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Letter to the Editor

Misdiagnosis of ventricular tachycardia is not unique to emergency physicians☆

I read with interest the review article by Farré et al., "Confounding factors leading to misdiagnosing ventricular tachycardia as supraventricular in the emergency room" [1]. I commend the authors for their comprehensive review of the issues underlying the difficulty in distinguishing ventricular tachycardia (VT) from supraventricular tachycardia with aberrancy in the emergency department (ED). I agree that VT is very infrequently encountered in the ED, thereby presenting real challenges with its diagnosis in the ED setting. However, I contend that the authors express some general misconceptions and make overly definitive, if not inaccurate statements.

In their narrative review [1], the authors frequently allege that emergency physicians are those who are primarily responsible for VT misdiagnosis. However, their supporting evidence [2,3] also reports misdiagnoses by cardiologists, general internists, and internal medicine residents or do not clearly specify who performed ECG interpretation in settings that included primary care. [4]. These cited studies [2–4], published in the 1980s, are egregiously obsolete by current emergency medicine practice standards. For example, the studies [2–4] report that serious complications of VT misdiagnosis were largely associated with the use of verapamil, a drug that contemporary, established resuscitation guidelines and certification courses [5] recommend *against* using for regular, monomorphic (or uniform) wide-complex tachydysrhythmia. These guidelines [5], by design, also recommend *immediate* treatment of a regular, monomorphic (or uniform) wide-complex tachydysrhythmia *before* any deliberation about a specific rhythm diagnosis. Furthermore, Farré et al. [1], themselves, present in Figure 1 an ECG with "classic criteria" for VT and report that among more than 200 cardiologists at a European Society of Cardiology conference, only 39% correctly diagnosed VT. Lastly, without presenting data, the authors generalize about emergency physician competence by stating "We have seen …" and citing "years of our professional activity" [1] ostensibly at a single center which may or may not include ED staff formally trained in emergency medicine. Anecdotal experiences should not be considered evidence to support definitive statements in a scientific paper.

Typically, several physicians of different specialties (i.e., emergency medicine, cardiology, critical care medicine) and degrees of training are involved in the care of the ED patient with VT. Any of these physicians, not only emergency physicians, may fall prey to VT misdiagnosis, particularly during the resuscitation of the initially undifferentiated, critically ill, and potentially unstable patient in the uncontrolled environment of the ED.

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