

152134

17th edition

# SMITH'S GENERAL UROLOGY

Emil A. Tanagho • Jack W. McAninch

Mc  
Graw  
Hill

**LANGE**

# Contents

Authors .....	vii
Preface .....	xi
<b>1. Anatomy of the Genitourinary Tract</b> .....	<b>1</b>
<i>Emil A. Tanagho, MD</i>	
<b>2. Embryology of the Genitourinary System</b> .....	<b>17</b>
<i>Emil A. Tanagho, MD, &amp; Hiep T. Nguyen, MD</i>	
<b>3. Symptoms of Disorders of the Genitourinary Tract</b> .....	<b>30</b>
<i>Jack W. McAninch, MD, FACS</i>	
<b>4. Physical Examination of the Genitourinary Tract</b> .....	<b>39</b>
<i>Maxwell V. Meng, MD, &amp; Emil A. Tanagho, MD</i>	
<b>5. Urologic Laboratory Examination</b> .....	<b>46</b>
<i>Karl J. Kreder, Jr, MD, &amp; Richard D. Williams, MD</i>	
<b>6. Radiology of the Urinary Tract</b> .....	<b>58</b>
<i>Scott R. Gerst, MD, &amp; Hedvig Hricak, MD, PhD</i>	
<b>7. Vascular Interventional Radiology</b> .....	<b>105</b>
<i>Roy L. Gordon, MD</i>	
<b>8. Percutaneous Endourology &amp; Ureterorenoscopy</b> .....	<b>114</b>
<i>Joachim W. Thüroff, MD, &amp; Rolf Gillitzer, MD</i>	
<b>9. Laparoscopic Surgery</b> .....	<b>135</b>
<i>J. Stuart Wolf, Jr, MD, FACS, &amp; Marshall L. Stoller, MD</i>	
<b>10. Retrograde Instrumentation of the Urinary Tract</b> .....	<b>155</b>
<i>Marshall L. Stoller, MD</i>	
<b>11. Urinary Obstruction &amp; Stasis</b> .....	<b>166</b>
<i>Emil A. Tanagho, MD</i>	
<b>12. Vesicoureteral Reflux</b> .....	<b>179</b>
<i>Emil A. Tanagho, MD, &amp; Hiep T. Nguyen, MD</i>	
<b>13. Bacterial Infections of the Genitourinary Tract</b> .....	<b>193</b>
<i>Hiep T. Nguyen, MD</i>	
<b>14. Specific Infections of the Genitourinary Tract</b> .....	<b>219</b>
<i>Emil A. Tanagho, MD, &amp; Christopher J. Kane, MD</i>	
<b>15. Sexually Transmitted Diseases</b> .....	<b>235</b>
<i>John N. Krieger, MD</i>	
<b>16. Urinary Stone Disease</b> .....	<b>246</b>
<i>Marshall L. Stoller, MD</i>	

<b>17. Injuries to the Genitourinary Tract</b> .....	278
<i>Jack W. McAninch, MD, FACS</i>	
<b>18. Immunology &amp; Immunotherapy of Urologic Cancers</b> .....	297
<i>Eric J. Small, MD</i>	
<b>19. Chemotherapy of Urologic Tumors</b> .....	302
<i>Eric J. Small, MD</i>	
<b>20. Urothelial Carcinoma: Cancers of the Bladder, Ureter, &amp; Renal Pelvis</b> .....	308
<i>Badrinath R. Konety, MD, MBA, &amp; Peter R. Carroll, MD</i>	
<b>21. Renal Parenchymal Neoplasms</b> .....	328
<i>Badrinath R. Konety, MD, &amp; Richard D. Williams, MD</i>	
<b>22. Neoplasms of the Prostate Gland</b> .....	348
<i>Joseph C. Presti, Jr, MD, Christopher J. Kane, MD, Katsuto Shinohara, MD, &amp; Peter R. Carroll, MD</i>	
<b>23. Genital Tumors</b> .....	375
<i>Joseph C. Presti, Jr, MD</i>	
<b>24. Urinary Diversion &amp; Bladder Substitution</b> .....	388
<i>Badrinath R. Konety, MD, MBA, Susan Barbour, RN, MS, WOCN, &amp; Peter R. Carroll, MD</i>	
<b>25. Radiotherapy of Urologic Tumors</b> .....	404
<i>Joycelyn L. Speight, MD, PhD, &amp; Mack Roach III, MD</i>	
<b>26. Neurophysiology &amp; Pharmacology of the Lower Urinary Tract</b> .....	426
<i>Karl-Erik Andersson, MD, PhD</i>	
<b>27. Neuropathic Bladder Disorders</b> .....	438
<i>Emil A. Tanagho, MD, Anthony J. Bella, MD, &amp; Tom F. Lue, MD</i>	
<b>28. Urodynamic Studies</b> .....	455
<i>Emil A. Tanagho, MD, &amp; Donna Y. Deng, MD</i>	
<b>29. Urinary Incontinence</b> .....	473
<i>Emil A. Tanagho, MD, Anthony J. Bella, MD, &amp; Tom F. Lue, MD</i>	
<b>30. Disorders of the Adrenal Glands</b> .....	490
<i>Christopher J. Kane, MD, FACS</i>	
<b>31. Disorders of the Kidneys</b> .....	506
<i>Jack W. McAninch, MD, FACS</i>	
<b>32. Diagnosis of Medical Renal Diseases</b> .....	521
<i>Flavio G. Vincenti, MD, &amp; William J.C. Amend, Jr., MD</i>	
<b>33. Oliguria; Acute Renal Failure</b> .....	531
<i>William J.C. Amend, Jr., MD, &amp; Flavio G. Vincenti, MD</i>	
<b>34. Chronic Renal Failure &amp; Dialysis</b> .....	535
<i>William J.C. Amend, Jr., MD, &amp; Flavio G. Vincenti, MD</i>	
<b>35. Renal Transplantation</b> .....	539
<i>Stuart M. Flechner, MD, FACS</i>	

<b>36. Disorders of the Ureter &amp; Ureteropelvic Junction</b> .....	559
<i>Barry A. Kogan, MD</i>	
<b>37. Disorders of the Bladder, Prostate, &amp; Seminal Vesicles</b> .....	574
<i>Emil A. Tanagho, MD</i>	
<b>38. Male Sexual Dysfunction</b> .....	589
<i>Anthony J. Bella, MD, &amp; Tom F. Lue, MD</i>	
<b>39. Female Urology &amp; Female Sexual Dysfunction</b> .....	611
<i>Donna Y. Deng, MD</i>	
<b>40. Disorders of the Penis &amp; Male Urethra</b> .....	625
<i>Jack W. McAninch, MD, FACS</i>	
<b>41. Disorders of the Female Urethra</b> .....	638
<i>Emil A. Tanagho, MD, William O. Brant, MD, &amp; Tom F. Lue, MD</i>	
<b>42. Skin Diseases of the External Genitalia</b> .....	645
<i>Timothy G. Berger, MD</i>	
<b>43. Abnormalities of Sexual Determination &amp; Differentiation</b> .....	649
<i>Laurence S. Baskin, MD</i>	
<b>44. Male Infertility</b> .....	684
<i>Paul J. Turek, MD</i>	
<b>45. The Aging Male</b> .....	717
<i>Paul J. Turek, MD</i>	
<b>Appendix: Normal Laboratory Values</b> .....	727
<i>Marcus A. Krupp, MD, FACP</i>	
Index .....	731