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## Research Letter

# Fragmented QRS is associated with ventricular tachycardia in patients with apical aneurysm with hypertrophic cardiomyopathy



## Keywords:

Apical aneurysm  
Hypertrophic cardiomyopathy  
Fragmented QRS  
Ventricular tachycardia

Dear Editor,

We read the article with a great interest by Özeke et al. published recently in Indian Heart Journal entitled "Association of ST elevation with apical aneurysm in hypertrophic cardiomyopathy".<sup>1</sup> In this study, the authors have reported the relationship between apical aneurysm and ST elevation in lead V4-6 in patients with hypertrophic cardiomyopathy. It is a well-designed and well-written manuscript and is original.

Hypertrophic cardiomyopathy (HCM) is a well-known genetic disorder, indicating increased morbidity and mortality in patients with sustain ventricular tachycardia (VT). VT could be first presentation in patients with apical aneurysm with HCM. Previous case reports demonstrated that fragmented QRS (fQRS) at inferior and/or mid-precordial leads was apparent in apical aneurysm formation in apical HCM.<sup>2-4</sup> The following that fQRS was also related with hypokinetic apical contraction suggested that fQRS could be an index of myocardial injury before the formation of apical aneurysm. Suwa et al. showed that fQRS was associated with a higher prevalence of VT.<sup>5</sup>

We speculated that potential serious complication due to apical aneurysm with hypertrophic cardiomyopathy may be eliminated by detailed investigation of electrocardiography.

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