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Editors

Cardiac Arrhythmias

From Basic Mechanism to
State-of-the-Art Management

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This book is dedicated to my family, Gabriela, David, Victoria, and Peter, for their love and support; to all the current and future professionals of arrhythmias for whom this book was written; Additional thanks to Dr. Lucian Gheorghe, Dr. Vasile Murgu, Dr. Ionel Droc, Dr. Mocanu Iancu, Dr. Vasile Greere, Dr. Daniel Nita, Dr. Adela Cirstea, Dr. Gabriel Cristian. Special thanks are owed to Dr. Blanca Calinescu, Dr. Chantal Trudeau, Dr Jenica Roates, Associate Professor Liviu Chiriac, Professors Alexandru Campeanu, Tiberiu Nanea, and Ion C. Țintoiu, for their guardianship, friendship and support through the good and bad times. I am eternally grateful to all Editors of this book who actively participated with me to realize this Edition.

Ambrose S. Kibos, MD, PhD

Foreword

The field of cardiac arrhythmias has had a remarkable and light-speed progress in the past two decades. From being the Cinderella of Cardiology and practiced in dark damp basements in many institutions around the world, this field is now at the forefront of every cardiology division. Similarly the progress in understanding the mechanisms, anatomy, diagnosis, and treatment of all different forms of cardiac arrhythmias has been overwhelming in the past decade. The twenty-first-century cardiac electrophysiologist has to possess a large bulk of knowledge in this field and is confronted with the challenge of staying updated at the millisecond pace in which new developments occur, a fate rarely seen in other subspecialties. For this reason this first edition of *Cardiac Arrhythmias: From Basic Mechanism to State-of-the-Art Management* encompasses one of the most comprehensive updated textbooks available to date. In its four sections this multiauthored international compilation brightly reviews the anatomy of arrhythmias, diagnostic methods, and diseases associated with arrhythmias and treatment of all forms of cardiac arrhythmias with lavishly illustrated and ample discussions on the most modern ablation and mapping techniques available to date. Similarly the field of devices in the management of cardiac arrhythmias is superbly reviewed. This new textbook adds to the field of cardiac arrhythmias a new and fresh perspective and should be useful not only for the trainee and new upcoming electrophysiologist but also for the seasoned one. This book should be on the shelves of all cardiac arrhythmia units around the globe as it is authored by a significant number of the most influential electrophysiologists in the field and presents a comprehensive and practical approach to cardiac arrhythmias.

Carlos A. Morillo, MD, FRCPC, FACC, FHRS, FESC

Preface

The past 50 years have witnessed the growth and evolution of clinical electrophysiology from a field whose initial goals were the understanding of arrhythmia mechanisms to one of significant therapeutic impact. The development and refinement of implantable devices and catheter ablation have made non-pharmacological therapy a treatment of choice for most arrhythmias encountered in clinical practice. The purpose of this book is to provide the “caring electrophysiologist” with an electrophysiologic approach to arrhythmias, which is predicted on the hypothesis that a better understanding of the mechanisms of arrhythmias will lead to more successful and rationally chosen therapy. As such, the techniques suggested to address these issues and specific therapeutic interventions employed represent a personal view on intuition, based on experiences of world renowned scientists. These include among others, Steve Fishberger, Vidal Essebag, Bradley Knight, G André Ng, Mauricio Scanavacca, Cheuk-Man Yu, Ion Țintoiu and Mark Slevin.

Ambrose S. Kibos, MD, PhD

Letter from the Editors

Cardiac Arrhythmias: From Basic Mechanism to State-of-the-Art Management

The editors of this book had three primary objectives. The first objective was to develop an outline for a comprehensive, modern-era textbook on heart rhythm disorders that properly covered each of the major topics in the field – from basic mechanisms to state-of-the-art clinical management. Careful organization of the chapters and precise wording of each chapter title were important to ensure that critical issues were all addressed and presented in a logical fashion. The second goal was to appropriately select the best possible authors for each chapter. The ideal author for a book chapter is not just an expert in the field with recognized experience and authority, but is also someone who is able to effectively communicate the key teaching points for the topic, has excellent writing skills, and can reliably meet submission deadlines. It was critical that these two objectives were accomplished very early in the planning stages of the book to lay the groundwork for the contributors.

