

venous blood with a high specific gravity, high cell volume, increased plasma potassium, and decreased plasma proteins.

The author feels that hypertonic saline is to be used only in small amounts (200–500 cc.) and its effects should be controlled by repeated blood determinations as well as by the response of the patient. The best success was obtained with the combined administration of hypertonic sodium chloride, cortical extract and transfusions.

Cortical extract is discussed at length and its use is advocated in treatment of shock as it is said to correct many altered physiological functions and abnormal chemical and physico-chemical states. It acts to restore blood volume, relieves hemo-concentration, raises blood pressure, and increases alkaline reserve through promotion of base retention. It restores renal function, causing increased excretion of potassium as well as ammonia and retention of both sodium and chloride. It increases heat production, decreases the retained nitrogenous elements in the blood and lowers the value for blood potassium. Cortical extract, where used, showed a better survival rate (52 percent) in moribund patients and in several cases of post-operative shock, where the usual measures failed; it alleviated the shock when administered with salt solution. The extract is given intravenously in repeated small doses.

The author does not say that shock is due to potassium poisoning but believes that alterations in potassium in both blood and body fluids serve as a measure of profound cellular changes.

Part three of the book is unique in that it is concerned entirely with historical developments in the conception and treatment of shock, in the physiologic and toxicologic effects of potassium, and of some of the functions of the adrenal glands.

An extensive bibliography is pro-

vided, citing over five hundred references.

Part four is a short laboratory manual describing the technique of the different determinations suggested by the author.

*Summary:* This book contains material suitable for wide clinical application in daily practice. It is well written and is excellently authenticated by references. Dr. Seudder has studied his problem profoundly and has given us a foundation for clinical practices that may be responsible for the saving of many lives.

C. B. H.  
R. M. T.

*Cyclopropane Anesthesia.* BENJAMIN HOWARD ROBBINS, B.A., M.S., M.D., Associate Professor of Pharmacology, Vanderbilt University School of Medicine. Pages 175. Baltimore: Williams & Wilkins Company, 1940. Cloth—Price \$3.00.

This small but comprehensive book serves to clarify the present status of cyclopropane as an anesthetic agent. Starting from the history of its first discovery and dealing with its physical and chemical characteristics and methods of manufacture, it then devotes a series of chapters to the effects of cyclopropane on the important organs and tissues of the body, both in the experimental animal and the human subject. These chapters contain useful summaries. The figures and tables which are presented are illustrative and easily read. One of the eleven chapters in the book is devoted to the clinical administration of cyclopropane as an anesthetic agent and while several techniques are mentioned there is a limited amount of discussion regarding actual clinical administration. Separate chapters discuss the complications following cyclopropane anesthesia and the indications and contraindications for the use of this valuable anesthetic

agent. The last chapter is devoted to the explosive hazards and mentions the common precautions that may be taken but no mention is made of any new device that is known to give adequate protection against static accumulations. There is a fairly comprehensive bibliography and an adequate index. The chapters dealing with the chemical and physical properties are quite technical, and the clinical anesthetist might feel that more space could have been devoted to the problems involved in administration of the gas. The author suggests the interesting point that cardiac irregularities so often encountered in cyclopropane anesthesia might be eliminated by using barbiturates, in place of, and to the exclusion of, morphine as premedicating agents. The book should prove of value to both anesthetists and pharmacologists.

J. T. T.

R. M. T.

*The Evolution of Obstetric Analgesia.*

ANDREW M. CLAYE, M.D., (Leeds), F.R.C.S. (Eng.), F.C.O.G., Leeds, Eng., Professor of Obstetrics and Gynecology, University of Leeds; Honorary Surgeon, Leeds Maternity Hospital, and Hospital for Women; with a chapter by W. STANLEY SYKES, M.A., M.B., B.Ch. (Cantab.), D.A., Leeds, Honorary Anesthetist, General Infirmary, and Hospital for Women. Oxford University Press. London, 1939, 99 pp.

The author's purpose in presenting this small volume is to fill the need of a book in English stressing the historical aspect of obstetric analgesia. The writer emphasizes two of the highlights of the subject; the introduction of ether and chloroform, and the development of twilight sleep.

The first chapter is devoted to ether and chloroform, which is a concise and

reverential summary of their introduction by Sir James Y. Simpson. The contributions of a number of other workers are sketched but the subject is not completely covered. The controversies and oppositions—lay, clerical, and medical—incident to the introduction of the new methods in childbirth are briefly mentioned.

The second chapter passes abruptly into the development of twilight sleep without mention of preceding advancements. Two pioneers are briefly mentioned with a summary of their methods and results. Gauss, who worked at Freiburg, has received a disproportionate amount of space. The subject matter is largely devoted to detailing the modifications of dosage of morphine and scopolamine and enumerating the criteria and tests used in evaluating the success of the amnesia. The adverse effects are minimized. Results are quoted without analysis or comment. The controversies subsequent to the introduction of twilight sleep are omitted.

The gaseous anesthetics are grouped together in one chapter. The dangers of asphyxia associated with nitrous oxide are under-emphasized. The chapter is burdened by the detailed descriptions of various types of apparatus for administering nitrous oxide and the results of various investigators using these machines. The risk of explosion with ethylene is emphasized. The discussion of cyclopropane is inadequate since it consists only of a description of a single case of the author.

The large and important subject of the barbiturates is dismissed with a description of the author's use of nembutal and pernocton, and his clinical impressions of them.

The book is merely of casual interest to anesthetists because of its sketchy presentation and superficial discussions.

R. J. F.