

Table of contents

Contributors

Foreword

Preface

Acknowledgments

Abbreviations

Section I: Renal Anatomy

1. Normal Development and Congenital Anomalies, *Paul G. Schmitz*

2. Gross and Microscopic Anatomy with Functional Correlations, *Paul G. Schmitz and Bahar Bastani*

Section II: Renal Physiology

3. Body Fluid Composition and Fluid Administration, *Paul G. Schmitz*

4. Glomerular Hemodynamics, *Paul G. Schmitz*

5. Principles of Renal Clearance, *Paul G. Schmitz*

6. Transport of Electrolytes and Water in the Proximal Tubule, *Paul G. Schmitz*

7. Transport of Electrolytes and Water in the Loop of Henle, *Paul G. Schmitz*

8. Transport of Electrolytes and Water in the Distal Tubule, *Paul G. Schmitz*

9. Renal Endocrinology, *Paul G. Schmitz and Kevin J. Martin*

Section III: Electrolyte Disorders

10. Water Disorders, *Paul G. Schmitz*

11. Potassium Disorders, *Paul G. Schmitz*

12. Edema and Diuretic Use, *Paul G. Schmitz*

Section IV: Acid-Base

13. Acid-Base Physiology, *Paul G. Schmitz and Bahar Bastani*

14. Acid-Base Disorders, *Paul G. Schmitz and Bahar Bastani*

Section V: Kidney Disease

15. Approach to the Patient with Kidney and Urinary Tract Disease, *Paul G. Schmitz*

16. Glomerular Disease, *Paul G. Schmitz*

17. Tubulointerstitial Disease, *Paul G. Schmitz*

Section VI: Renal Failure

18. Acute Kidney Injury, *Paul G. Schmitz*

19. Chronic Kidney Disease, *Paul G. Schmitz, Kevin J. Martin, and Bahar Bastani*

Section VII: Miscellaneous Disorders

20. Hypertension, *Paul G. Schmitz*

21. Urologic Disorders, *Paul G. Schmitz*

Answers to Questions

Index