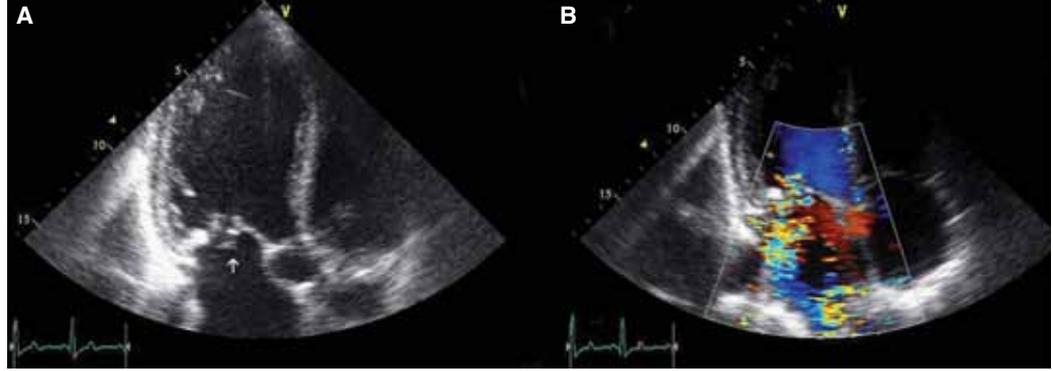


## Aortic valve perforation and mitral valve chordal rupture as a complication of previous infective endocarditis

## Geçirilmiş enfektif endokardit komplikasyonu olarak aort kapağı delinmesi ve mitral kapak kord yırtığı

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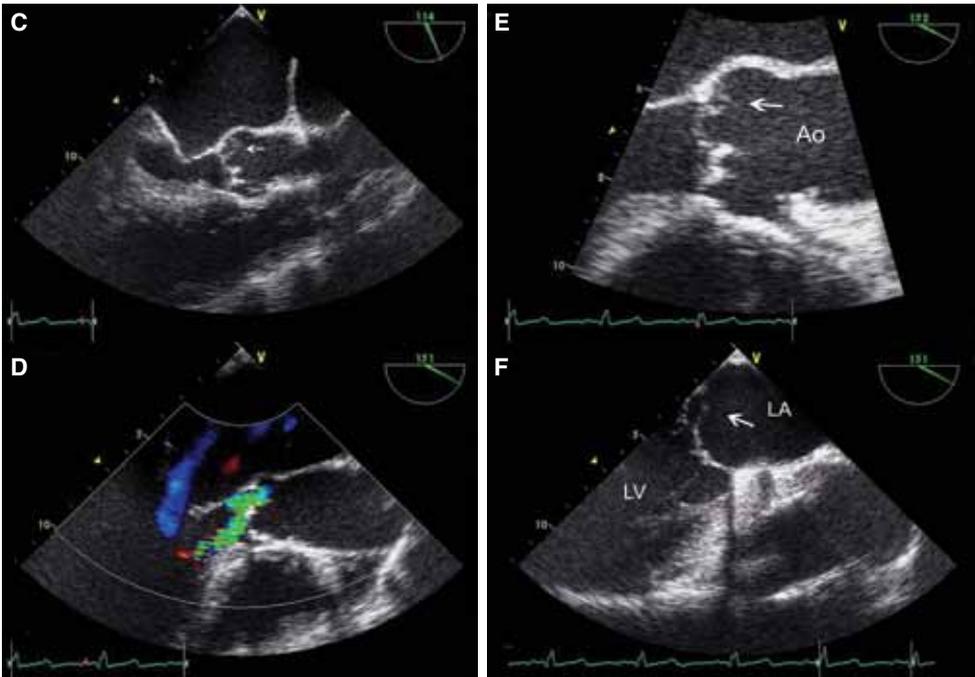
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An 82-year-old male patient without any known cardiac disorder was admitted to the emergency room with dys-

pnea. The patient had complaints of fatigue and fever six months before, for which he did not seek treatment. Subsequently, he developed progressive dyspnea. On physical examination, his body temperature was 36.8 °C, and auscultation showed basilar rales and an apical pansystolic murmur. Transthoracic echocardiography showed normal systolic function, severe mitral regurgitation, moderate-to-severe tricuspid regurgitation, and severe aortic regurgitation. A fibrillary structure was also noted moving into the left ventricle with mitral valve closing (Fig. A, B). Transesophageal echocar-

diography was performed for definite diagnosis, which revealed rupture of the noncoronary cusp of the aortic valve. Color Doppler imaging showed a regurgitation jet within this ruptured segment. Transesophageal echocardiography also showed anterior mitral valve chordal rupture and severe mitral regurgitation (Fig. C, F). Infective endocarditis was suspected, but no causative agent was isolated from three sets of blood cultures. White blood cell count, serum CRP, and sedimentation rate were in normal limits. Serologic tests for brucella were negative. These findings were suggestive of a complication of infective endocarditis that previously improved, affecting both the mitral and aortic valves. Surgical intervention was planned after preoperative coronary angiography.



**Figures.** Transthoracic echocardiography: (A) Apical four-chamber view shows a fibrillary structure that moves into the left ventricle with mitral valve closing and into the left atrium with mitral valve opening (white arrow). (B) Color flow image shows severe mitral regurgitation.

Transesophageal echocardiography: (C) The white arrow shows a hypoechogenic cystic structure on the aortic valve, suggestive of an abscess cavity as a complication of previous infective endocarditis. (D) The color flow image of the same view demonstrates an aortic jet through the abscess cavity into the left ventricle outflow tract, indicating rupture of the aortic valve. The white arrows show (E) the ruptured leaflet of the aortic valve and (F) ruptured chorda of the anterior mitral leaflet.