Editors

Role of Continuous Monitoring for Optimizing Management Strategies in Patients With Early Arrhythmia Recurrences After Atrial Fibrillation Ablation
Sanjay Dixit, MD, FAHA; Francis E. Marchlinski, MD, FAHA .................................................. 791

The Yin and Yang of Convective Cooling in Radiofrequency Catheter Ablation
David E. Haines, MD .................................................................................................................. 794

“Cardiac K$_{ATP}$”: A Family of Ion Channels
Thomas P. Flagg, PhD; Colin G. Nichols, PhD ........................................................................... 796

Original Articles

Abnormal Response of Superior Sinoatrial Node to Sympathetic Stimulation Is a Characteristic Finding in Patients With Atrial Fibrillation and Symptomatic Bradyarrhythmia
Boyoung Joung, MD, PhD; Hye Jin Hwang, MD; Hui-Nam Pak, MD, PhD; Moon-Hyoung Lee, MD, PhD; Changyu Shen, PhD; Shien-Fong Lin, PhD; Peng-Sheng Chen, MD [Clinical Perspective] ........................................................... 799

Radiofrequency Catheter Ablation and Antiarrhythmic Drug Therapy: A Prospective, Randomized, 4-Year Follow-Up Trial: The APAF Study
Carlo Pappone, MD; Gabriele Vicedomini, MD; Giuseppe Augello, MD; Francesco Manguso, MD; Massimo Saviano, MD; Mario Baldi, MD; Andrea Petretta, MD; Luigi Giannelli, MD; Zarko Calovic, MD; Vladimir Guluta, MD; Luigi Tavazzi, MD; Vincenzo Santinelli, MD [Clinical Perspective] ........................................................... 808

Catheter Ablation of Atrial Fibrillation in Patients With Chronic Lung Disease
Seung-Young Roh, MD; Jong-II Choi, MD, PhD; Jane Young Lee, MD; Jae-Jin Kwak, MD; Jae-Seok Park, MD; Ji-Bak Kim, MD; Hong-Euy Lim, MD, PhD; Young-Hoon Kim, MD, PhD [Clinical Perspective] ........................................................... 815

Use of an Implantable Monitor to Detect Arrhythmia Recurrences and Select Patients for Early Repeat Catheter Ablation for Atrial Fibrillation: A Pilot Study
Evgeny Pokushalov, MD, PhD; Alexander Romanov, MD; Giorgio Corbucci, PhD; Sergey Artyomenko, MD; Alex Tarov, MD; Natalya Shirokova, MD; Alexander Karaskov, MD, PhD [Clinical Perspective] ........................................................... 823

Recovery of Mitral Isthmus Conduction Leads to the Development of Macro-Reentrant Tachycardia After Left Atrial Linear Ablation for Atrial Fibrillation
Navinder Sawhney, MD; Kislay Anand, MD, MPH; Clare E. Robertson, BS; Taylor Wurdeman; Ramtin Anousheh, MD, MPH; Gregory K. Feld, MD [Clinical Perspective] ........................................................... 832

Local Coronary Flow Is Associated With an Unsuccessful Complete Block Line at the Mitral Isthmus in Patients With Atrial Fibrillation
Toshiya Kurotobi, MD, PhD; Yoshihisa Shimada, MD, PhD; Naoto Kino, MD; Katsuomi Iwakura, MD, PhD; Koichi Inoue, MD, PhD; Ryusuke Kimura, MD, PhD; Yuko Tsumura, MD; Hiroya Mizzuno, MD, PhD; Yuji Okuyama, MD, PhD; Katsuhito Fujiwara, MD, PhD; Shinsuke Nanto, MD, PhD; Issei Komuro, MD, PhD [Clinical Perspective] ........................................................... 838

Efficacy of Low Interatrial Septum and Right Atrial Appendage Pacing for Prevention of Permanent Atrial Fibrillation in Patients With Sinus Node Disease: Results From the Electrophysiology-Guided Pacing Site Selection (EPASS) Study
Roberto Veriato, MD; Giovanni Luca Botto, MD; Riccardo Massa, MD; Claudia Amellone, MD; Antonello Perucca, MD; Maria Grazia Bongiorni, MD; Emanuele Bertaglia, MD; Vigilio Ziacchi, MD; Marcello Piacenti, MD; Attilio Del Rosso, MD; Giovanni Russo, MD; Maria Stella Baccillieri, MD; Pietro Turrini, MD; Giorgio Corbucci, PhD [Clinical Perspective] ........................................................... 844
Paced Left Ventricular QRS Width and ECG Parameters Predict Outcomes After Cardiac Resynchronization Therapy: PROSPECT-ECG Substudy

