Electrophysiology for Clinicians

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Foreword

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Cardiac arrhythmias present major management issues for all physicians who care for patients who have heart disease. The development and now common use of invasive electrophysiologic techniques, often in concert with catheter ablation, has fostered an explosion of knowledge in this field. The resulting definitions of mechanisms and physiology have translated into nuanced understandings of clinical features of common cardiac arrhythmias, as well as rare ones. Detailed cardiac mapping studies have defined new varieties and types of arrhythmias, and the findings from these studies have been related back to the electrocardiogram and other clinical features of arrhythmias. For example, a variety of types of atrial flutter have been defined, and specific types can be anticipated from the nature of the underlying heart disease, and from the electrocardiogram. This recognition is not merely of academic interest, but also informs the clinician about the likely success, ease, and risks of ablation therapy for that arrhythmia, information important to assessing treatment options. The situation is similar for other supraventricular tachycardias, as well as for ventricular tachycardias.

A number of genetic syndromes causing ventricular arrhythmias and sudden death are now recognized. The common use of implantable defibrillators has improved our understanding of the nature of ventricular arrhythmias that cause sudden death in rare syndromes and common cardiac diseases. All physicians will encounter patients for whom these devices can be life-saving. The optimal use of implantable devices involves not only recognition of the patients who need them, but also awareness of the significant progress in strategies to avoid potential adverse effects of these devices, such as the potential for diminished cardiac function during right ventricular pacing, and inappropriate shocks that reduce quality of life.

While this expanding body of knowledge is disseminated among subspecialists at the cutting edge of the field, it is often not organized and presented in an easily

accessible format for the vast majority of health care providers. *Electrophysiology for Clinicians* is a superb distillation of the field for clinicians. Authored by leaders in the field, led from the Montreal Heart Institute, it is a clear and concise text emphasizing clinically valuable insights and providing their pathophysiologic basis. Overviews of the fundamentals of arrhythmias and therapies provide the clinician with the necessary foundation for incorporating and retaining new advances into his or her knowledge base. This book is of great value to health care providers who care for patients who have cardiac arrhythmias.

Preface

The study of rhythm and conduction abnormalities in modern times has been facilitated by sophisticated diagnostic and therapeutic techniques. The explosion of knowledge regarding mechanisms that govern rhythm abnormalities has led to the creation of a highly specialized field, and consequent evolution of new concepts, terminology, and approaches.

Despite technological advances bringing increasingly complex interventions, the backbone of diagnostic and management strategies in cardiac electrophysiology rests on clinical grounds. Unfortunately, textbooks, monographs, and reviews largely focus on technical aspects or rely on ultraspecific electrophysiological jargon, limiting their utility as teaching tools for health professionals interested in clinical applications of state-of-the-art knowledge. This book is a response to the requests of clinicians, trainees, and other health professionals for essential information in a concise, readable, and easily accessible format.

Electrophysiology for Clinicians attempts to unravel the complexities inherent to cardiac electrophysiology, with a particular focus on diagnosis and management of cardiac arrhythmias, and indications for patient referral. With its standardized chapter outline approach including key points, color figures, charts, and tables, this handy guide will help demystify the essentials of cardiac electrophysiology for the practicing caregiver.

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Miguel A. Barrero Garcia