## Unruptured left ventricular pseudoaneurysm presenting as mitral stenosis

Mitral darlığı ile başvuran yırtılmamış sol ventrikül psödoanevrizması

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A 74-year-old man, who had previously had an inferoposterior myocardial infarction and had undergone a three-vessel coronary artery bypass graft operation several years previous, was admitted to our clinic complaining of dyspnea occurring with mild to moderate exertion and without angina. His medical history was notable for systemic arterial hypertension and hyperlipidemia. He had noticed a gradual worsening of his symptoms over the previous two years. At admission, that patient's hemodynamic parameters were within the normal limits, and electrocardiography (ECG) revealed inferolateral pathological Q waves consistent with previous myocardial infarction. No new ECG abnormalities were found when comparing the images to previous ECG records. Results of routine biochemical tests, including cardiac biomarker levels, were within normal limits. Transthoracic echocardiography demonstrated preserved left ventricular systolic function with an ejection fraction of 45-50% and mild to moderate mitral and tricuspid regurgitation. Furthermore, the patient was found to have a large posterolateral pseudoaneurysm communicating with the left ventricle through a narrow neck (Fig. A, Video 1). This pseudoaneurysm was very close to the posterior mitral annulus and left atrial

lateral wall. During color Doppler examination, flow turbulence through the mitral valve was noted. A pseudoaneurysm appeared to be compromising left ventricular filling by compressing the posterior mitral annulus and left atrial wall (Video 2). Continuous-wave Doppler of the mitral valve, with a mean gradient of 11 mmHg, confirmed the existence of the pseudoaneurysm (Fig. B). A diagnosis of left ventricular pseudoaneurysm causing severe mitral stenosis due to mass effect was suspected. Cardiac computed tomography was planned but not performed because the patient refused any further evaluation.



Figures- Transthoracic echocardiography of a patient with a left ventricular pseudoaneurysm causing severe mitral stenosis. (A) Transthoracic apical five-chamber view showing the pseudoaneurysm (arrow) compressing the left atrium and mitral annulus. (B) Measurement of the maximum and mean gradients across the mitral valve using continuous wave Doppler in the apical long axis view. LV: Left ventricle; RV: Right ventricle; MV: Mitral valve; AV: Aortic valve; LA: Left atrium. \**Supplementary video files associated with this case can be found in the online version of the journal.*