Jeff M. Hsing, MS, MD; Kimberly A. Selzman, MD, MPH; Christophe Leclercq, MD, PhD; Luis A. Pires, MD; Michael G. McLaughlin, MD; Scott E. McRae, MS; Brett J. Peterson, BS; Peter J. Zimetbaum, MD

Unstable QT Interval Dynamics Precedes Ventricular Tachycardia Onset in Patients With Acute Myocardial Infarction: A Novel Approach to Detect Instability in QT Interval Dynamics From Clinical ECG

Xiaozhong Chen, PhD; Yuxuan Hu, MS; Barry J. Fetics, MS; Ronald D. Berger, MD, PhD, FHRS; Natalia A. Trayanova, PhD, FHRS

Genotype- and Mutation Site–Specific QT Adaptation During Exercise, Recovery, and Postural Changes in Children With Long-QT Syndrome

Peter F. Aziz, MD; Tammy S. Wieand, MS; Jamie Ganley, RN; Jacqueline Henderson, RN; Akash R. Patel, MD; Maully J. Shah, MBBS

Electrocardiographic Characteristics and SCN5A Mutations in Idiopathic Ventricular Fibrillation Associated With Early Repolarization

Hiroshi Watanabe, MD, PhD, FESC; Akihiko Nogami, MD, PhD; Kimie Ohkubo, MD, PhD; Hiro Kawata, MD, PhD; Yuka Hayashi, MD; Taisuke Ishikawa, DVM; Takeru Makiyama, MD, PhD; Satoki Fukae, MD, PhD; Masahiro Mochizuki, MD, PhD; Hitoshi Oda, MD, PhD; Masayuki Okabe, MD, PhD; Akinori Kimura, MD, PhD; Kazuhiro Kawai, MD, PhD; Ichiro Watanabe, MD, PhD, FHRS; Shiro Kamakura, MD, PhD; Minoru Horie, MD, PhD; Yoshifusa Aizawa, MD, PhD; Wataru Shimizu, MD, PhD; Naomasa Makita, MD, PhD

Unusual Complications of Percutaneous Epicardial Access and Epicardial Mapping and Ablation of Cardiac Arrhythmias

Jacob S. Koruth, MD; Arash Aryana, MD; Srinivas R. Dukkipati, MD; Hui-Nam Pak, MD; Young-Hoon Kim, MD, PhD; Eduardo A. Sosa, MD; Mauricio Scanavacca, MD; Srijoy Mahapatra, MD; Gorav Ailawadi, MD; Vivek Y. Reddy, MD; Andre d’Avila, MD, PhD

Transcatheter Ethanol Ablation for Recurrent Ventricular Tachycardia After Failed Catheter Ablation: An Update

Michifumi Tokuda, MD; Piotr Sobieszczyk, MD; Andrew C. Eisenhauer, MD; Pipin Kojodjojo, MD; Keiichi Inada, MD; Bruce A. Koplan, MD, MHP; Gregory F. Michaud, MD; Roy M. John, MD, PhD; Laurence M. Epstein, MD; Frederic Sacher, MD; William G. Stevenson, MD; Usha B. Tedrow, MD

New Observation of Electrocardiogram During Sinus Rhythm on the Atriofascicular and Decremental Atroventricular Pathways: Terminal Quantronic Resonance System Complex Slurring or Notching

Zili Liao, MD; Jian Ma, MD; Jiqiang Hu, MD; Qian Yang, MD; Shu Zhang, MD

Electrophysiological Characteristics of Focal Atrial Tachycardia Surrounding the Aortic Coronary Cusps

Zuli Wang, MD; Tong Liu, MD, PhD; Michael Shehata, MD; Yanchun Liang, MD; Zhiqing Jin, MD; Ming Liang, MD; Yaling Han, MD; Allen Amorn, MD; Xiushi Liu, MD; Enzhao Liu, MD; Sumeet S. Chugh, MD; Xunzhang Wang, MD

Electrogram Fractionation: The Relationship Between Spatiotemporal Variation of Tissue Excitation and Electrode Spatial Resolution

Daniel D. Correa de Sa, MD; Nathaniel Thompson, MD; Justin Stinnett-Donnelly, MD; Pierre Znojkiewicz, MD; Nicole Habel; Joachim G. Muller, MD; Jason H.T. Bates, PhD; Jeffrey S. Buzas, PhD; Peter S. Spector, MD

