Section 1: An Overview of Kidney Stone Disease

1. Epidemiology Of Kidney Stones
2. Solution Chemistry And Crystallization
3. Biology And Clinical Relevance Of Urine Inhibitors
4. Characteristics Of Human Kidney Stones
5. Crystals In Human Kidneys And Formation Of Stones
6. Caox And Cap Crystal Interactions With Renal Cells
7. Animal Models Of Human Kidney Stones

Section 2: Mineral Metabolism and Stone Forming Diseases

8. Vitamin D Pth And Regulation Of Mineral Balance
9. Gastrointestinal And Renal Mineral Transport And Regulation
10. Renal Citrate Handling And Hypocitraturia
11. Urine Ph: Relationship To Integrative Physiology Of Calcium, Phoshate, And Magnesium, And Prevention Of Calcium Phosphate Precipitation
12. Acid Base Balance, Hypercalciuria And Bone
13. Idiopathic Hypercalciuria
14. Bone Histopathology And Disease In Hypercalciuria
15. Gi And Renal Oxalate Transporters
16. Idiopathic Calcium Stone Formers
17. Stones In Primary Hyperparathyroidism
18. Stones In Bowel Disease
19. Primary Hyperoxaluria
20. Renal Tubular Acidosis And Urolithiasis
21. Medullary Sponge Kidney And Human Monogenic Hypercalciurias
22. Cystinuria And Uncommon Organic Stones
23. Drug-Induced Stones
24. Uric Acid Stones: Epidemiology, Pathophysiology And Treatment
25. Pediatric Kidney Stone Disease
26. Chronic Kidney Disease And Stone Disease

Section 3: Surgical Management of Kidney Stones

27. Natural History Of Renal And Ureteral Calculi Including Propulsive Therapies
28. Stone Factors Affecting Treatment Choices (Anatomy, Composition, Etc.)
29. Preoperative Preparations For Stone Surgery
30. Radiological Imaging Of Nephrolithiasis: Emerging Technologies And Radiation Safety
31. Contemporary Outcomes For Shock Wave Lithotripsy, Ureteroscopy, And Percutaneous Nephrolithotomy
32. Shock Wave Lithotripsy In Management Of Stones
33. Ureteroscopy In The Management Of Stones

34. Percutaneous Nephrolithotomy In Management Of Stones: Present Role, Approaches, Outcomes And Complications
35. Special Considerations In Uteteroscopy
36. The Role Of Laparoscopy And Open Surgery
37. Surgical Management Of Stones In Children