Book Review

The EHRA Book of Interventional Electrophysiology

Edited by Hein Heidbuchel, Mattias Duytschaever, and Haran Burri. Oxford University Press, United Kingdom; 2017: 308 pages, 1 table, and 171 figures. ISBN: 978-0-19-876637-7.

Knowledge of cardiac rhythm disorders has increased exponentially in the last 3 decades. This has allowed not only a detailed understanding of the mechanisms underlying such disorders but also the development of diagnostic techniques and advanced nonpharmacological treatments applicable in a high proportion of patients, many of whom achieve better clinical outcomes than with drug therapy.

Cardiac electrophysiology is a subspecialty of cardiology dedicated to the study and treatment of cardiac arrhythmias; activities covered include imaging techniques and both invasive and noninvasive treatment. The invasive techniques are those included in the field known as interventional electrophysiology. In this field, cardiac arrhythmias are managed with percutaneous techniques that allow electrical activity of the heart to be recorded and pacing techniques that enable accurate diagnosis of the underlying mechanisms of the arrhythmia. Therapeutic procedures can then be applied to create controlled lesions in the heart and its main vessels, either through electrocatheters or balloon catheters that use different energy sources with the aim of eliminating the substrate responsible for initiating and propagating the arrhythmias. To achieve satisfactory clinical outcomes, highly complex diagnostic and therapeutic techniques are required and specific training is therefore necessary for professionals in this discipline. This training requires appropriately specified theoretical and practical content taken from documents developed by the corresponding scientific societies.[1]

Continuous advances in our knowledge of cardiac arrhythmias and the favorable outcomes obtained with interventional electrophysiology techniques have led to an increasingly broad range of indications. This in turn has indirectly led to a greater number of specific units for arrhythmias within cardiology departments, as well as an increase in the number of professionals working in this discipline. Thus, more patients undergo interventional electrophysiology procedures in developed countries each year and Spain is no exception.[2]

The European Heart Rhythm Association (EHRA), an organization within the European Society of Cardiology dedicated specifically to the field of cardiac rhythm disorders, has published its second official book, this time covering interventional electrophysiology while maintaining the same case study format as the first book on cardiac pacing, defibrillation, and cardiac resynchronization therapy.[3] The book is of particular interest not only for those professionals who are in training in cardiac electrophysiology (cardiology residents, electrophysiology students, technicians in companies that manufacture imaging and electrophysiological devices) but also for practicing electrophysiologists. The book takes a highly didactic approach to complex and varied cases ranging from very common issues to rare ones, thus helping professionals improve their diagnosis and treatment of patients with cardiac rhythm disorders. The book is also excellent additional material for anyone preparing accreditation examinations related to this material under the auspices of scientific societies as the examinations are in a similar format.

The book's editors are renowned European specialists in interventional electrophysiology, with contributions from a further 14 experts of international repute. There are 76 short chapters corresponding to 76 case studies, all following the same structure: on the left-hand page, there is a brief case description accompanied by a figure with 1 or several panels. On the right-hand page, there is a question with 5 possible answers. On turning over the page, readers can see the correct answer, followed by a detailed explanation of why that answer is correct, often supported by additional explanatory figures and relevant references. The figures are mainly traces of electrocardiographic signals and intracardiac electrocardiograms recorded during invasive studies, although radioscopy images, images from nonfluoroscopic mapping, and explanatory diagrams are also provided.

The 76-chapter book covers diagnostic and invasive therapeutic aspects related to the most common arrhythmic substrates in clinical practice, from the different supraventricular tachycardia variants to ventricular tachycardias, fibrillation, and atrial flutter, among others. The cases presented allow the reader to assess the diagnostic performance of pacing techniques during both sinus rhythm and tachycardia. Readers can also interpret cardiac signals during ablation procedures, assess the significance of events following therapeutic procedures, and familiarize themselves with uncommon cases that may occur in clinical practice and that, given their rarity, may pose a diagnostic and therapeutic challenge for the professional.

Although such a format for this material is not original—there are examples of books with a similar format and content, at least one of which has been written by a Spanish author[4] — the EHRA book covers advances occurring in recent years. Given the case study format, many of the underlying concepts may be addressed in similar previously published cases, although certain unique characteristics ensure the book's originality.

CONFLICTS OF INTEREST

M.A. Arias is Associate Editor of *Revista Española de Cardiologia*.

REFERENCES

1. Merino JL, Arribas F, Botto GL, et al. Core curriculum for the heart rhythm specialist. *Europace.* 2009;Suppl 3:iii1–iii26.

SEE RELATED CONTENT:
http://dx.doi.org/10.1016/j.rec.2017.05.015

http://dx.doi.org/10.1016/j.rec.2017.06.026
1885-5857/

2. Pedrote A, Fontenla A, García-Fernández J. Spanish Catheter Ablation Registry. 15th official report of the Spanish Society of Cardiology Working Group on Electrophysiology and Arrhythmias (2015). *Rev Esp Cardiol.* 2016;69:1061–1070.
3. Burri H, Israel C, Deharo JC. *The EHRA book of pacemaker, ICD, and CRT. Troubleshooting: Case-based learning with multiple choice questions.* Oxford: Oxford University Press; 2017.
4. García Civera R. *Interpretación de trazados en Electrofisiología Cardíaca Clínica.* Madrid: McGraw-Hill España; 2000.

Miguel A. Arias
Unidad de Arritmias y Electrofisiología Cardiaca, Servicio de Cardiología, Hospital Virgen de la Salud, Toledo, Spain

E-mail address: maapalomares@secardiologia.es