

Reply to the Letter to the Editor for the Article Entitled “Potential Prognostic Impact of Frequent Premature Ventricular Complexes”

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The correspondent raised concern that atrial burden in the observation group is higher than in the treatment group, which may be detrimental to atrial and ventricular function.¹ We agree that the higher atrial burden may partially contribute to poor prognosis. However, increase in atrial burden may be a consequence of a premature ventricular complexes (PVC)-induced atriomypathy, which precedes the deterioration in left ventricular systolic function and serves as a potential early marker of myocardial involvement.^{2,3} A recent study showed that ablation of PVCs significantly improved left atrial function with a marginal increase in left ventricular systolic function, suggesting an inseparable link between PVCs and atrioventricular myopathy.³ The role of atrial burden and atriomypathy in PVC patients warrants further investigation.

We share the concern of the correspondent regarding assessment of left atrium enlargement with unidimensional anteroposterior diameters of the left atrium. Left atrial volume index (LAVI) is a more reliable and accurate parameter to evaluate changes in the left atrial size. Limited by the retrospective design, we only reported the left atrial linear dimensions, which were consistently measured. In the reported population, LAVI values were available in 60 patients (41 in the treatment group, and 19 in the observation group). Follow-up LAVI values increased by 6.564 mL/m² in the observation group (30.858 ± 13.593 vs. 37.422 ± 16.998, p = 0.020),

while there was no significant change in the treatment group (31.537 ± 13.416 vs. 34.092 ± 13.110, p = 0.161).

Finally, we agree with the correspondent about the utility of exercise stress testing and cardiac magnetic resonance (CMR) in PVC evaluation, which may unveil concealed cardiac structural and electrical abnormalities. The PVC responses to exercise may offer valuable mechanistic insights and prognostic information, which are pivotal in guiding PVC therapies.^{4,5} As the correspondent notes, we were unable to address this issue in our retrospective study because exercise stress testing and CMR were not routinely performed in PVC patients at our institution.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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