The third objective of the editors was to ensure that the finished product was of the best possible quality. Each chapter was thoroughly reviewed by at least one editor for both content and presentation. This can be a challenging task when the chapters are each written by different authors selected from all over the world, where English may not be the primary language and where books may have variable writing styles and formats. In addition, most of the chapters themselves were a product of collaboration among multiple authors who had to choreograph their work. Fortunately, we had the luxury of reviewing work from an outstanding international group of authors. This made our task enjoyable and educational.

Any multiauthored book that ventures to cover as many topics as are covered in this book will inevitably contain some redundancy. We felt that it was more important to allow each author to fully present his or her topic in a chapter that could stand alone, rather than to try and eliminate all redundant content.

We would like to thank each and every author for their effort and contribution and hope that you enjoy reading this book as much as each of the editors did when putting this collection together.

Chicago, IL, USA

Bradley P. Knight, MD, FACC, FHRS

Contents

1 Anatomy and Physiology of the Atrioventricular Node: Basic Concepts	1
Ambrose S. Kibos and Blanca F. Calinescu	
2 Anatomy and Physiology of the Atrioventricular Node: What Do We Know Today?	5
Hidekazu Miyazaki	
3 Molecular Basis of Arrhythmias Associated with the Cardiac Conduction System	19
Sunil Jit R.J. Logantha, Andrew J. Atkinson, Mark R. Boyett, and Halina Dobrzynski	
4 Functional Anatomy in Arrhythmias and Vascular Support of the Conduction System.	35
Cristian Stătescu, Radu A. Sascău, and Cătălina Arsenescu Georgescu	
5 Autonomic Control of Cardiac Arrhythmia.	43
Kieran E. Brack and G. André Ng	
6 Neural Mechanisms of Arrhythmia	61
Hyung-Wook Park and Jeong-Gwan Cho	
7 Understanding the Genetic Basis of Atrial Fibrillation: Towards a Pharmacogenetic Approach for Arrhythmia Treatment	65
Jason D. Roberts and Michael H. Gollob	
8 Importance of Isthmus Structure in the Right Atrium	77
Jiunn-Lee Lin, Ling-Ping Lai, Liang-Yu Lin, Chia-Ti Tsai, and Chih-Chieh Yu	
9 Channelopathies and Heart Disease	95
Bogdan Amuzescu, Bogdan Istrate, and Sorin Musat	
10 Late Open Artery Hypothesis and Cardiac Electrical Stability.	131
Craig Steven McLachlan, Brett Hambly, and Mark McGuire	
11 The Clinical Utility of 12-Lead Resting ECG in the Era of Ablation Strategies	145
Jang-Ho Bae, Taek-Geun Kwon, and Ki-Hong Kim	
12 Long-Term ECG (Holter) Monitoring and Head-Up Tilt Test.	157
Santosh Kumar Dora	
13 Echocardiography in Arrhythmias	165
Ioan Tiberiu Nanea	
14 Electrophysiologic Testing and Cardiac Mapping.	187
Mitsunori Maruyama and Teppei Yamamoto	

15	How to Differentiate Between AVRT, AT, AVNRT, and Junctional Tachycardia Using the Baseline ECG and Intracardiac Tracings	199
	Sharon Shen and Bradley P. Knight	
16	Recognizing the Origin of Ventricular Premature Depolarization During Sinus Rhythm and During Non-sustained Tachycardia	209
	Seow Swee-Chong	
17	Detection and Management of Atrial Fibrillation in Patients with Stroke or TIA in Clinical Practice	221
	Jerzy Krupinski, Jorge de Francisco, and Sonia Huertas	
18	Ventricular Arrhythmias During Acute Myocardial Ischemia/ Infarction: <i>Mechanisms and Management</i>	237
	Theofilos M. Kolettis	
19	Arrhythmias and Hypertrophic Cardiomyopathy	253
	Krishnakumar Nair, Douglas Cameron, Gil Moravsky, and Jagdish Butany	
20	Lai Tai, the Mysterious Death of Young Thai Men	265
	Gumpanart Veerakul, Lertlak Chaothawee, Kriengkrai Jirasirojanakorn, and Koonlawee Nademanee	
21	Cardiac Arrest Arrhythmias	279
	Riccardo Proietti, Jacqueline Joza, Florea Costea, Mihai Toma, Dan Mănăstireanu, and Vidal Essebag	
22	Electrical Storm: Recent Advances	285
	Mitsunori Maruyama and Teppei Yamamoto	
23	Electrical Storm: Clinical Management	293
	Sofia Metaxa, Spyridon Koulouris, and Antonis S. Manolis	
24	Cellular Pharmacology of Cardiac Automaticity and Conduction: Implications in Antiarrhythmic Drug Assessment	305
	Gary Aistrup	
25	Biophysical and Molecular Targets	335
	Mark Slevin, Michael Carroll, Chris Murgatroyd, and Garry McDowell	
26	Proarrhythmia (Secondary)	345
	Debabrata Dash	
27	Connexin-43 Expression: A Therapeutic Target for the Treatment of Ventricular Tachycardia	351
	Craig Steven McLachlan, Zakaria Ali Moh Almsherqi, Brett Hambly, and Mark McGuire	
28	Biophysics of Modern Ablation Techniques and Their Limitations	361
	Erik Wissner and Andreas Metzner	
29	Cardiac Imaging to Assist Complex Ablation Procedures	369
	Alejandro Jimenez Restrepo and Timm M. Dickfeld	
30	AVNRT Ablation: Significance of Anatomic Findings and Nodal Physiology	387
	Félix Ayala-Paredes, Jean-Francois Roux, and Mariano Badra Verdu	
31	Mechanisms of Atrial Fibrillation	401
	Rishi Arora and Hemantha K. Koduri	

