Contents

Contributors *ix*
Foreword *xi*
Preface *xiii*

1. **The History of Insulin Therapy** **1**
Shama Mahendru, Ambrish Mithal

2. **Physiology of Insulin Secretion and Action** **8**
Monashis Sahu

3. **Insulin Types and Pharmacokinetics** **16**
Ganesh Jevalikar, Suchitra Behl

4. **Insulin Analogs** **26**
Jasjeet S Wasir

5. **Advances in Insulin Delivery Devices** **39**
Ramchandra Naik, Arundhati Dasgupta

6. **Insulin Therapy in Type 1 Diabetes** **52**
Ganesh Jevalikar

7. **Initiation and Intensification of Insulin Therapy in Type 2 Diabetes** **68**
Sunil K Mishra, Ambrish Mithal

8. **Insulin Therapy for Diabetic Ketoacidosis and Hyperosmolar Hyperglycemic State** **82**
Gagan Priya

9. **Insulin Therapy in Hospitalized Patients** **103**
Beena Bansal, Ambrish Mithal

10. **Insulin Therapy in Special Situations** **112**
Pankaj Shah, Julie Probach, Tricia Veglahn

11. **Adverse Effects of Insulin Treatment** **129**
Vaishali S Naik, Ambrish Mithal, Ganesh Jevalikar

***Appendix 1*: Storage of Insulin** **143**
Shubhda Bhanot

***Appendix 2*: Insulin Injection Sites** **145**
Shubhda Bhanot, Ganesh Jevalikar

***Appendix 3*: Injection Technique, Needle Reuse, and Needle Disposal** **147**
Shubhda Bhanot

***Appendix 4*: Guidelines on Safe Use of Insulin in Hospital** **155**
Beena Bansal

***Appendix 5*: Peri-operative and Peri-procedure Orders for Type 2 Diabetes Patients Undergoing Surgery Under GA (e.g., Coronary Artery Bypass Grafting)** **157**
Beena Bansal

***Appendix 6*: Peri-operative and Peri-procedure Orders for Type 2 Diabetes for Procedures Under Regional Anesthesia When NPO for Less than Half Day** **159**
Beena Bansal, Ganesh Jevalikar

***Appendix 7*: Glucose Monitoring Chart for Patients on Subcutaneous Insulin** **160**
Beena Bansal

Index *163*