Books review

Electrocardiography in Ischemic Heart Disease

Edited by Miquel Fiol-Sala, Yochai Birnbaum, Kjell Nikus, and Antoni Bayés de Luna. Wiley Blackwell, United Kingdom; 2019: 415 pages, 15 tables and 282 figures. ISBN: 9781119422280.

Spectacular advances have been made in the field of cardiology in the past few decades. Diagnostic imaging techniques and interventional treatments in various areas of the specialty offer ever-increasing possibilities and are more and more complex, to the point where some of them require subspecialization of the professionals that perform them. Due to these advances, one could think that electrocardiography, being more than a century old, would run the risk of being deemed a thing of the past. However, nothing could be further from the truth, and electrocardiogram (ECG) interpretation remains a key tool in the assessment of patients with heart disease. This is not to forget, of course, the diagnosis of arrhythmias, the area of cardiology in which the ECG has proven most useful in the assessment of patients with ischemic heart disease.

In 2008, Dr Antoni Bayés de Luna and Dr Miguel Fiol-Sala published the book *Electrocardiography in Ischemic Heart Disease,* a compendium of the knowledge—to which the authors themselves have made a significant contribution—on the electrocardiogram in ischemic heart disease. The book is divided into 2 parts: the first focuses on the description of the electrophysiological changes caused by myocardial ischemia and necrosis and how they translate to the surface ECG, and the second, on the electrocardiographic manifestations of the different clinical presentations of ischemic heart disease. This rigorous, comprehensive book quickly became a classic and the international work of reference for this field.

The second edition of this book has just been published. This time, the authors of the first worked with 2 new collaborators: Doctors Yochai Birnbaum and Kjell Nikus, both of whom have an excellent scientific reputation in this field due to the quantity and quality of their contributions.

Compared with the first edition, this second edition has a similar scope, but the contents have been reorganized. The first section has been noticeably shortened, partly because the section dedicated to the correlations between the ECG changes seen with different locations of coronary occlusion has been moved to the second section. The second part of the book has undergone substantial changes. First, the chapters relating to ST-elevation and non–ST-elevation acute coronary syndrome have been separated, in line with the different treatments for each condition. Second, although some chapters, such as that dedicated to the role of the ECG in patients with chest pain or with Q-wave or non–Q-wave infarction, have relatively few changes, others, such as that reviewing the electrocardiographic manifestations of the complications of acute coronary syndromes, have been expanded. Lastly and most importantly, this second edition includes some new chapters that are of great clinical interest. Of note among them is the chapter dedicated to the differential diagnosis between ischemic and nonischemic causes of ST-segment elevation, another that looks at the most common errors in electrocardiographic diagnosis of acute coronary syndromes, and another that covers the potential for telemedicine based on surface ECG in the diagnosis of ischemic cardiomyopathy.

In addition to these changes in the contents and structure, the new edition of the book has attractive images, incorporating coronary computed tomography, myocardial perfusion scanning, and cardiac magnetic resonance, and their electrocardiographic correlations. A new feature of this edition, of great use for learning and which also greatly stimulates the reader's interest, is the inclusion in most of the chapters of difficult clinical cases (in general, 4 per chapter), with multiple-choice answers and a reasoned explanation of the correct answer.

In summary, this is a new edition of a classic of electrocardiography in ischemic heart disease, in which the authors have expanded the contents, incorporating new chapters of great clinical interest. Maintaining the high scientific standard of the previous edition, this book has gained in readability and educational value with the inclusion of numerous difficult clinical cases. This makes for more rewarding and enjoyable reading, for cardiologists interested in electrocardiography and for all professionals involved in the care of patients with chest pain or with different presentations of coronary disease, in the prehospital and hospital emergency services, on the wards, and in the clinic.

As mentioned, the humble ECG may be less glamourous that some of the sophisticated interventions that can be required in patients with complications of ischemic heart disease but which may occasionally be detracting. However, correct interpretation of the ECG is of invaluable help for a rapid, accurate diagnosis, and therefore reduced risk of complications. Its study, for which this book offers a fantastic option, remains as important as always.

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