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Schrier's Diseases of Kidney

VOLUME

NINTH EDITION

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# SCHRIER'S DISEASES OF THE KIDNEY

NINTH EDITION

**VOLUME II** 

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# SCHRIER'S DISEASES OF THE KIDNEY

NINTH EDITION

To our families for their support.

The recent advances in many aspects of kidney diseases have mandated a new edition of *Schrier's Diseases of the Kidney*. As in previous editions, a group of international experts was assembled to present this information in a comprehensive, authoritative, concise, and readily accessible fashion. The chapters have been extensively revised and updated.

Nephrology is a discipline that combines the basic and clinical sciences. Successful integration of this knowledge is the goal of this Ninth Edition. The 11 sections of the two-volume book are actually individual texts that can stand on their own.

The first section presents an overall view of the structural, physiologic, and biochemical aspects of the kidney. This section incorporates the latest developments in cellular and molecular biology, emphasizing the most current information and concepts on cell signaling, receptors, and ion channels. The subsequent 10 sections are disease oriented, with each section beginning with a pathophysiology chapter. The goal of *Schrier's Diseases of the Kidney* is to publish the most comprehensive material for practicing and academic physicians caring for patients with kidney disease and hypertension. The 11 sections of the book cover 86 chapters and are summarized as follows:

- Structural and Functional Correlations in the Kidney includes structural, hemodynamic, hormonal, ion transport, and metabolic functions in eight chapters.
- II Clinical Evaluation is covered in five chapters on urinalysis, laboratory evaluation, urography, tomography, angiography, with indications and interpretations for renal biopsy.
- III Cystic and Tubular Disorders in seven chapters covers genetic mechanisms, medullary cystic and sponge disorders, polycystic kidney disease, Alport syndrome, Fabry disease, and nail-patella syndrome, as well as isolated renal tubular disorders.
- IV Infections of the Urinary Tract and the Kidney are contained in seven chapters, including host-defense mechanisms; urinary bacterial infections, including tuberculosis as well as fungal infections; renal abscesses; and cystitis.

- V Acute Kidney Injury is described in 11 chapters, including the pathophysiology of renal cell ischemia and nephrotoxic injury, acute tubular necrosis, acute interstitial nephritis, and acute nephrotoxic renal disease.
- VI Hypertension and its renal manifestations are covered in six chapters, which include pathophysiology, renal vascular, and endocrine-related hypertension as well as hypertension in pregnancy and in diabetes.
- VII Glomerular, Interstitial, and Vascular Renal
  Diseases are discussed in 13 chapters, including
  collagen vascular diseases, chronic interstitial nephritis,
  primary glomerulonephritides, and vasculitides.
- VIII Systemic Diseases of the Kidney are covered in eight chapters, including diabetes, hepatorenal syndrome, sickle cell disease, gout, myeloma/amyloidosis, and tropical diseases.
- IX Disorders of Electrolyte, Water, and Acid Base are covered in nine chapters, including syndrome of inappropriate antidiuretic hormone secretion, central and nephrogenic diabetes insipidus, cardiac failure, cirrhosis, and the nephrotic syndrome.
- X Chronic Kidney Disease, a section of six chapters, covers pathophysiology, anemia, osteodystrophy, the nervous system, cardiovascular complications, and metabolic and endocrine dysfunctions.
- XI Management of End-Stage Renal Disease by transplantation, peritoneal dialysis and hemodialysis, including complications, outcomes, and ethical considerations, is discussed in six chapters.

As editors, we have substantial expertise in most of these areas of nephrology and are very pleased with the content of the Ninth Edition. Out of 86 chapters, 44 have new authors. We would like to thank our authoritative and remarkably talented contributing authors, whose dedication to nephrology is unmatched.

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