Low-Energy Multistage Atrial Defibrillation Therapy Terminates Atrial Fibrillation With Less Energy Than a Single Shock

Wenwen Li, PhD; Ajit H. Janardhan, MD, PhD; Vadim V. Fedorov, PhD; Qun Sha, MD; Richard B. Schuessler, PhD; Igor E. Efimov, PhD

Unique Properties of the ATP-Sensitive K+ Channel in the Mouse Ventricular Cardiac Conduction System

Li Bao, PhD; Eirini Kefalogianni, PhD; Joshua Lader, MD; Miyoun Hong, MS; Gregory Morley, PhD; Glenn I. Fishman, MD; Eric A. Sobie, PhD; William A. Coetzee, DSc
Isolation and Characterization of Atrioventricular Nodal Cells From Neonate Rabbit Heart
Xiao Ye Sheng, MD, MSc; Yang Qu, MD, PhD; Pauline Dan, PhD; Eric Lin, PhD; Linda Korthout, MSc; Aaron Bradford, BSc; Leif Hove-Madsen, PhD; Shubhayan Sanatani, MD, FRCPC; Glen F. Tibbits, PhD

Clinical Perspective

Calcium-Calmodulin Kinase II Mediates Digitalis-Induced Arrhythmias
Luis A. Gonano, MD; Marisa Sepúlveda, BS; Yanina Rico, BS; Marcia Kaetzel, PhD; Carlos A. Valverde, PhD; John Dedman, PhD; Alicia Mattiazzi, MD; Martin Vila Petroff, PhD

Clinical Perspective

Advances in Arrhythmia and Electrophysiology
How to Perform and Interpret Provocative Testing for the Diagnosis of Brugada Syndrome, Long-QT Syndrome, and Catecholaminergic Polymorphic Ventricular Tachycardia
Manoj N. Obeyesekere, MBBS; George J. Klein, MD; Simon Modi, MBBS; Peter Leong-Sit, MD; Lorne J. Gula, MD, MSc; Raymond Yee, MD; Allan C. Skanes, MD; Andrew D. Krahn, MD

Signals and Signal Processing for the Electrophysiologist: Part I: Electrogram Acquisition
K.L. Venkatachalam, MD; Joel E. Herbrandson, RN; Samuel J. Asirvatham, MD

Signals and Signal Processing for the Electrophysiologist: Part II: Signal Processing and Artifact
K.L. Venkatachalam, MD; Joel E. Herbrandson, RN; Samuel J. Asirvatham, MD

Circulation: Arrhythmia and Electrophysiology Electronic Pages
Teaching Rounds in Cardiac Electrophysiology
Teaching Points With 3-Dimensional Mapping of Cardiac Arrhythmia: How to Overcome Potential Pitfalls During Substrate Mapping?
Freddy Del Carpio Munoz, MD; Traci L. Buescher, RN; Samuel J. Asirvatham, MD

Circulation: Arrhythmia and Electrophysiology Topic Review
Circulation: Arrhythmia and Electrophysiology Editors’ Picks: Most Read Articles on the Topic of Ventricular Arrhythmias
The Editors

Images and Case Reports in Arrhythmia and Electrophysiology
Successful Ablation of an Epicardial Ventricular Tachycardia Using a Surgical Ablation Tool
Nilesh S. Mathuria, MD; Marmar Vaseghi, MD, MS; Eric Buch, MD, MS; Kalyanam Shivkumar, MD, PhD

Correspondence
Letter by Opthof et al Regarding Article, “Prolonged Tpeak to Tend Interval on the Resting Electrocardiogram Is Associated With Increased Risk of Sudden Cardiac Death”
Tobias Opthof, PhD; Michiel J. Janse, MD, PhD; Ruben Coronel, MD, PhD

Response to Letter Regarding Article, “Prolonged Tpeak to Tend Interval on the Resting Electrocardiogram Is Associated With Increased Risk of Sudden Cardiac Death”
Ragesh Panikkath, MD, DM; Kyndaron Reinier, PhD; Audrey Uy-Evanado, MD; Carmen Teodorescu, MD, PhD; Jonathan Hattenhauer, BS; Ronald Mariani, EMT-P; Karen Gunson, MD; Jonathan Jui, MD, MPH; Sumeet S. Chugh, MD

⇒ indicates articles with a Clinical Perspective; ★ indicates articles available online only.