

the anesthesiologist understand the step-by-step procedure of such a common operation as thyroidectomy, although probably not in such detail as presented in this volume. On the whole, however, there is little to interest the anesthesiologist in this atlas; anesthetic techniques are not depicted. It is an atlas devoted entirely to surgical technique, and as such will find a place in few anesthetic libraries.

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

Anoxia of the Newborn Infant (A Symposium). Edited by KENNETH W. CROSS, MARCEL LELONG, CLEMENT A. SMITH, J. F. DELAFRESNAYE, AND T. E. OPPE. \$5.50. Pp. 230, with 86 illustrations. Charles C Thomas, Publisher, 301-327 E. Lawrence Ave., Springfield, Ill.; Blackwell Scientific Publications, 24-25 Broad St., Oxford, England; Ryerson Press, 299 Queen St., W., Toronto 2B, Canada, 1953.

This symposium, organized by the Council for International Organizations of Medical Sciences, includes the written contributions of 17 participants from 8 countries, together with the discussions of each paper.

As stated in the introduction, "The object of each article was to serve as a personal contribution on some definite clinical or laboratory aspect of the subject, chosen by the author, to be compared with the works of others engaged in the same field of research. The object of the discussion was to attempt to separate, from among the data presented and the explanations suggested, those which seemed acceptable to all."

The articles are arranged under five headings: Clinical, Histological and Pathological, Biochemical, Physiopathological, and Therapeutic Considerations. A section at the end summarizes the general conclusions of the participants.

Clear figures and illustrations, easy-to-read print, and paper of excellent quality are characteristics of this book. Bibliographies, for the most part, are ample for a publication of this type, and an adequate index is provided. A misprint occurs in table V, page 90, where the number "18" appears as "81."

The subject matter is treated with refreshing objectivity, emphasizing personal observations and experiences, and clearly indicating certain controversial aspects. Unusual prominence is given to such matters as the newborn's tolerance of anoxia; the anoxic threat during cesarean section; the relationship between amniotic fluid aspiration and anoxia and "hyaline membrane"; the physiological significance and efficacy of apneustic, periodic, and gasping respiration; the significance of chemoreceptors; and the interrelationship of respiratory and circulatory functions in the newborn infant. None of the participants made any reference to the relationship between the use of high concentrations of oxygen and the incidence of retrolental fibroplasia in premature infants, although the possibility of "oxygen poisoning" is mentioned, with a plea for more exact control of oxygen in incubators, "in the belief that concentrations of 50 per cent are not only safe but effective."

Anesthesiologists, obstetricians, pediatricians, and other physicians whose responsibilities include the care of newborn infants would derive considerable benefit from reading this symposium.

JOHN R. LINCOLN, M.D.

Spinal Epidural Analgesia. By P. R. BROMAGE, M.B., B.S., F.F.A.R.C.S., Consultant Anaesthetist, Chichester Hospitals Group, Chichester, West Sussex, England. Cloth \$3.75. Pp. 123, with 41 illustrations. Williams & Wilkins Company, Mount Royal and Guilford Aves., Baltimore 2, 1954.

This small book offers a comprehensive discussion of epidural analgesia, based upon thorough study of previous work with the method, understanding of the anatomical structures and physiologic principles involved, and the author's large experience of 1,000 administrations over a period of five years. The procedure is presented as, "... a simple, safe, and effective method, having certain definite advantages over current re-

laxant techniques, in a limited field of surgery, as well as possessing a number of therapeutic applications."

The first 4 of the 9 chapters comprise a brief, but inclusive, résumé of the development of epidural analgesia and of the physical, physiologic, and anatomic facts upon which its successful utilization depends. The remainder of the book is concerned with practical considerations of indications, technique, management, advantages, and hazards of the method. The wealth of illustrative material and advice derived from Dr. Bromage's wide experience renders this section invaluable to those having limited experience with the technique.

The text is clear and concise, generously illustrated with photographs, diagrams, charts, and tables. References to the literature are listed at the end of each chapter. Since this volume makes available material for which otherwise one would have to consult many sources, it is of great value to anesthesiologists and surgeons.

JULIA G. ARROWOOD, M.D.

Dextran: Its Properties and Use in Medicine. By JOHN R. SQUIRE, M.D., F.R.C.P., AND OTHERS. \$3. Pp. 91, with 7 figures. Charles C Thomas, Publisher, 301-327 E. Lawrence Ave., Springfield, Ill.; Blackwell Scientific Publications, Ltd., 24-25 Broad St., Oxford, England, 1955.

The qualities desired in a blood plasma substitute are described and dextran is presented as a possible substitute. Dextran is a collective name given to represent a series of polyglucoses whose molecules vary in size and configuration. It is commonly used as a 6 per cent solution and is effective through the colloid osmotic pressure it exerts in the blood stream. Its physical and chemical nature, availability, and behavior in the human body permit this substance to serve well as a temporary fluid replacement when plasma is not readily available. It has been standardized in the United States and Britain (1954), with only slight differences, although an international standard would be preferable.

The authors feel that dextran will be most useful (1) in normal transfusions practice while waiting for cross-matching tests to be completed when plasma is not available, (2) in places where blood is not available, and (3) in national emergencies. Its chief use appears to be for the treatment of shock of an acute nature due to blood loss. Dr. Squire reports its use in the nephrotic syndrome, but these studies are incomplete and results equivocal.

Dextran is relatively nontoxic in the body. Certain individuals exhibit a sensitivity to it, as manifested by urticaria or a generalized reaction of an allergic or anaphylactic nature, which is more common in the unanesthetized individual. These reactions seem to be associated with certain strains of leuconostoc bacteria producing the dextran. The more highly branched dextrans were associated with a higher incidence of reactions.

From the above, it seems advisable that in the future specification of dextran should include a statement of the strain of leuconostoc bacteria producing the dextran, and a statement of whether the branches are long or short. Dr. Squire stresses the desirability of an expression of the colloid osmotic pressure of the mixture of dextran and serum, the determination of which at present is technically not feasible.

Dr. Squire and associates have presented an interesting and comprehensive study of dextran, including problems yet to be solved. The impression is gained that dextran in its present form can be a vital drug in intravenous therapy, and we can look forward to an improved dextran in the near future.

ANNE H. DODD, M.D.