BOOK REVIEWS


The “Contents” of this little volume on Cardiovascular Therapy would seem to give a more comprehensive review than would be possible if the usual style were employed.

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CLINICAL APPLICATIONS OF BETA ADRENERGIC BLOCKADE. Donald C. Harrison, M.D., and Robert M. Karch, M.D.

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H. B. B.


The best review of this large tome, which was sponsored by the American College of Chest Physicians, is the “Table of Contents.”

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The authors of this monograph, which is devoted exclusively to the Frank lead system, are Associate Professor and Professor of Medicine, respectively, at the University of Cincinnati College of Medicine. As emphasized in the foreword by Dr. J. McGuire, Director of the Cardiac Laboratory and Professor of Medicine at this College, Dr. Helm has carried out important and fundamental studies in the theoretical aspects of vectorcardiography while Dr. Chou has made numerous important contributions to practical vectorcardiography. The result of this collaboration is perhaps the best textbook on vectorcardiography published so far, since it provides the cardiologist with a clear discussion of the basic principles of the method and the underlying electrical events in the heart and at the same time contains detailed information concerning vectorcardiographic differential diagnosis and a wealth of original findings which will be of value even to the most expert vectorcardiographers.

The first part of the book contains introductory chapters on the vector concept, lead systems, derivation of the vector loops, and the corresponding scalar electrocardiograms followed by detailed analysis of the normal range and the findings in left and right ventricular hypertrophy, left and right bundle-branch block, myocardial infarction, injury and ischemia, atrial enlargement, Wolff-Parkinson-White syndrome, and certain specific anomalies, such as atrial septal defect and pulmonary emphysema. The second part of the book contains descriptions of 50 cases which can be used for correlation of vectorcardiograms with clinical and anatomic findings and as exercises in vectorcardiographic diagnosis. The numerous illustrations contain the transverse, right sagittal, and frontal planes, taken at normal and at fourfold sensitivity throughout to show details of the P, S-T, and T loops, as well as the corresponding 12-lead electrocardiograms. The technical quality of registration and reproduction is excellent.

In the sagittal vectorcardiogram the authors use the view from the patient's right rather than the view from the left recommended by the Committee on Electrocardiography of the American Heart Association since, in their opinion, the latter would make it impossible to apply the method of measuring angles in the frontal plane first used by Einthoven to all three vectorcardiographic planes. However, if the posterior rather than the anterior end of the Z axis is designated as the point of 0 degrees in the left sagittal view, this method can be applied to all three planes; such a designation has been used in many recent publications relating to the Frank system. Since uniformity of nomenclature would be an important factor in giving vectorcardiography the clinical popularity it deserves, the reviewer hopes that future editions of the book will adopt the left sagittal view even if it is at variance with "well-established trigonometric convention." Other improvements for future editions would be inclusion of the quantitative criteria for the diagnosis of ventricular hypertrophy developed by P. G. Hugenholtz and designation of the high-frequency filter used in each figure. A minor point would be elimination of the running head "W-F-W Syndrome" from the second half of Chapter 12, which is devoted to congenital heart disease.

E. Lepeschkin, M.D.


It gives one pause to consider an undertaking that has produced a review of fibrinolysis that includes 197 pages of references (4,517 in all) with 429 pages of text. All aspects of the subject are exhaustively organized, categorized, and referenced for the convenience of both the uninstructed and the serious worker in the field. The all-inclusive nature of the work is the reason for both its importance and its flaws. Historical information on the development of concepts in fibrinolysis and a descriptive terminology are clearly presented at the start, followed by a
review of the individual components of the fibrinolytic system and their interaction. Although complete, this section is written in a deliberate staccato style that is necessary to state the multitude of facts gleaned from the extensive bibliography. The latter is exhaustively and at times unnecessarily cited, as when the term "experimental thrombi and emboli" is referenced by 68 sources and "the fibrinolytic system in tissues" by no less than 116 articles. Laboratory methods for studying and detecting fibrinolysis are mentioned, but the technical details are insufficient for those interested in actually setting up these tests.

The largest section is devoted to the physiology of in vivo fibrinolysis, which is of special concern to the clinician as well as the researcher. This section is divided into discussions of normal fibrinolysis as balanced by the coagulation system, and the disease states characterized by either an abundance or a pathologic decrease of the lytic process. The author does not stress the process of heightened coagulation as the basis for the clinical syndrome of the disseminated intravascular clotting, and as a result undue emphasis is given to reports of the as yet unproven entity of hypofibrinolysis. The final chapter deals with the clinical applications of fibrinolytic therapy, and here more than anywhere else in the review, a simple statement of the facts and the implications of recent clinical trials suffices to keep the reader's interest. The text is long and at times repetitious, especially regarding the homeostatic balance between clotting and fibrinolysis, and lacks the flavor of an original treatise because of its documentary nature. However, the author's major purpose is a cataloguing of all existing information on the subject of fibrinolysis up to the publication date of 1968, and in this regard he succeeds eminently.

