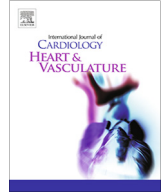




Contents lists available at ScienceDirect

IJC Heart & Vasculature

journal homepage: www.journals.elsevier.com/ijc-heart-and-vasculature

Editorial

All for one and one for All? – Do we need a VT network?



Medical progress is constantly growing; this is certainly true for the last 25 years in many fields of Cardiology. Clinical Electrophysiology is one of the subspecialties that requests constant relearning and adjustment to innovations for diagnostic and therapeutic procedures. Thorough ECG interpretation and 24-hour Holter recording turned into machine learning ECG analysis, implanted loop recording devices and numerous wearable tools for detection of arrhythmic events. Point by point mapping with catheters tracking down the origin of arrhythmic foci is replaced by computer guided mapping with color depicted conduction abnormalities identifying arrhythmogenic substrates for ablation [1–3]. Additional help by CT scanning techniques or CMR imaging using late gadolinium enhancement further improves identification of critical arrhythmic areas. Initially used surgical techniques to treat arrhythmias were displaced by DC catheter ablation (“fulguration”), followed by continuously improved techniques of radiofrequency- and cryoablation, with a new procedure of stereotactic radiation therapy being already on the horizon [4]. In contrast, antiarrhythmic drug management remained disappointing and more effective compounds are currently not visible.

Although ventricular tachyarrhythmias and the problem of sudden arrhythmic death were always “hot topics”, atrial fibrillation (AF) as a significant risk factor for stroke and heart failure moved to the front of clinicians' interest, and with progress of AF ablation technology major activity of electrophysiologists became AF ablation. However, the matter of sudden death prevention, treatment of ventricular tachyarrhythmias and new methods of defibrillator therapy have not lost its importance. Progress of VT/VF ablation technology, better computerized mapping systems and deeper insight into location and mechanism of particular forms of ventricular tachycardia contributed to it.

Today's successfully performing EP-teams consist of at least two or three experienced electrophysiologists, two to three trained catheter laboratory nurses and two EP-technicians, not counting physicians in training and outpatient clinic staff, particularly trained for modern telemonitoring tasks. However, it must not be covered up that growing progress in all fields of cardiology caused dramatic increase of medical costs and expenditures; and with this commercial interest and search for profit found their way into hospitals and specialized centers; in reverse, generated profit may be considered as “well performed” medicine.

Everything in medicine is now guideline directed; every therapeutic procedure finds its place in “traffic light oriented” positions, based on published study results determined by medical society appointed guideline- or consensus committees [5]. Guidelines are continuously updated according to newly published trial data [6].

Healthcare providers and health insurance organizations consider guidelines as “to do” lists or rules to be followed, whereas originally guidelines were developed to help or assist physicians remaining up to date with medicine when adjusting their therapies to individual patient care. Guideline following became a benchmark of good medical performance, whereas deviations from current guideline listing is not rarely condemned as “malpractice”.

Although the “traffic-light set-up” of guidelines is designed as simplified summary of extensively discussed study results in various journals, they are not rarely abused by hospital administrations or insurance companies for reimbursement arguments. Due to modern hospital billing models, performing as many as possible green or even orange depicted guideline-listed procedures becomes very attractive and profitable for hospital administrations, tempting physicians to carry out procedures they may not have enough training or experience with or- even worse- which may not be necessary.

Therefore, an important question is rising if every hospital or clinical center should be able to provide service for all, even the most complex and expensive procedures “justified” within the guidelines, and most likely as often as feasible. Or would it be advisable dividing diagnostic and treatment procedures within an organized clinical center network according to available physicians, their experience and available hospital structures and equipment within a circumscribed region, guaranteeing best medical care for patients, also assuring fair distribution of monetary reimbursement in order to avoid undue competition within groups.

Along this line M. Martinek et al. (this journals issue) [7] propose building a nationwide VT/VF treatment network, subdivided by various regions. They present a consensus concept of the Austrian Working Group of Arrhythmias for acute and subsequent management of ventricular tachycardia and electrical storm. Although their concept of basic diagnostic work-up, antiarrhythmic drug treatment, handling of electrical storm and ICD programming methods are not much different than already proposed in other guidelines, when discussing various treatment options for ventricular tachycardia, in particular ablation strategies, they propose a stepwise management of patients with VT/VF by “primary” and “secondary” clinical centers, based on centers' availability of experienced electrophysiologists, technical prerequisites, assistants and nursing staff, critical care existence and available nearby cardiac surgery. “Primary” VT centers are supposed to become points of contact for peripheral hospitals, providing acute or emergency management of life-threatening arrhythmias, perform basic diagnostics and monitoring until patients can be transferred to “secondary” centers that have more experienced EP-staff and all

other equipment to perform any type of VT ablation, including epicardial procedures and, if necessary, can provide hemodynamic support with ECMO or LVAD insertion, or even provide cardiac surgery. Unfortunately, a precise distinction between proposed primary and secondary VT center characteristics is missing; it seems somewhat inconsistent that “primary” VT centers may also perform VT ablation.

Separating fully equipped centers with great EP experience and continuous service standby from baseline and emergency VT/VF management centers is attractive and promises best patient care. However, the major question and challenge will be, how to install such network of organized VT/VF management within a settled healthcare system. It will need agreement of benefit- and cost oriented hospital administrations and reimbursement systems, approval of medical organizations, and finally patients’ consent within a system of voluntary physician selection. Who will define criteria for primary- and secondary VT centers, and should such network be limited to VT management only or mandatorily arranged for all currently performed EP-procedures?

In other words, is this proposal a consensus of only physicians belonging to “secondary” centers or does such interesting project find agreement of all EP-practicing cardiologists? Let’s wait if the slogan of A. Dumas’ “The three musketeers”: “All for one and one for All” will be valid also for VT treatment?

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Received 18 March 2021

Accepted 19 March 2021