BOOK REVIEWS



Z. NICHOLAS ZAKOV, MD, SECTION EDITOR Reviews by DONALD G. VIDT, MD, CHAIRMAN, DEPARTMENT OF HYPERTENSION AND NEPHROLOGY

HYPERTENSION MECHANISMS

by Irvine H. Page Grune & Stratton

This book represents a Herculean accomplishment by a physician whose name has been synonymous with the field of hypertension for 50 years. Dedicated to the staff and employees of the Cleveland Clinic, with whom he collaborated and directed research efforts in hypertension for 33 years, Dr. Page has provided an extraordinary review and interpretation of the published research and development in the field of hypertension to 1984. His inimitable writing style will be immediately recognized by readers familiar with his writings. As stated in his preface, he has "presented the results of the study of hypertension without laundering them to fit conceptions of my own choosing." He has carefully and thoroughly documented the history of developments in hypertension as a foundation for future research and understanding of this disease.

The first chapters deal with the hemodynamics of hypertension, the kidney in hypertension, and the renal handling of salt in animals and in man. The renin-angiotensin system is addressed in considerable detail and reflects the author's intense interest and involvement in this important area of developmental research. Following chapters review the vessel wall in hypertension, the role of depressor polypeptides, selected endocrine aspects of hypertension, central regulation of blood pressure, and catecholamines and other neurotransmitters. The role of the kidney in hypertension is described in chapters discussing prostaglandins, renoprival hypertension, renal function in essential hypertension, and malignant hypertension. The section on the principles of the mosaic theory of hypertension, which Dr. Page first proposed in 1949, assists understanding of this multifactorial disease and will be appreciated by the reader.

Despite its length (1,102 pages), the book reads easily because of Dr. Page's style and relaxed presentation of data. An unfortunate delay in publication resulted in references being included only through 1984. Nevertheless, this book should find its way into the library of any

physician with a serious interest in hypertension research.

PERSPECTIVES IN HYPERTENSION: THE KIDNEY IN HYPERTENSION

by N. M. Kaplan, B. M. Brenner, and John H. Laragh Raven Press

This volume is the first in a series designed to provide timely and authoritative reviews covering diagnostic and therapeutic advances. It focuses on the role of the kidney in the pathogenesis of hypertension, selected clinical topics in diagnosis and evaluation, and therapeutic strategies for managing patients with mild to severe hypertension, including hypertension associated with renovascular disease and with chronic renal failure.

Initial chapters provide authoritative reviews of the renal-body fluid feedback regulation of blood pressure as well as alterations in sodium and calcium transport and their possible roles in the peripheral resistance elevations noted in established hypertension. Additional chapters are devoted to discussions of the renin-angiotensin-aldosterone system in human hypertension and the role of renal nerves in the pathogenesis of hypertension. The review of the function of glomerular hypertension both in initiation and progression of renal disease stresses the importance of the intrarenal effects of newer classes of antihypertensive agents on progressive renal disease.

The importance of the renal vessels in the pathogenesis of essential hypertension is examined along with evidence suggesting that these changes play a significant part in the progression of the disease. Recommendations for screening and evaluating patients with renovascular hypertension are discussed, including radiological evaluation and recognition of both renovascular and parenchymal diseases causing hypertension. Current principles of antihypertensive drug therapy are reviewed, and the practical clinical pharmacology of the major classes of antihypertensive agents is described in some detail. The authors have not limited their discus-

sion to mild to moderate hypertension but have included an examination of the current recommended management of hypertensive crises as well. Several papers review current recommendations for medical and surgical management of renovascular hypertension as well as newer techniques of percutaneous transluminal renal angioplasty. Finally, management of the patient with hypertension associated with renal insufficiency or renal failure is discussed.

This first volume in a new series has touched upon many topics important to the nephrologist or cardiologist in managing patients with a variety of hypertensive disorders, particularly when associated with renal artery stenosis or with renal parenchymal disease.

MILD HYPERTENSION: FROM DRUG TRIALS TO PRACTICE

Edited by Thomas Strasser and Detlev Ganten Raven Press

Twenty years of clinical trial results dealing with the management of mild hypertension have still left important issues unresolved. In this volume, which presents the proceedings of a December 1985 conference held in Konigstein, West Germany, the authors address a number of questions arising from these controversies. An outstanding group of authors analyzes published clinical trials in relation to these and other issues: levels of blood pressure that warrant pharmacologic therapy; risk v benefit of pharmacotherapy in patients with mild hypertension; importance of modification of lifestyle, including such cardiovascular risk factors as smoking and hy-

percholesterolemia and, in particular, whether mild hypertension can be managed effectively with nonpharmacologic therapy.

A major portion of the book is devoted to discussion of the mechanisms of hypertension and pharmacologic v nonpharmacologic methods of controlling mild hypertension. The role of salt sensitivity in hypertension, as well as that of alcohol and exercise on hypertension control, is discussed in detail. The place for newer classes of agents, including angiotensin-converting-enzyme inhibitors and calcium antagonists in mild hypertension, is reviewed. Also discussed is a subject of critical importance—whether drug treatment can be stopped in the course of long-term hypertension treatment.

A section addresses issues dealing with hypertension during childhood and adolescence, including discussion of clinical characteristics that may enable identification of children at greater cardiovascular risk. The role of biologic maturation and effects of early increases in body weight on the risk of hypertension early in life are discussed.

Finally, guidelines for the treatment of mild hypertension, based on the scientific evidence given in this volume, are offered. The importance of a thorough, initial clinical evaluation, as well as periodic tracking of blood pressure, is stressed. Consensus recommendations include nonpharmacologic therapy for patients with mild, uncomplicated hypertension and diastolic blood pressures less than 95 mmHg. While these recommendations are not universally accepted, they represent a reasonable approach based on interpretation of the clinical trial data presented.