

Multiple left ventricular crypts in patient with hypertrophic cardiomyopathy

Hipertrofik kardiyomiopati hastada çok sayıda sol ventrikül kripleri

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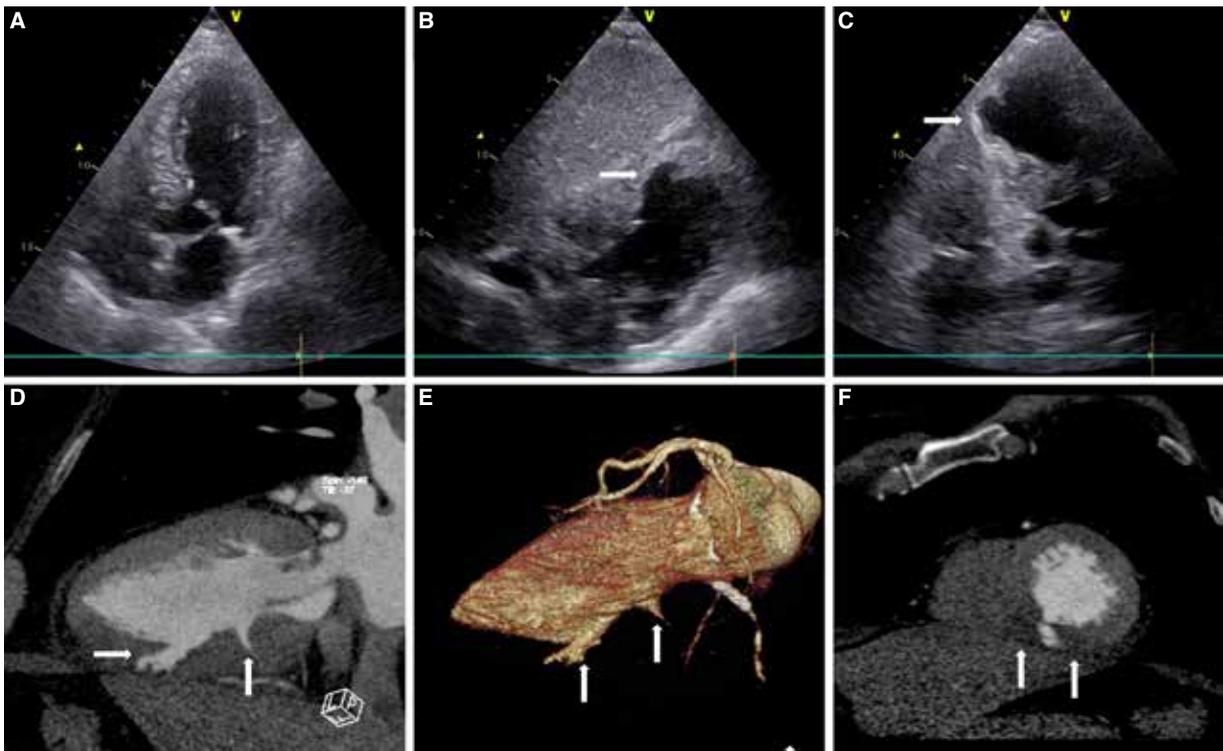
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A 67-year-old male with subacute inferior myocardial infarction was referred for coronary angiography, which revealed critical proximal stenosis and distal chronic total occlusion of the right coronary artery. Following angiography at the same session, stent implantation was performed for proximal right coronary artery lesion, and medical follow-up for chronic distal occlusion was planned. Nonobstructive hypertrophic cardiomyopathy (HCM) and myocardial defect at mid inferior left ventricle (compatible with myocardial infarction region) were observed in predischarge echocardiogram. Due to suspicion of pseudoaneurysm or concealed rupture of the left ventricle, multislice computed tomography

(MSCT) was performed for morphological and coronary evaluation. Echocardiogram and MSCT images are shown in Figure A-F. HCM is characterized by diverse patterns of left ventricular (LV) hypertrophy. Congenital clefts or LV diverticulum are rare cardiac malformations observed in cases of HCM. Recently, unusual, deep crypts of the LV basal septum with unknown clinical significance have been reported in HCM patients. Coexistence of basal septal crypt, mid inferior defect, and nonobstructive HCM was observed in the present case. Coexistence of inferior myocardial infarction and possible inferior congenital cleft complicates diagnosis. Whether inferior large myocardial defect localized at the center of hypoperfused segment, as demonstrated on MSCT, is a necrotic lesion or combination of congenital defect and necrosis is discussed, though demonstration of systolic contraction around this defect favors a diagnosis of congenital defect (Video*).



Figures– (A) Apical 4-chamber transthoracic echocardiographic (TTE) image demonstrating nonobstructive hypertrophic cardiomyopathy, (B) arrows demonstrating basal inferoseptal cleft and inferior myocardial defect on subcostal TTE image, (C) modified 2-chamber and (D, E) post-processed, 3-dimensional, volume-rendered MSCT images, (F) short-axis MSCT image demonstrating inferior myocardial defect at center of first-pass hypoperfused inferior segment. *Supplementary video file associated with this presentation can be found in the online version of the journal.