To the Editor:
I was delighted to read the contribution of Hoshida et al.1 The authors used 24-h Holter ECG monitoring-based measurements of T-wave alternans, employing the modified moving method (MMA-TWA), and heart rate turbulence (HRT), with well-accepted criteria, in their study of 313 consecutive post-myocardial infarction (post-MI) patients who were followed for 190±441 days for overall cardiac mortality and fatal arrhythmic events. Although the authors observed that both MMA-TWA and HRT were significant predictors of the endpoints, on multivariate analyses, HRT was most predictive of overall cardiac mortality, and MMA-TWA of fatal arrhythmic events, including sudden cardiac death. The study is important because it was (1) prospective, (2) realistic because it was based on ambulatory ECG monitoring instead of exercise stress testing, without discontinuation of beta-blockers, (3) executed in the crucial for decision-making time period after MI, (4) using data for recruited consecutive patients, with the entire range of left ventricular dysfunction, but mostly with preserved ejection fraction, and (5) simultaneously using 2 predicted instruments.

I have some remarks for the authors. (1) Considering the current guidelines about the waiting time period after an MI, before implanting cardioverter-defibrillators (ICDs) to appropriate patients, it will be important for readers to have more details about the timing of the measurements than the “(usually >2 weeks after onset)”. (2) I have some concerns about the “fairness” of comparing MMA-TWA with HRT, when assessment in the former is always attainable in interpretable 24-h Holter ECG monitoring, whereas in the latter the absence or presence of only a few premature ventricular beats confers a “negative” result. (3) Are there “endpoint” data for the 15 patients with intraventricular conduction disturbances, or who suffered paroxysmal atrial tachyarrhythmias, and thus were excluded from the study after enrollment? (4) Are there “endpoint” data for the patients with chronic atrial fibrillation or an implanted permanent pacemaker/cardiac resynchronization therapy system, admitted with an MI between June 2006 and January 2010? (5) Do the authors feel comfortable, on the basis of the data depicted in Figure 2 of their article, to recommend that post-MI patients with positive MMA-TWA and HRT receive an ICD, and those with negative MMA-TWA and HRT, or one of these 2 tests being positive, be subjected to yearly (or otherwise) retesting for decision making?

Disclosures
Nothing to disclose.

Reference

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