32	Importance of Left Atrial Imaging in Catheter Ablation of Atrial Fibrillation	413
	Seil Oh, Youngjin Cho, and Eue-Keun Choi	
33	Atrial Fibrillation Ablation: From Guidelines to Clinical Reality	419
	Joseph M. Lee and Steven M. Markowitz	
34	Atrial Fibrillation: Should Cardiac Surgeons Be Consulted?	439
	Max Baghai, Randolph H.L. Wong, Innes Y.P. Wan, and Malcolm John Underwood	
35	Atrial Arrhythmias After AF Ablation: Challenge for the Next Decade?	451
	Tamás Tahin and Gábor Széplaki	
36	Cavotricuspid Isthmus Anatomy Particularities in Atrial Flutter Ablation	463
	Liviu Chiriac, Gabriel Cristian, Romi Bolohan, and Ion C. Țintoiu	
37	Location of Accessory Pathways in WPW: What and How Should We Ablate	469
	Bieito Campos, Xavier Viñolas, José M. Guerra, Concepción Alonso, and Enrique Rodríguez	
38	VT Ablation Importance of Linear Lesions and Late Potentials	489
	Cristiano Pisani, Sissy Lara Melo, Carina Hardy, and Mauricio Scanavacca	
39	Programmed Stimulation During Mapping and Ablation of VT	497
	Yaariv Khaykin	
40	Catheter Ablation in Pediatric and Congenital Heart Disease	509
	Steven B. Fishberger	
41	Interventional Electrophysiology in Patients with Congenital Heart Disease	517
	Sissy Lara Melo, Cristiano Pisani, Eduardo Sosa, and Mauricio Scanavacca	
42	Epicardial Mapping and Ablation of Cardiac Arrhythmias	525
	Robert Lemery	
43	Robotic Ablation in Electrophysiology	533
	Ferdi Akca, Lara Dabiri, and Tamas Szili-Torok	
44	Strategies for Restoring Cardiac Synchrony by Cardiac Pacing	543
	Gabriel Cristian, Ecaterina Bontas, Liviu Chiriac, Silviu Ionel Dumitrescu, and Ion C. Țintoiu	
45	Device Therapy for Bradycardias	591
	Chung-Wah Siu and Hung-Fat Tse	
46	Pacemaker Dependence After Atrioventricular Node Ablation	597
	Joseph Yat-Sun Chan and Cheuk-Man Yu	
47	Pacing Site: From Theory to Practice	605
	Cristian Stătescu and Cătălina Arsenescu Georgescu	
48	Implantable Cardioverter Defibrillators in the Pediatric and Congenital Heart Population	613
	Steven B. Fishberger	

49 Sensing Issues in CRT Devices	619
Giuseppe Stabile, Assunta Iuliano, and Roberto Ospizio	
50 Cardiac Resynchronization Therapy: Do Benefits Justify the Costs and Are They Sustained Over the Long Term?	629
Chin-Pang Chan and Cheuk-Man Yu	
51 Complications of Cardiac Implantable Electronic Devices (CIED)	639
Sorin Pescariu and Raluca Sosdean	
52 Peri-device Implantation Anticoagulation Management: Evidence and Clinical Implications	653
Alexander Omelchenko, Martin Bernier, David Birnie, and Vidal Essebag	
Index	665

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