ADVANCES IN NEPHROLOGY

VOLUME 10

ADVANCES IN NEPHROLOGY

From the Necker Hospital

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Preface

With the publication of this issue, Advances in Nephrology will have passed its first decade of publication. The continuous substantial increase in readership attests to the value of these symposia for nephrologists, medical libraries and others interested in nephrology. Nephrology, of course, has expanded to include not only clinical and experimental kidney disease, fluids and electrolytes and renal physiology, but also hypertension, immunology, dialysis, transplantation, bone disease and other specialized areas of medical science.

The multiplicity of these interrelated disciplines prevents any single volume of Advances in Nephrology from being a comprehensive yearly update, nor indeed is that our aim. Rather, as stated previously, the editors choose topics or areas in which new concepts have emerged from recent research or that for various reasons have assumed greater importance in nephrology. These subjects are usually treated in depth, either by inviting several contributors to deal with specific aspects or requesting a single contributor to write a complete review. In addition, various topics of current interest are included as individual articles. This yearly publication thus can rapidly pull together and synthesize studies from scientific journals and can anticipate what will appear in textbooks several years later.

The present volume includes a symposium on various aspects of hypertension, descriptions of two new renal disorders (cholesterol acyltransferase deficiency and nephropathy associated with antibodies to tubular basement membrane), review articles on acute renal failure and endocrine disorders in hemodialysis patients, exciting basic research on isolated glomeruli, and other articles of clinical interest.

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Essential hypertension cannot be fully understood or prevented until its genetic components are elucidated. Three articles deal with this exciting aspect. Professor Svendsen (Copenhagen) presents evidence that both experimental and human hypertension may result in immunologic changes and, conversely, that some forms of hypertension are caused by immunologic mechanisms. Professor Yamori et al. (Izumo, Japan) review 15 strains of genetically hypertensive animals and analyze the genetic and environmental factors contributing to the hypertension. An interesting observation is the possible importance of dietary protein. Garay (Paris) and his collaborators review and amplify their recent finding of abnormal transmembrane sodium and potassium transport that occurs in essential but not in secondary hypertension. Other aspects of hypertension included in the symposium are prostaglandins (Professor Szczeklik, Cracow), antidiuretic hormone (Möhring et al., Strasbourg and Bonn), renal blood flow (Hollenberg, Boston) and angiotensin-converting enzyme inhibitors (Waeber et al., Lausanne and Boston).

Infantile cystinosis need no longer be a uniformly fatal disorder. Professor Broyer et al. (Paris) describe the clinical and pathologic features of 35 cases, including experiences with dialysis and renal transplantation. Cholesterol acyltransferase (LCAT) deficiency, a new metabolic disease with renal involvement, should be suspected in patients with rapidly progressive renal insufficiency, diffuse corneal opacities, proteinuria and lipemic plasma. Twenty-one patients from ten families with familial LCAT deficiency are described by Professor Gjone (Oslo). Rakotoarivony et al. (Toulouse) present an experimental model as well as case histories of 10 patients with renal disease and circulating anti-tubular basement membrane antibodies.

Also included in this volume of Advances in Nephrology are up-to-date, scholarly reviews of acute renal failure (Schrier et al., Denver) and endocrinopathies in chronic hemodialysis patients (Drueke, Paris).

Two articles treat various aspects of glomerular tissue culture studies (Foidart et al., Liege) and glomerular receptor sites and binding properties (Sraer et al., Paris). Lymphocytes from patients with the nephrotic syndrome contain a mediator, VPF, which enhances vascular permeability and may participate in glomerular localization of immune complexes and the alteration of the filtration barrier (Sobel et al., Paris).

Professor Carpenter (Boston) emphasizes the importance of the HLA-D region in man, analagous to the mouse H-2 locus, in anti-GBM and membranous nephritis. R. Y. Calne (Cambridge, England) analyzes animal and human studies with a new immunosuppressive agent, Cyclosporin-A (CYA), which appears to act at an early stage in the differentiation of T-cells. CYA proved to be the most effective immunosuppressive agent yet used in patients receiving cadaveric renal transplants.

The Advances in Nephrology series also serves to span the Atlantic and Pacific oceans in presenting the most valuable contributions to various topical areas in this specialty—a task this volume fulfills eminently.

MORTON H. MAXWELL, M. D.