

## Görüntülü olgu örnekleri

## Case images

## A giant congenital left ventricular diverticulum

## Dev konjenital sol ventrikül divertikülü

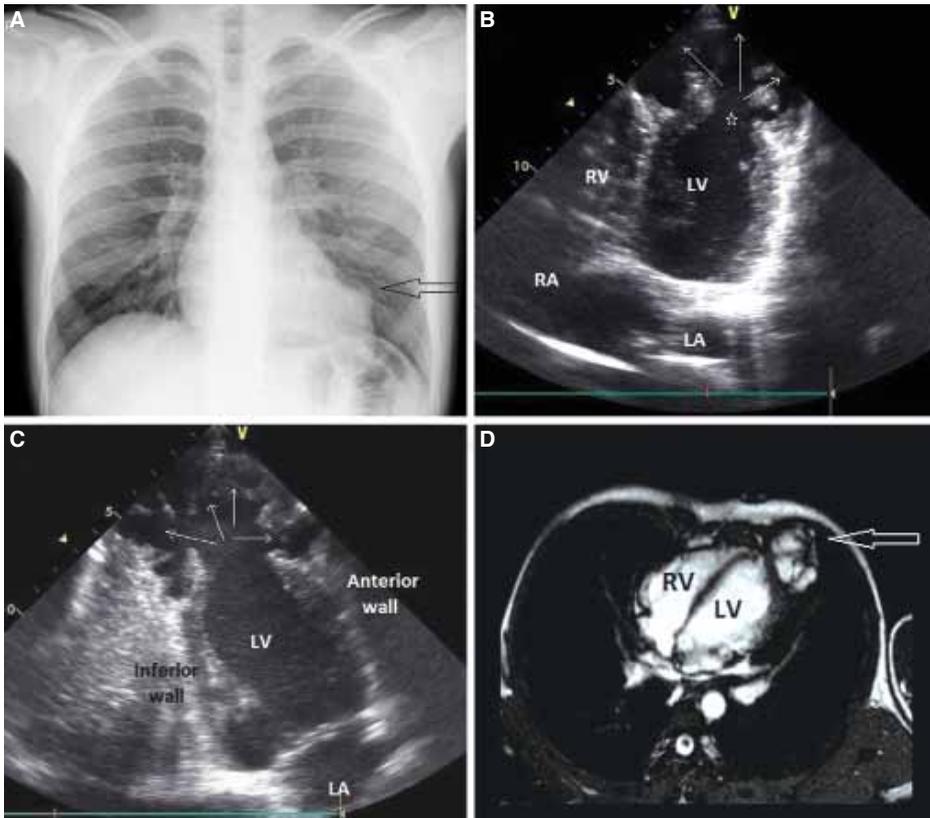
Mustafa Oylumlu  
Murat Yüksel  
Abdülkadir Yıldız  
Mehmet Zihni Bilik

Department of Cardiology,  
Dicle University Faculty of  
Medicine, Diyarbakir

An 18-year-old man admitted with new onset palpitation and dispnea (NYHA class II) for the last month. He had no past medical history of cardiac disease or trauma, nor family history of cardiac events. Physical examination was unremarkable.

Sinus rhythm with incomplete left bundle branch block and negative T-waves at V4-6 derivation were realized on electrocardiogram. There was a bulging on left lower cardiac contour on chest X-ray (Fig. A). Transthoracic echocardiography and cardiac magnetic resonance imaging revealed an aneurysmal segment with a narrow neck at the apex of the left ventricle and diminished left ventricle ejection fraction to 40%. There was prominence of trabeculation and dysknetic motion of the aneurysmal wall (Fig. B-D, Videos

1-3\*). Cardiac biomarkers showing myocardial injury were in normal range. The presumptive diagnosis for the apical aneurysm was a giant congenital left ventricle diverticulum. Myocardial non-compaction was considered in the differential diagnosis. However, presence of eccentric ventricular aneurysm and lack of deep recessus in ventricular myocardium were not compatible with myocardial non-compaction. Selective coronary angiography was planned, and cardiac surgery was proposed as the eventual treatment. However, the patient refused to proceed furthermore. Congenital ventricular diverticulum, saccular dilatation of the ventricular wall, is a rare cardiac malformation. Most of the left ventricular diverticula are located at the apex of the left ventricle, but they may also be found in any other location. Congenital left ventricular diverticula may cause serious complications including systemic thromboemboli, endocarditis, cardiac rupture, heart failure, arrhythmia and sudden cardiac death.



**Figures–** (A) Chest X-ray on postero-anterior projection showing a bulging on the left lower cardiac contour (arrow). (B) Apical 4-chamber view and (C) apical 2-chamber view demonstrating a giant diverticulum (arrows) with a narrow neck (star) at the apex of the left ventricle on transthoracic echocardiogram. (D) Cardiac magnetic resonance imaging revealed giant left ventricular diverticulum on transverse section (arrow). \*Supplementary video files associated with this presentation can be found in the online version of the journal.

