

Contents

List of Contributors ix

Preface xi

Section 1 Normal and Abnormal Human Kidney Development

- 1 **Normal Human Kidney Development and Congenital Anomalies of the Kidneys and Urinary Tract** 1
Paul J. D. Winyard, Raffaele Napolitano, and Neil J. Sebire
- 2 **Distribution of Pediatric Renal Biopsy Diagnoses in a Large Single Center and Rare Pediatric Cases** 17
Alejandro Best Rocha

Section 2 Glomerular Diseases

- 3 **Idiopathic and Hereditary Proteinuric Glomerular Diseases** 27
Danica Galešić Ljubanović and Parker Wilson
- 4 **Haematuric Glomerular Diseases (Collagenopathies)** 56
Catherine Horsfield and Helen Liapis
- 5 **Immune Complex Mediated Glomerular Diseases** 87
Pablo Cannata
- 6 **Inherited Metabolic Diseases Affecting the Kidney** 121
Sabine Leh and Surya V. Seshan
- 7 **Glomerular Diseases with Fibrillary Deposits** 159
Nattawat Klomjit, Ladan Zand, and Mariam Priya Alexander
- 8 **Mitochondrial Diseases in the Pediatric Kidney** 171
Alessia Buglioni and Mariam Priya Alexander

Section 3 Tubulointerstitial Diseases

- 9 **Hereditary and Acquired Tubulointerstitial Diseases** 181
Amélie Dendooven and Elena Levchenko
- 10 **Tubulointerstitial Diseases with Crystal and Pigment Deposits** 197
Joris J. Roelofs and Tri Q. Nguyen

Section 4 Vascular Diseases

- 11 **Small Vessel Vasculitis and Selected Pediatric Vascular Diseases** 213
Thorsten Wiech, Silke R. Brix, and Peter F. Zipfel

Section 5 Infectious Diseases

- 12 **Infections Involving the Kidney Directly** 231
Marjan Afrouzian and Stanley de Almeida Araujo

Section 6 Cystic Diseases

- 13 **Autosomal Dominant Polycystic Kidney Disease and Autosomal Recessive Polycystic Kidney Disease** 255
Carrie L. Phillips, Bharathi V. Reddy, and Stephen M. Bonsib
- 14 **Tuberous Sclerosis Complex** 272
Christie L. Boils
- 15 **Glomerulocystic Kidney (GCK) and GCK Disease (GCKD)** 283
Helen Liapis

Contents

- 16 **Nephronophthisis Complex** 290
Kerstin Amann

Section 7 Solid Tumors of the Kidney

- 17 **Solid Kidney Tumors** 299
Maureen J. O'Sullivan and John P. O'Neill

Section 8 Transplant Pathology of the Kidney

- 18 **Transplant Pathology** 341
Agnieszka Perkowska-Ptasinska

Index 367