CONTENTS

Section 1: Introduction

Section Editor: KM Prasanna Kumar

1. **Childhood Diabetes** 3
   Ashok K Jhingan
2. **Epidemiology of Childhood Diabetes** 8
   Subhankar Chowdhury, Sujoy Ghosh
3. **Monogenic Diabetes: Perspectives and Clinical Implications from Pediatric to Adult Endocrinology** 21
   BV Reshma, Kavitha Muniraj, KM Chandrika, S Geetha Rao, L Reddy, Usha Rangaraj, Vasanthi Nath, Neera Gupta, Ranjini Sen, Mudita Dhingra, Sanjay Kalra, Ashok K Das, SS Srikanta; The Diabetes Collaborative Study Group
4. **Growth and Development in Children with Type 1 Diabetes Mellitus** 31
   Raghupathy Palany, Abraham Paulose

Section 2: Clinical and Laboratory Approach

Section Editor: Raghupathy Palany

5. **Clinical Examination of Type 1 Diabetes Mellitus** 41
   Rishi Shukla
6. **Initial and Annual Laboratory Investigations** 48
   Bipin K Sethi, V Sri Nagesh, Jayant V Kelwade, Harsh Y Parekh
7. **Glycemic Monitoring in Children** 53
   Meha Sharma, Deep Dutta, Sanjay Kalra
8. **Childhood Diabetes: Common Pitfalls in Diagnosis and Management** 59
   Sweety Agrawal, Nikhil Tandon

Section 3: Nonpharmacological Management

Section Editor: PV Rao

9. **Medical Nutrition Therapy in Children with Type 1 Diabetes Mellitus** 67
   Anjana Hulse, KM Prasanna Kumar

10. **Exercise in Children and Adolescents with Type 1 Diabetes Mellitus** 76
Rajesh R Joshi

11. **Diabetes Education** 82
Archana S Sarda

12. **Biopsychosocial Dimensions in Diabetes: A Brief Outline** 94
Sangeeta Das

Section 4: Pharmacological Management

Section Editor: Subhankar Chowdhury

13. **Insulin Therapy** 105
Ashok K Das

14. **Noninsulin Therapy** 123
Sanjay Kalra, Manash P Baruah

15. **Continuous Glucose Monitoring System and Insulin Pump** 131
Sunil M Jain

16. **Pancreas and Islet Cell Transplant in Children** 148
Sujoy Ghosh

Section 5: Acute Complications

Section Editor: Nalini Shah

17. **Diabetic Ketoacidosis in Children** 159
Alok Kanungo

18. **Management of Diabetes in Hospitalized Children** 172
PV Rao, Daruru Ranganath

19. **Surgery in a Child with Diabetes** 177
Sneha M Kothari, Manoj D Chadha

20. **Hypoglycemia** 191
Kranti S Khadilkar, Shivane Vyankatesh, Lila Anurag, Bandgar Tushar, Nalini Shah

Section 6: Chronic Complications

Section Editor: Vaman Khadilkar

21. **Lipid Disorders in Type 1 Diabetes Mellitus** 201
Bipin K Sethi, V Sri Nagesh

22. **Hypertension** 207
Sanjay Kalra, Mudita Dhingra, Rakesh Sahay

23. **Microvascular Complications** 215
Vijay Viswanathan

24. **Future Metabolic Risk among Subjects with Type 1 Diabetes Mellitus** 222
SK Hammadur Rahaman, Mohd Ashraf Ganie

Section 7: Special Situations

Section Editor: Nikhil Tandon

25. **Sick Day Management** 231
Banshi D Saboo

26. **Managing Diabetes in Neonates and Toddlers** 238
Aashima Dabas, Rajesh Khadgawat

27. **Psychiatric Management** 249
Yatan PS Balhara, Sathya Prakash

Section 8: Miscellaneous

Section Editor: Rakesh Sahay

28. **Diabetes Education Material** 263
Archana S Sarda, Shuchy Chugh

29. **Genetics of Type 1 Diabetes Mellitus** 280
Mudita Dhingra, J Jayannan, Ashok K Das, Sanjay Kalra

30. **Type 2 Diabetes Mellitus in Children** 288
Jabbar Khadar, Abilash Nair

31. **Type 1 Diabetes Mellitus: A Perspective from Guidelines** 299
Sanjay Kalra, Yashdeep Gupta

Appendix 309

Index *313*