Current guidelines recommend insertion of ICDs for patients with reduced left ventricular ejection fraction (LVEF), but the majority of sudden deaths occurs in patients with only moderately reduced or preserved LVEF (5). Identification of patients who are at high risk of dying suddenly is an unresolved clinical challenge.

LVEF, as a classical risk factor, is an indirect measurement of scar size. Many factors may affect LVEF, in addition to scar size, such as preload, afterload, autonomic factors medications, and post-infarction remodeling (6). For this reason, measurement of the scar size by CMR may give additional prognostic information beyond LVEF. Klem et al. (7) tested whether an assessment of myocardial scarring by cardiac MRI would improve risk stratification in patients evaluated for ICD implantation. In patients with LVEF >30%, significant scarring (>5% LV) identifies a high-risk cohort with similar risk as in those with LVEF ≤30%. Conversely, in patients with LVEF ≤30%, minimal or no scarring identifies a low-risk cohort similar to those with LVEF >30% (7). We therefore found that a larger peri-infarction zone, seen by CMR, is associated with ventricular tachycardia inducibility in post-MI patients with preserved LVEF. In our study, LVEF was similar among patients with and without VT inducibility (8).

Risk assessment of sudden death in patients with relatively preserved LVEF is still an unsolved issue. Based on the hypothesis, also supported by our study (8), Kadish et al. (9) designed the Defibrillators to Reduce Risk by Magnetic Resonance Imaging Evaluation (DETERMINE) Trial. The goal of this study was to test the hypothesis that patients with an infarct size of >10%, randomized to ICD and medical therapy, will have improved survival as compared to those randomized to medical therapy alone. CMR would have been performed in patients with CAD and LVEF of >35% and less than 50% (or patients with an LVEF of 30%-35% and New York Heart Association class I heart failure without a history of ventricular arrhythmias). Death from any cause was selected as the endpoint for the trial. Unfortunately, to reach the target randomization, approximately 10,000 patients would never have been screened with CMR. Due to slow enrollment, this study recently halted. We believe that randomized trials with follow-up with CMR will identify patients who need an ICD after myocardial infarction better than standard techniques in the near future.

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P-wave dispersion and left ventricular diastolic dysfunction in hypertension

To the Editor,

We read the manuscript written entitled "Association of P wave dispersion and left ventricular diastolic dysfunction in non-dipper and dipper hypertensive patients." by Tosu et al. (1) that was published in April issue of The Anatolian Journal of Cardiology 2014; 14: 251-5, "Association of P-wave dispersion and left ventricular diastolic dysfunction in non-dipper and dipper hypertensive patients," with great interest. They evaluated patients for left ventricular (LV) diastolic dysfunction and association with P-wave dispersion in dipper and non-dipper hypertensive patients. They found that P-wave dispersion is associated with left ventricular dysfunction in non-dipper and dipper hypertension.

This is an interesting study, but we have some additional contributions. First, in this study, parameters, including E/A rates, deceleration time (DT), and isovolumetric relaxation time (IVRT), were used to evaluate diastolic dysfunction. In addition, in the correlation analysis, the authors mentioned that P-wave dispersion is correlated with left ventricular mass index (LVMi), IVRT, left atrial diameter (LAd), E/A, and interventricular septum (IVS), and these correlations are presented as evidence for left ventricular diastolic dysfunction. However, these parameters are not sufficient for the evaluation of diastolic dysfunction according to current guidelines. Tissue Doppler imaging (TDI) methods, such as e', a', and E/e', should be used for the optimal assessment of left ventricular diastolic dysfunction (2). e' is commonly used to refer to arterial elastance. The mitral inflow E velocity to tissue Doppler e', E/e' latter ratio plays an important role in the estimation of LV filling pressures. In patients with cardiac disease, e' velocity can be used to correct for the effect of LV relaxation on mitral E velocity, and the E/e' ratio can be applied for the prediction of LV filling pressures (3). Additionally, using the septal E/e' ratio, a ratio <8 is usually associated with normal LV filling pressures, whereas a ratio >15 is associated with increased

filling pressures (2). These parameters should be included in this study for a better assessment. Again, for the assessment of left ventricular diastolic dysfunction, a comparison between P-wave dispersion and TDI parameters would be more accurate.

Daytime ambulatory blood pressure (ABP) is usually higher than nighttime ABP, and the reverse diurnal pattern is independently associated with a higher incidence of cardiovascular events and mortality (4). Reverse-dippers still had approximately twice the risk for stroke versus dippers or non-dippers. Reverse-dippers also had twice as many total cardiovascular events (cardiac and stroke events) as the other dipping groups (5). On the other hand, as you evaluate dipper and non-dipper patient groups, it would be better to include reverse-dipper patients in the study, as this subgroup has the worst prognosis in hypertension patients.

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Author`s Reply

To the Editor,

We thank all of the authors for their valuable comments, and we were delighted to see your interest to our study (1), entitled "Association of P-wave dispersion and left ventricular diastolic dysfunction in non-dipper and dipper hypertensive patients," published in the April issue of The Anatolian Journal of Cardiology 2014; 14: 251-5.

1) You are right about the mentioned parameters, such as e', a', and E/e'; this may be a deficiency of our study. Nevertheless, we will take your advice into consideration for future research.
2) Deficient of normal fall of blood pressure at night is associated with increased risk of cardiovascular disease (2). Reverse-dipper or riser patients generate a small portion of hypertensive patients (3). Although this group is at risk for stroke (commonly intracranial hemorrhage), especially in elderly patients (4). However, despite the evidences, reverse-dipping is not mentioned in the valid guide- lines currently (5). The small number of patients was another deficiency in our study to obtain wide-angle data. Consequently, we did not examine and create a reverse-dipper group. Studies involving more patients with longer follow-ups may contribute valuable parts of further guidelines.

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Breast arterial calcifications and carotid intima-media thickness and hemodynamics: Is there any association?

To the Editor,

We have read the article "Breast arterial calcifications and carotid intima-media thickness and hemodynamics: Is there any association?" written by Büyükkaya et al. (1), published in the June 2014 issue of The Anatolian Journal of Cardiology, with great interest.

They aimed to investigate the relation between breast arterial calcification (BAC) detected by mammography and two well-known markers of cardiovascular diseases: carotid artery intima-media thickness (C-IMT) and hemodynamic parameters, like carotid peak-systolic velocity (PSV), end-diastolic velocity (EDV), and resistive index (RI). Postmenopausal female patients ranging in age from 40 to 86 were included in their study. They found a statistically significant difference between BAC groups [BAC(+), BAC(-)] in mean C-IMT after adjustments