LETTER TO THE EDITOR

Presence of Fragmented QRS May Be Due to Higher Levels of Left Ventricle Mass in Patients with Severe Aortic Stenosis

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aortic stenosis; fragmented QRS; left ventricle mass

To The Editor,

I have read the article "Fragmented QRS Can Predict Severity of Aortic Stenosis" by Açıkgöz, et al. with great interest.¹ In their study, authors reported the fragmented QRS (fQRS) is associated with severity of aortic stenosis, and they suggested that fQRS may be better than traditional electrocardiography (ECG) criterias of left ventricle hypertrophy (LVH) and echocardiographic LVH to determine the severity of aortic stenosis.¹ They used the left ventricular ejection fraction, septum and posterior wall thickness, gradients, strain pattern, and systolic pulmonary artery pressure as echocardiographic parameters. In their study, there is no any data about the left ventricle mass (LVM) and LVM index (LVMI) which are the most important indicators of echocardiographic LVH. In a study which includes patients with hypertension and normal coronary angiogram, LVMI was significantly higher in the patients with fQRS than that of patients who did not have fQRS on ECG.² In another recent study, the main finding was; presence of fQRS on ECG in hypertensive

patients is associated with significantly higher levels of LVM than patients without fQRS on ECG.³

In the present study of Açıkgöz, et al. there are significantly higher mean and peak gradients in patients with fQRS group. Therefore, patients with fQRS may have more severe aortic stenosis than patients without fQRS on ECG. This may indicate that, patients with fQRS have higher levels of LVM and LVMI than patients without fQRS. In this sense, presence of fQRS may not be due to aortic stenosis, may be due to higher levels of LVM and LVMI in patients with fQRS group.

In conclusion, statistical data of Açıkgöz, et al. study may be improved. Addition of LVM and LVMI into the statistical analysis may effect the results of this study. Presence of fQRS may not be due to isolated valvular stenosis, may be due to higher levels of LVM and LVMI because of more severe aortic stenosis in patients with fQRS group.

REFERENCES

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