EDITORIAL

Hereditary Arrhythmia Corner: Learning from Challenging Patients: A New Section of *Annals*

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During our medical school years, case presentations with discussions were an important part of our education for it helped integrate the preclinical basic science information with the patient as a person and his/her medical condition. It was a special learning experience that involved both deductive and inductive reasoning in the diagnosis and treatment of patients. The clinical pathological conference (CPC) with the patient as the central focus is another case-based learning experience, and I can still recall the first CPC that I formally discussed as a medical student in a teaching session involving faculty and my peers. In the traditional CPC case, an expert clinician discusses the differential diagnosis of a patient with various signs and symptoms of a medical disorder, and the discussion concludes with a specific diagnosis that may be right or wrong. The pathologist then provides the final diagnosis based on biopsy or autopsy findings with brief commentary. The CPCs are still published each week in the *New England Journal of Medicine*, and over the years the case discussions have focused mostly on the medical diagnosis with emphasis on deductive reasoning.

In recent years, many medical meetings include several sessions devoted to the discussion of patients with interesting medical disorders where the emphasis is less on diagnosis and more on the critical aspects of medical management. Often, different management strategies and approaches are expressed by several experts, and the attendees are encouraged to ask questions of the experts to gain an understanding of their reasoning process. These educational sessions are well attended and provide useful insight to the attendees on how experienced

clinicians reason through several available therapeutic options and end up selecting a specific therapy that they think is best for the patient. The role of the pathologist is replaced by a clinician who reports on the therapy that was initiated and the subsequent clinical course and outcome of the patient under discussion.

Other educational case-based approaches include single case reports that are published in many of the medical journals. These case reports are selected to highlight either special clinical features of a medical disorder, new insights into a disease mechanism, issues related to the diagnosis, the clinical efficacy of a new or under-appreciated therapy, or the identification of treatable risk factors that were not recognized or acted upon and resulted in an unfavorable outcome. Because of page restrictions in most printed journals, publication of case reports is quite limited with prioritization on the basis of the likely contribution of the case to the medical literature.

A few months ago, Drs. Ilan Goldenberg and David Huang from the Cardiology Division at the University of Rochester Medical Center approached me about adding a new section to *Annals* in which the emphasis would be on the clinical reasoning process of expert clinicians in their diagnostic or therapeutic approach to patients with challenging hereditary arrhythmias. This recommendation was related to our Friday morning electrophysiology conferences in which patients with potential life-threatening cardiac arrhythmias are presented and discussed. Most but not all of the cases come from our Hereditary Arrhythmia Clinic and includes patients and families with definite or

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suspect long QT syndrome (LQTS), hypertrophic cardiomyopathy (HCM), Brugada syndrome (BS), arrhythmogenic right ventricular cardiomyopathy (ARVD), catecholaminergic polymorphic ventricular tachycardia (CPVT), or congenital heart disease. The diagnostic and therapeutic challenges in optimally managing these interesting patients and families has been a great learning experience for the medical students, medical residents, cardiology fellows, and cardiology faculty in attendance at these sessions.

We decided to call the new section "Hereditary Arrhythmia Corner: Learning From Challenging Patients," and it will be published in each issue of the *Annals of Noninvasive Electrocardiology*, the official journal of the International Society for Holter and Noninvasive Electrocardiology. I have asked Drs. Goldenberg and Huang to be the Associate Editors of the "Hereditary Arrhythmia Corner" and to select for each issue of *Annals* one interesting case and an expert clinician who will be the discussant. The general format is: (1) presentation of the highlights of an interesting and challenging patient up to a critical point in the clinical course of the patient with one relevant figure that will usually be an ECG; (2) the discussant is then asked to explain what he or she would do

next in the workup of the patient with a brief explanation about the reasons why, but without knowledge of the subsequent clinical course of the patient under discussion; and (3) the expert clinician would then be presented with the subsequent clinical course of the patient in terms of diagnosis and management and asked to make a few brief comments on what he or she has learned from the case.

The inaugural "Hereditary Arrhythmia Corner" case presentation with discussion is published in the current issue of *Annals*.¹ We are fortunate in having as the discussant for this first case Dr. Sami Viskin from the Department of Cardiology of the Tel Aviv Medical Center, Israel. Dr. Viskin is a senior clinical cardiologist who is a world expert in electrophysiology, and especially in inherited cardiac arrhythmias. We hope this new "Hereditary Arrhythmia Corner" section of *Annals* will add an important dimension to the thinking process involved in the diagnosis and management of patients and families with hereditary arrhythmias.

REFERENCE

1. Goldenberg I, Huang DT, Viskin S. Hereditary Arrhythmia Corner: Learning from challenging patients. *Ann Noninvasive Electrocardiol* 2010;15:384–386.