statement that "chloroform is rarely used nowadays." One can anticipate that such a statement would deter the neophyte from the use of a drug that might better have been banned from our armamentarium twenty or more years ago.

Noel A. Gillespie was Associate Professor of Anesthesia at the University of Wisconsin until his death in 1955. Drs. Bamforth and Siebecker, both of professional rank at the University of Wisconsin, are to be commended for having undertaken preparation of the third edition. Their efforts will perpetuate this classic in a form as suitable and as useful to present-day students of anesthesia as was the first edition to those thirsting