## Contents

**Foreword by N.A. Mark Estes III** xi  
**Foreword by Rosemary S. Bubien** xiii  
**Preface** xv  
**Contributors** xvii

### Section 1 Basics of Cardiac Anatomy and Electrophysiology

1.1. Cardiac Anatomy, Physiology, Electrophysiology, and Pharmacology  
*Linda K. Ottoboni, Aimee Lee, and Paul Zei*  
5

1.2. Diagnostic Testing for the Arrhythmia Patient  
*Angela Tsiperfal, Paul J. Wang, and Amin Al-Ahmad*  
25

### Section 2 Supraventricular Tachycardia: Diagnosis and Management

2.1. AVNRT, AVRT, and Atrial Tachycardia: Diagnosis and Treatment  
*Traci Buescher and Samuel J. Asirvatham*  
41

2.2. Atrial Fibrillation and Flutter: Diagnosis and Treatment  
*Salwa Beheiry, Amin Al-Ahmad, and Andrea Natale*  
85

2.3. Ventricular Tachycardia Associated with Cardiomyopathies: Diagnosis and Treatment  
*Kelly J. Cook and Henry H. Hsia*  
101

2.4. Ventricular Tachycardia in Structurally Normal Hearts  
*Katie Morganti and Richard H. Hongo*  
127
Section 3 Implantable Device Management  
3.1. Basics of Pacing and Defibrillation: Indications and Components  
Kimberly Scheibly  
3.2. Device Implantation and Perioperative Care  
Melanie E. Marshall and Munther K. Homoud  
3.3. Pacemaker Timing Cycles, Programming, and Troubleshooting  
Christine C. Chiu-Man, Anders Nygren, and Laura De Souza  
3.4. Cardiac Resynchronization Therapy  
Melanie Turco Gura and William R. Lewis  
3.5. ICD Follow-Up and Troubleshooting  
Julie B. Shea and Laurence M. Epstein  
3.6. Pacemaker and ICD Follow-Up  
Laurie Racenet  
3.7. Family Matters: Research and Clinical Management of Psychosocial Issues for ICD Patients and Their Partners  
Samuel F. Sears, Kari Kirian, Melissa Matchett, Christie Benton, and Rajasekhar Nekkanti  
3.8. Management of Device Recalls  
Charles L. Witherell  
3.9. Device Evaluation in Special Circumstances  
Lynne D. Foreman and Deepak Bhakta

Section 4 Syncope and Sudden Cardiac Death  
4.1. Diagnosis and Management of Syncope  
Beverly L. Karabin and Blair P. Grubb  
4.2. Sudden Cardiac Death  
Steven C. Hao and Katie Morganti

Section 5 Care of the Pediatric Arrhythmia Patient  
5.1. Care of the Pediatric Patient with a Device  
Debra Hanisch  
5.2. Care of the Pediatric Patient with SVT  
Kelly Collardey and David J. Bradley

Section 6 Additional Topics in Cardiac Arrhythmia Management  
6.1. EP Mapping System Technologies  
Craig A. Swygman and D. Randolph Jones
6.2. Procedural Sedation in the Electrophysiology Lab  
Salwa Beheiry  

443

6.3. Ethical Issues in Cardiac Electrophysiology Practice: A Guide for Clinicians  
Paul S. Mueller  

453

Index  

469