

Can Diastolic Dysfunction Develop as a Result of Premature Ventricular Complex?

To the Editor,

We have read the article by Keleş et al¹ entitled "Does premature ventricular complex impair left ventricular diastolic functions?" with great interest which was published in *Anatol J Cardiol* 2023; 27: 217-222. In the present study, the authors reported that patients with premature ventricular complex exhibited a lower early diastolic strain rate than the normal population and this parameter can be used to predict left ventricular diastolic dysfunction in the study population. Also, the authors reported that patients with premature ventricular complex may have a higher risk of left ventricular diastolic dysfunction than healthy individuals.¹ We would like to emphasize some important points about this well-written study.

Keleş et al¹ stated that the mean age was significantly higher in the patient group ($P=.037$). The effect of age on diastolic functions has been previously investigated in the literature.^{2,3} Could the lower early diastolic strain rate observed in the study be due to the higher mean age of the patient group compared to the control group? Would the same results be found if the mean age was similar between the 2 groups?

Also in the present study, there is no information about the inter-observer and intra-observer variability in echocardiographic parameters. It would be helpful if the authors provided these reproducibility values in order to estimate the reliability of left ventricular deformation analysis in the study population.

Moreover, Alonso Gómez et al⁴ showed that adding left atrial strain parameters to the current recommendations in evaluating diastolic dysfunction significantly reduces the number of indeterminate left ventricular diastolic dysfunction patients.⁴ So left atrial strain parameters could provide insight into the diagnosis of left ventricular dysfunction seen in patients with frequent premature ventricular complex.

In conclusion, to verify the effect of the premature ventricular complex in impaired left ventricular diastolic functions, abovementioned factors should be taken into consideration.

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LETTER TO THE EDITOR

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