VICTOR J. MARDER, M.D.


As the title indicates, this small volume is concerned with cerebral circulation in contradistinction to cerebral blood flow. The reviewer feels that this point should be emphasized. The authors have reviewed a considerable amount of Russian literature which is not readily available to English readers because of obvious language problems. In most instances the literature is subjected to interpretative analysis by the authors. However, there are some exceptions where there is in essence a mere cataloguing of references.

The studies of circulation by Naumenko and Benua usually employ impedance plethysmography. This approach is not widely used in this country nor is it wholeheartedly accepted, but it is fair to say that it reflects the status of cerebral circulation. There are a few spelling errors. At times the language is stilted because the translation is quite literal. However, these do not really detract from the value of the book and offer no real problem to the reader.

The book contains chapters on humoral, neurohumoral, and reflex control of cerebral circulation. In addition metabolic, chemical, and pharmaceutical effects on cerebral circulation are also discussed. There is a short chapter on the role of conditioned reflexes. This was somewhat vague, and I agree with the authors themselves when they say that the mechanisms of these conditioned vascular responses are complex and not easily understood. The final chapter is concerned with autoregulation of cerebral circulation and contains the authors' views on the matter.

The general usefulness of this reference should not be overlooked because of some of the critical comments made by this reviewer. The authors' hypotheses are interesting and thought provoking. In addition, although the literature is generally reviewed, there is a valuable overview of relevant references in Russian. These cover almost a century of literature and are of historic as well as scientific interest. This reference is suggested for workers in the field of cerebral blood circulation.

JOSEPH RESCH, M.D.


This volume, containing scholarly reviews of a variety of topics under the general heading of thrombosis, resulted from a Conference on Thrombosis held under the auspices of the National Research Council in November 1967. The Conference was undertaken, in part, because of the need to document the high incidence and ubiquity of thrombosis and to present the subject of thrombosis within its own framework rather than secondary to the various target organs in which intravascular coagulation occurs. Although only a small amount of the material presented is new, the careful analysis of the thrombotic

This book deals primarily with the physiologic aspects of hematology rather than with just the descriptive aspects; this is one of its strong points as well as one of its shortcomings. In his preface, the author plainly states that the book is not a textbook of cytopathologic diagnosis and presents his arguments for keeping photomicrographs to a minimum. The author also states that his book excludes changes in circulating blood cells in the course of nonhematologic diseases; blood group systems; the hematology of infancy and childhood; hematologic problems of pregnancy and those of geriatric patients.

Given the above exclusions, one might wonder what there is left. There is a great deal. The first two chapters, attempt to portray current understanding in the development and functional aspects of the various blood cells. The normal as well as the abnormal are considered. One gets the impression that the normal physiologic events are dealt with somewhat more thoroughly than the abnormal ones. The second main part of the book deals with the pathophysiology of human blood diseases. Here one finds some items discussed with great clarity such as the anemia of chronic disorders, microangiopathic anemia, and chronic granulocytic leukemia. Other entities in this section such as the disturbances of cyanocobalamin and folic acid metabolism, multiple myeloma and the malignant lymphomas are less clear.

While much therapy is discussed in earlier sections, part three gives a very general overview of some selected topics such as transfusions, steroid therapy, treatment of malignancies, and anticoagulation. Splenectomy and thymectomy are covered but treatment of nutritional deficiencies, phlebotomy, and radioisotopes are not included. The portion on anticoagulant therapy is really very brief and does not include a discussion on the treatment of disseminated intravascular coagulation and defibrination. Rather one is referred to an earlier section. Little attention is given to the newer approaches of managing hemophilia.

The book is a useful reference source and gives an excellent review of the European and world literature. Several medical students reviewed the book and found it useful as a primary reference source, but felt the text was not sufficiently definitive. The technical quality of Physiopathology and Therapy of Human Blood Diseases may not justify the relatively expensive purchase price of $27.00. The book which was reviewed had a section of eight pages improperly bound. However, this is a good reference work for hematology divisions and medical school libraries. It is of value as an introductory review of pathophysiology with excellent guidelines for further reading.

JAMES R. MCArTHUR, M.D.