Correspondence

Letter by Jiménez-Jáimez and Tercedor Sánchez Regarding Article, “Outcome of Apparently Unexplained Cardiac Arrest: Results From Investigation and Follow-Up of the Prospective Cardiac Arrest Survivors With Preserved Ejection Fraction Registry”

To the Editor:

We have read with interest the article by Herman et al describing the prospective outcome of patients with unexplained cardiac arrest (UCA). Certainly, it seems that a high incidence of adverse events occurs in a short-period follow-up. We agree that an implantable cardioverter defibrillator (ICD) is mandatory irrespective of achieving a final diagnosis. The poorer prognosis in patients with structural abnormalities respect to those with primary electric disorders is an interesting finding and might be because of a high efficacy of medical treatment for some cardiac channelopathies. However, some other considerations need to be addressed.

It is somewhat surprising that the same incidence of appropriate therapies was observed for both groups, diagnosed and UCA patients. Even diagnosed patients seem to have a higher proportion of therapies (P=0.054) when the opposite was expected. This fact is quite relevant as one of the aims of the Cardiac Arrest Survivors With Preserved Ejection Fraction Registry (CASPER) and other UCA registries was to direct the treatment to avoid ICD therapies. The authors claim that a more severe phenotype could be the reason for this observation, but we disagree: all the patients presented with the same fatal arrhythmia and no pathological data in phenotype. There is no basis to suggest that a positive exercise test or pharmacological challenge would involve a worse outcome. Instead, we feel that the article lacks information that would be extremely useful to try to deduce the real cause for this observation. First, there is no mention about the doses and kind of β-blockers used in the diagnosed group. There are 18 long-QT syndrome and 10 catecholaminergic polymorphic ventricular tachycardia patients. Both diseases present an excellent response to β-blockers but in a different way depending on the doses and subtype; for example, nadolol seems to be the best choice for catecholaminergic polymorphic ventricular tachycardia and type 2 long-QT syndrome.1,2 The only information about medical therapy is a similar rate of β-blocker use among the 2 groups, something that is hard to understand, in our opinion, as there is no recommendation to do that in patients with no definitive diagnosis.4 Another point that is not described in the article is the ICD programming in the study groups. There is consensus in avoiding early intervention of the ICD to avoid treating nonsustained ventricular arrhythmias. Finally, given the suggested lack of usefulness of achieving a diagnosis to avoid appropriate ICD therapies, according to the article, the main reason to perform this complex algorithm suggested for UCA is to detect hidden cases among the relatives. Unexpectedly, only 85 family members of 65 patients were clinically and genetically assessed. This number seems to be low according to a 200-index case sample. Only 14 family members were diagnosed and a phenotype-directed treatment started. In our previously published series of 35 UCA patients, we managed to include 2.5 direct relatives per proband, detecting 19 subclinical cases among them.3 A larger sample with a long-time follow-up period study is needed to demonstrate a reduction in cardiac events among relatives of diagnosed UCA patients.

Disclosures

None.

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References


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_Circ Arrhythm Electrophysiol._ 2016;9:
doi: 10.1161/CIRCEP.116.003984

_Circulation: Arrhythmia and Electrophysiology_ is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
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Print ISSN: 1941-3149. Online ISSN: 1941-3084

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