BOOK REVIEWS

Hyperlipidemia and Hyperlipoproteinemia.

This little book will be of greatest value to medical students and physicians interested in acquiring a practical understanding and working knowledge of the hyperlipidemias. It is clearly written, with numerous diagrams and illustrations. The author has tried hard to present rational explanations of the various clinical situations.

The book is divided into 11 chapters, the first three of which provide a brief introduction to the serum lipids and lipoproteins. Normal values are tabulated. Chapter 4, entitled "Biochemical Defects in Hyperlipoproteinemia," describes the normal metabolism of serum lipoproteins and outlines, in straightforward and somewhat simplified form, current views of the abnormal pathways associated with hyperlipoproteinemia.

Chapter 5, "Secondary Hyperlipoproteinemia," impresses me as one of the strongest features of the book. Most of the common and uncommon causes, to be ruled out before the condition is labeled "essential," are considered.

The next five chapters are devoted, respectively, to the five types of familial hyperlipoproteinemia, as defined by Fredrickson. The final chapter is a brief summary. The bibliography is dominated by references to other reviews, rather than to the original literature.

The book contains numerous illustrations, including the common varieties of xanthomata, but these are not in color. No picture of the highly characteristic palmar lesions of the type III syndrome is presented. Lacking information from ultracentrifugal analysis, the clinician must recognize these lesions if he is to diagnose this variant with any certainty.

The average reader would have welcomed a well-illustrated section devoted to the interpretation of the patterns seen on paper electrophoresis.

Brief discussions of drug and dietary therapy are included. These are not sufficiently detailed to serve as an adequate practical guide without some supplementation from other sources. Partial ileal bypass receives a surprisingly harsh appraisal as "an extreme and hazardous form of treatment." The author seems to accept without reservation the value of cholesterol-lowering regimens, although fully convincing evidence for this view has not yet appeared. The suggested upper limit of normal for the concentration of cholesterol in serum, 270 mg/100 ml, would be considered much too high by many authorities.

The importance of "teaming up" of the A and B apolipoproteins in the formation of pre-β-lipoproteins is emphasized repeatedly. The C apolipoproteins go almost unmentioned, perhaps in the interest of simplification. This omission is surprising, nevertheless, in view of Dr. Sanbar's previous association with the Oklahoma Medical Research Foundation, where so much work has been done on these peptides.


IVAN D. FRANTZ, JR., M.D.

Hypertrophic Obstructive Cardiomyopathy.

This monograph documents the clinical and laboratory investigations of 23 patients with hypertrophic obstructive cardiomyopathy, which the author defines as that state in which primary myocardial disease results in ventricular outflow or inflow tract obstruction, or both. Of 22 patients undergoing hemodynamic investigation, 13 had evidence of obstruction to left ventricular outflow at rest. Nine patients had evidence of inflow obstruction to the left ventricle (due to reduced compliance) but no outflow tract obstruction.
The first part of the monograph reports the results of the detailed studies by the author, together with an extensive review of the world literature on the subject. The second part documents in detail the 23 case histories.

In the first part of the monograph, the author draws attention to the discrepancies between the number of familial and nonfamilial cases reported in 1869 and the number reported in the French literature. He makes the point that the number of familial cases are probably underestimated, due to lack of screening of other family members and on this basis suggests that it is probably not justifiable to compare and contrast features of familial versus nonfamilial cases. He suggests that the 2:1 male-to-female preponderance may largely be a manifestation of the greater number of physical examinations (military service, insurance, sports, employment) that males are subjected to. In 17 of his 23 patients the detection of a murmur was the first manifestation of the disease. He presents a cogent argument for the myocardial defect being congenital in origin, with the first manifestations being commonest in the second decade.

No patient had congestive heart failure. Syncope occurred in patients with and without outflow tract obstruction but was commoner in the former. The louder murmurs usually indicated the presence of outflow tract obstruction.

Eleven of the 23 patients had a previously reported bulge on the left heart border above the apex on the posteroanterior chest x-rays. The 11 patients having pathologic Q waves in the electrocardiogram had a mean age of 16 years, whereas those not having this abnormality had a mean age of 27 years.

The most notable contribution of the monograph is the author's use of intracavitary electrocardiograms to detect contact with the ventricular myocardium at the time that intraventricular pressure differences are being recorded. This provides yet another means for differentiating between a true and an artificial intraventricular pressure difference.

Electromyographic recordings from skeletal muscle in the 23 patients revealed a shortening in the mean duration of the action potential in 15, suggesting the possibility that the cardiomyopathy may be but part of a generalized muscle disorder.

The cineangiographic descriptions of the left ventricle are disappointing in their apparent lack of attention to one side of the outflow tract obstruction, that is, the anterior mitral leaflet. The author suggests that anterior mitral leaflet movements are normal in systole, which is contradictory to recent reports of others. Likewise, the lack of clear distinction between the patients with and those without left ventricular outflow tract obstruction throughout most of the text is considered to detract from this otherwise intensive and extensive effort on the part of Dr. Meerschwam.

