

Table of Contents

- Foreword Richard A. Jonas p. iii
- Preface p. v
- Contributors p. ix
- 1. Extracorporeal Membrane Oxygenation for Children with Cardiac Disease Brian W. Duncan p. 1
- 2. Centrifugal Pump Ventricular Assist Device in Pediatric Cardiac Surgery Tom R. Karl and Stephen B. Horton p. 21
- 3. Intra-Aortic Balloon Counterpulsation for Children with Cardiac Disease John A. Hawkins and L. LuAnn Minich p. 49
- 4. Extracorporeal Membrane Oxygenation Versus Ventricular Assist Device Support for Children with Cardiac Disease Brian W. Duncan p. 61
- 5. Intensive Care Management of Cardiac Patients on Extracorporeal Membrane Oxygenation David L. Wessel and Melvin C. Almodovar and Peter C. Laussen p. 75
- 6. Nursing Management for Children with Cardiac Disease on Mechanical Circulatory Support Paula J. Moynihan and Dorothy M. Beke and Kim Reiser and Patricia A. Hickey p. 113
- 7. Management of the Extracorporeal Membrane Oxygenator Circuit for Children with Cardiac Disease Lynne K. Bower p. 139
- 8. Management of the Ventricular Assist Device Circuit for Pediatric Cardiac Patients David M. Farrell and Robert A. LaPierre and Robert J. Howe and Gregory S. Matte p. 159
- 9. Use of Rapid Deployment Extracorporeal Membrane Oxygenation for the Resuscitation of Children with Cardiac Disease after Cardiac Arrest Brian W. Duncan p. 169
- 10. The Use of Mechanical Circulatory Support in the Treatment of Myocarditis and Cardiomyopathy Desmond Bohn p. 183
- 11. Long-Term Follow-Up of Children with Cardiac Disease Requiring Mechanical Circulatory Support Andra E. Ibrahim and Brian W. Duncan p. 205
- 12. The Use of Mechanical Circulatory Support in Pediatric Cardiac Transplantation Emile A. Bacha and Patricia O'Brien and Leslie Smoot and Pedro J. del Nido p. 221
- 13. The Use of Extracorporeal Membrane Oxygenation for Cardiac Support in Children with Noncardiac Disease Caroline Killick and Allan Goldman p. 233
- 14. The Use of Extracorporeal Membrane Oxygenation for Perioperative Support in Pediatric Lung Transplantation Patients Jill E. Ibrahim and Eric N. Mendeloff and Charles B. Huddleston p. 243
- 15. The Use of the HeartMate Left Ventricular Assist Device in Children David N. Helman and Mehmet C. Oz and Mark E. Galantowicz p. 259
- 16. Clinical Applications in Children of the Medos Ventricular Assist Device Wolfgang F. Konertz p. 269
- 17. The Use of the Berlin Heart in Children Vladimir Alexi-Meskishvili and Roland Hetzer and Yuguo Weng and Brigitte Stiller and Matthias Loebe and Evgenij Potapov p. 287
- 18. Experimental Development of the Medos-HIA Ventricular Assist Device in Children Dominique Shum-Tim p. 315

- 19. Development of the Nimbus/University of Pittsburgh Pediatric Rotary Blood Pump Harvey S. Borovetz and Mahendar Macha and Marina V. Kameneva and Bartley P. Griffith and Philip Litwak and Kenneth C. Butler and Timothy R. Maher and Lynn P. Taylor and Douglas C. Thomas p. 335
- 20. Myocardial Remodeling and Thyroid Regulation in the Developing Heart During Mechanical Circulatory Support Michael A. Portman p. 349
- Index p. 361