CARDIOVASCULAR ENDOCRINOLOGY

In the last two to three decades, cardiovascular disease and diabetes have emerged as a major public health problem. This is partly related to the epidemic of obesity, which plays a major role in the pathogenesis of both diabetes and cardiovascular disease. In addition, several other hormones and cytokines have been shown to play an important role in the regulation of the vascular system. This increase in the clinical problems of cardiovascular disease in a large segment of the population has brought together the two disciplines of vascular biology and endocrinology. This book highlights the many common pathophysiological processes involved in this epidemic and the common clinical manifestations that result from them.

The book has several important contributions from distinguished workers in the field. Derek Leroith begins with a novel view of the hormonal regulation of the vascular system, starting, not surprisingly, with pituitary and hypothalamic factors that may impact vascular disease.

The problems of diabetes and cardiovascular disease are extensively covered in a number of chapters, including a review of the epidemiology of the problem by James Meigs, and the important disruption of the nitric oxide signaling system, as well as the role of fatty acids and cytokines in the development of this problem, which are discussed by Bobby Nossaman and Gunther Boden, respectively.

Management of the problem of cardiovascular disease and diabetes in relation to screening of patients using modern cardiovascular techniques is discussed by Paolo Raggi, followed by discussions of the role of insulin (Dandona) and insulin sensitizers (Thethi), and their potential for impacting cardiovascular health.

Endocrine hypertension has long been recognized as an important contributor to cardiovascular morbidity, and the renin-angiotensin system plays a key role in not only endocrine-mediated hypertension, but hypertension in general. This system and its impact on cardiovascular events is discussed by Jim Sowers and followed by a discussion on microalbuminuria and chronic kidney disease by George Bakris.

Adiponectin has emerged as a natural endogenous vascular protective and anti-inflammatory substance of considerable importance in the context of cardiovascular endocrinology, and is reviewed by Mandeep Bajaj. Another important peptide hormone that affects vascular function is the group of natriuretic peptides, reviewed by Kailash Pandey.

Finally, the interaction of sexual dysfunction and cardiovascular disease has attracted much attention, and the overlap of these conditions and therapeutic approaches to overcome them are reviewed by Glen Matfin. Closely related is the effect of testosterone, often neglected as a player in vascular function and reviewed by Alan Seftel.

This textbook of cardiovascular endocrinology comes back full circle to the role of insulin-like growth factors and cardiovascular disease with the final contribution by Patrice Delafontaine.

Finally, I would like to dedicate this book to our many patients who have participated in clinical research to improve our understanding of their disease process. More importantly I wish to dedicate it to the people of New Orleans and wish that city a speedy recovery.
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