E. D. WIGLE, M.D., F.R.C.P.(C)


The editor and contributing authors have prepared a monograph which should be of great value to any physician responsible for treatment of trauma victims. Although injuries of the chest are a frequent cause of death following accidents, physiologic derangements accompanying thoracic injury and their proper management are often poorly understood.

The subject is introduced by a classification of thoracic injuries based upon their effects on respiratory function. Emphasis is placed appropriately on hypoventilation as the critical factor in chest trauma and upon the great difficulty in recognizing inadequate ventilation by the usual clinical signs. Mechanisms by which respiratory insufficiency occurs in the various types of thoracic injuries are clearly described. A second chapter is devoted to initial examination and resuscitation of the patient with a chest injury. The requirement that cardiorespiratory stability be achieved before other less urgent injuries are treated is stressed. Proper equipment for an emergency room and useful procedures and technics for treatment of chest injuries are discussed.

Individual chapters are devoted to trauma to the chest wall, pleural complications of thoracic trauma, injuries to trachea and major bronchi, injuries to the lungs, trauma to the heart and great vessels, injuries of esophagus, injury of diaphragm, and finally to postinjury care.

Throughout the monograph the authors have attempted to present the clinical picture produced by specific injuries of the thorax. The place of operative and nonoperative treatment in different types of chest injury is discussed. In those situations where type of treatment is controversial, as in some cardiac injuries, the pros and cons of the various kinds of therapy are presented. Where appropriate, the text is supplemented by short case reports. For example, nonoperative treatment for injury of the lung is usually recommended. In those circumstances in which operation is indicated, conservatism in dealing with pulmonary tissue and avoiding resection is emphasized. Case reports in this chapter serve well to illustrate the situations in which pulmonary re-
section is necessary. Reproductions of roentgenograms are of good quality and explanatory captions are adequate.

The chapter devoted to postinjury care includes a section on use of mechanical respirators to aid or control ventilation. The importance of the physician being familiar with the capabilities of the respirators which he is using is stressed.

There is little in this book with which the reviewer disagrees. Perhaps more emphasis might be given to early use of aortography in patients with crushing chest injury to detect rupture of aorta and great vessels. In general, the philosophy of treatment presented is sound, and this monograph will serve as an excellent guide to management of thoracic trauma.

JOHN F. PERRY, M.D.


Despite its title, this is not a comprehensive text on the subject of peripheral vascular disease. The author delves deeply into some of the physiologic parameters in the commonest arterial diseases which can and do effect the outcome of patients who suffer from these diseases.

It is the careful student of peripheral vascular disease who will probably benefit most from this book, which clearly shows that physiologic measurements can be of import in the understanding of certain aspects of diseases of peripheral circulation. The surgeon, the clinical investigator, and the physician who limits much of his practice to peripheral vascular disease can learn some new technics for studying these patients.

The methods described in the text, many of which have been introduced by the author and many of which have been adapted from other authors, vary from extremely complex methods (wave-form analysis) to easily applicable methods (ultrasonic determination of pressure distal to occluded arteries).

The text is written clearly. The author’s intentions are succinctly stated. Illustrations are excellent, and it is a book to be read with interest by anyone wishing to know more about peripheral arterial circulation in both health and disease. It is, however, not a book to be read without realizing that the newer methods of study, especially some highly sophisticated procedures, are not always needed to evaluate patients with arterial disease.

The usefulness of a monograph such as this lies not in its comprehensive survey of the literature on a given subject but in its attempt to stimulate the reader to think about new approaches to old problems. In this, Dr. Strandness has achieved his goal. Certainly the surgeon interested in peripheral vascular disease must be interested in this book. It is hoped that the cardiologist and the cardiovascular specialist who is not a surgeon will likewise be interested.

J. F. FAIRBAIRN, II, M.D.


The first three chapters of Electrocardiography for the Anaesthetist consist of a somewhat terse review of normal and abnormal electrocardiographic findings. The method of presentation would be helpful to the student who needs a review of the subject, but it might be troublesome for one who wants source material for learning basic electrocardiography.

The fourth chapter deals specifically with the effect of anesthetic agents on the electrocardiogram, with a few pages devoted to electrolyte imbalance. Of necessity, this material is less than precise, consisting largely of statements from the literature that testify to the occurrence of specific patterns under certain conditions. One must not be inflexible in accepting these many reports as truly representative of specific anesthetic agents.

The last four chapters contain the substance of the volume, dealing, respectively, with the ECG in anesthesia and surgery, intensive care, a résumé of suitable equipment for use by the anesthetist, and the values and limitations of anesthesia in ECG. The final chapter is most important and should be reviewed by all who use electrocardiography in the operating room.

The appendix is useful, listing all types of arrhythmias, their causes, and treatment in tabular form. The index and bibliography are adequate.

EDWARD P. DIDIER, M.D.