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CORRESPONDENCE

Letter to the Editor

Left Ventricular Mass and the Outcome of Patients With Hypertrophic Cardiomyopathy

I read with great interest the study by Olivotto et al. (1), which concluded that the left ventricular (LV) mass by cardiovascular magnetic resonance proved more sensitive than a maximal LV thickness ≥30 mm in predicting outcome of patients with hypertrophic cardiomyopathy. However, as stated in an Editorial Comment by Reichek (2), the number of cardiac deaths in the study was small. In other words, LV mass by cardiovascular magnetic resonance did not prove more sensitive in predicting outcome in the presently enrolled patients. What happened when the authors chose other end points such as progression to severe functional limitation (New York Heart Association functional class III or IV) and/or sustained, life-threatening ventricular arrhythmias requiring the implantation of a cardioverter-defibrillator that are used for the entire cohort of patients with hypertrophic cardiomyopathy as previously described (3)? If the aforementioned end points were chosen, did LV mass prove more sensitive than a maximal LV thickness ≥30 mm in predicting the outcome of patients with hypertrophic cardiomyopathy? In addition, what were the causes of death in the study by Olivotto et al. (1)?

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Please note: The author would like to thank the Editors of *JACC* for the opportunity to ask these questions about such an important article.

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Reply

We are grateful to Dr. Song for his interest in our work (1). He poses questions regarding the choice of the end point for our study and the definition of the causes of death. With regard with the first question, Dr. Song is correct in pointing out that the only end point assessed in our study was cardiovascular mortality. This choice was unavoidable, given the relatively short duration of follow-up available, consequent to the recent introduction of cardiovascular magnetic resonance to clinical cardiology and hypertrophic cardiomyopathy (HCM). Symptom progression to New York Heart Association functional class III to IV is a slowly evolving process in HCM and can be meaningfully assessed only over the course of several years or even decades. For example, our other study cited by Dr. Song (2), in which a combined end point was in fact employed, had a mean follow-up of 12 years, compared with 2.6 years in the present study (1).

With regard to the definition of causes of death and with all due respect, we believe that we have provided the relevant information in the Results section of the report (1). Over a 2.6- ± 0.7-year follow-up, there were 10 HCM-related events: 5 sudden death events (including 1 resuscitated cardiac arrest and 2 appropriate implanted cardioverter-defibrillator discharges for life-threatening, sustained ventricular arrhythmias), 3 deaths due to progressive heart failure, and 2 after surgical septal myectomy. The causes of death in our HCM patients were classified according to standard definitions that we have consistently employed in prior studies (2–5).

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