CONTENTS

SECTION ONE: THE SCIENTIFIC BASIS OF PEDIATRIC SURGICAL ONCOLOGY

1. **Epidemiology of Childhood Tumors** 3
   Chantal Rodary, Robert Carachi, Devendra K Gupta
2. **Genetics and Molecular Biology of Pediatric Tumors** 10
   Hidetaka Niizuma, Akira Nakagawara
3. **Fine Needle Aspiration Cytology of Pediatric Tumors** 23
   Venkateswaran K Iyer
4. **Pathology of Renal Tumors and the Indian Scenario** 32
   Kiran Mishra
5. **Tumor Markers** 39
   Vinod Kochupillai, Sudeep Gupta
6. **Surgical Principles of Management of Common Pediatric Solid Tumors** 48
   Devendra K Gupta, Shilpa Sharma
7. **Infections in Pediatric Oncology Patients** 58
   TD Chugh
8. **Fungal Infections in Hematological Malignancies** 62
   Lalit Kumar, R Jagarlamudi, V Kochupillai, Subhash C Gulati
9. **Nutritional Support for Children with Cancer** 68
   Tulika Seth
10. **PET and PET-CT in Pediatric Oncology** 74
    Rakesh Kumar, A Malhotra

SECTION TWO: THE CLINICAL BASIS OF PEDIATRIC SURGICAL ONCOLOGY

11. **Neonatal Tumors** 85
    Devendra K Gupta, Shilpa Sharma, Robert Carachi
12. **Pediatric Renal Tumors** 100
    Winfried Rebhandl, Franz Xaven Felberbauer, Ernst Horcher
13. **Wilms' Tumor in South Africa** 121
    GP Hadley
14. **Bilateral Wilms' Tumors** 128
    Devendra K Gupta, Shilpa Sharma
15. **Management of Wilms' Tumor with Intracaval Thrombus** 137
    Robert Carachi, Devendra K Gupta
16. **Neuroblastoma** 143
    Yoshiaki Tsuchida, Hitoshi Ikeda, Shin Itsu Hatakeyama
17. **Recent Advances in Neuroblastoma** 159
    Devendra K Gupta, Shilpa Sharma

18. **Stage IV-S Neuroblastoma** 174
Shilpa Sharma, Devendra K Gupta
19. **Intraoperative Radiation Therapy in Advanced Neuroblastoma** 180
Tatsuo Kuroda
20. **Micrometastasis and the Treatment of Neuroblastoma** 185
Tatsuo Kuroda
21. **Benign Liver Tumors** 191
Sani Molagool, Bhaskar Rao, Chan Hon Chui, Kenneth W Gow
22. **Malignant Liver Tumors in Children and Adolescents** 200
Kenneth W Gow, Chan Hon Chui, Sani Molagool, Bhaskar Rao
23. **Hepatocellular Carcinoma** 227
Piotr Czauderna
24. **Tumors of the Adrenal Gland (Other than Neuroblastoma)** 235
Chan Hon Chui, Bhaskar Rao, Sani Molagool, Kenneth W Gow
25. **Rhabdomyosarcoma in Children** 245
Sandeep Agarwala, Devendra K Gupta
26. **Non-rhabdomyosarcoma Soft Tissue Sarcomas in Children** 262
Sandeep Agarwala, Devendra K Gupta
27. **Germ Cell Tumors** 271
Hitoshi Ikeda, Yoshiaki Tsuchida
28. **Testicular Tumors** 287
Andrew Pinter
29. **Ovarian Tumors** 299
Jaun A Tovar
30. **Granulosa Cell Tumor of the Ovary** 308
Devendra K Gupta, Shilpa Sharma

SECTION THREE: THE CLINICAL BASIS OF PEDIATRIC MEDICAL ONCOLOGY

31. **Leukemia** 317
LS Arya, Sunil Narain
32. **Lymphoma** 324
Sameer Bakhshi
33. **Histiocytosis** 330
Tulika Seth

SECTION FOUR: PEDIATRIC TUMORS AND THE SUBSPECIALITIES

34. **Head and Neck Tumors** 341
RK Minkes, MA Skinner
35. **Mediastinal Masses** 354
Spencer W Beasley

36. Tumors in Intersex Disorders 364
Devendra K Gupta, Akshay Pratap
37. Therapeutic Advances in Pediatric Malignant Bone Tumors 368
Gauri Kapoor
38. Cranial Tumors in Children 375
VS Mehta, PS Chandra
39. Retinoblastoma 400
Supriyo Ghosh, Sanjeev Nainiwal, Mridula Mehta

SECTION FIVE: ENDOCRINE TUMORS AND RARE PEDIATRIC SURGICAL TUMORS

40. Parotid Masses in Children 409
VT Joseph
41. Thyroid Tumors in Children 419
RK Minkes, MA Skinner
42. Pancreatic Tumors in Childhood 427
Devendra K Gupta, Shilpa Sharma
43. Solid Pseudopapillary Tumor of the Pancreas 437
Seung Hoon Choi
44. Fibromatosis 444
Devendra K Gupta, Shilpa Sharma, M Ragavan
45. Gastric Teratoma 451
Devendra K Gupta, M Ragavan
46. Mesenchymal Hamartoma of the Liver 454
Devendra K Gupta, M Ragavan
47. Colorectal Carcinoma in Children 457
Devendra K Gupta, Shilpa Sharma, Gautam Agarwal
48. Rare Pediatric Tumors 463
Devendra K Gupta, M Ragavan
49. Pseudotumors 472
Shilpa Sharma, Devendra K Gupta

SECTION SIX: THERAPEUTIC STRATEGIES IN PEDIATRIC SURGICAL ONCOLOGY

50. Chemotherapy for Pediatric Tumors 481
YK Gupta, KH Reeta, S Briyal, V Gupta
51. Radiotherapy in Pediatric Malignancies 503
GK Rath, Partha Mukhopadhyay, Kalinga K Naik, PK Julka
52. Bone Marrow Transplantation in Childhood Diseases 530
Lalit Kumar, K Ganessan
53. Liver Transplantation for Liver Tumors 543
Mark D Stringer

54. Pediatric Renal Transplantation 557
Sandeep Guleria, Arvind Bagga
55. Surgical Management of Metastasis 566
Amulya K Saxena
56. Laparoscopy in Pediatric Malignancies 572
Amulya K Saxena
57. Psychosocial Aspects of Pediatric Oncology: An Integrated Approach to Management 580
Madhu Bhardwaj, Savita Sapra, Deepika Gupta
58. Role of Biological Therapy for Pediatric Tumors 589
Bharat Aggarwal
59. Relief of Pain in Pediatric Cancer Patients 594
Chittaranjan Joshi, MK Arora
60. Use of Biological Agents in Supportive Care 603
Bharat Aggarwal
61. Acute Crisis Management in Pediatric Oncology 606
Shilpa Sharma, Devendra K Gupta

SECTION SEVEN: LONG-TERM RESULTS IN PEDIATRIC SURGICAL ONCOLOGY

62. Long-term Follow-up of Wilms' Tumor 627
SM Kim, SH Choi
63. Late Effects in Childhood Cancer Survivors: Current Scenario and Future Challenges 634
PA Kurkure, B Arora
64. Late Affects of Treatment of Childhood Cancer 644
HA Heij, C ven den Bos, HJH ven der Pal

Appendix I: Chemotherapy Protocols 657

Appendix II: Normograms 664

Appendix III: Support Group for Children with Cancer 666

Index 669