

Degenerative and calcific mass on the mitral valve: echocardiography and magnetic resonance imaging findings

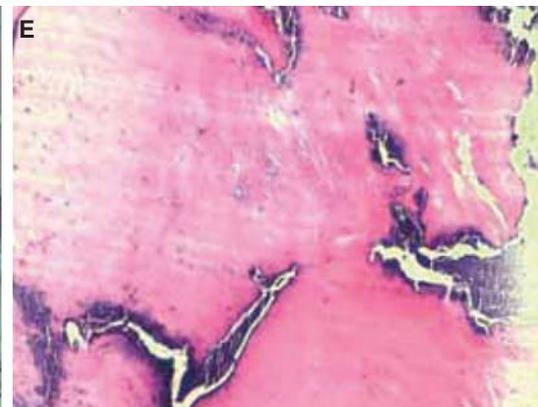
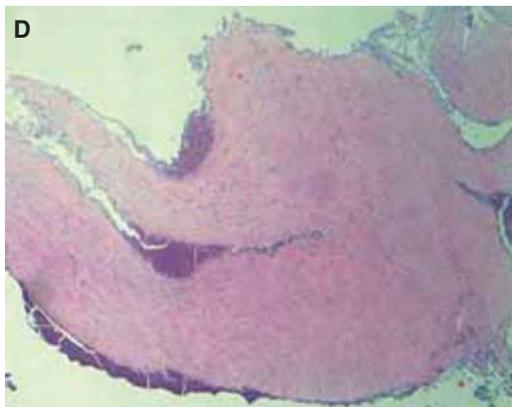
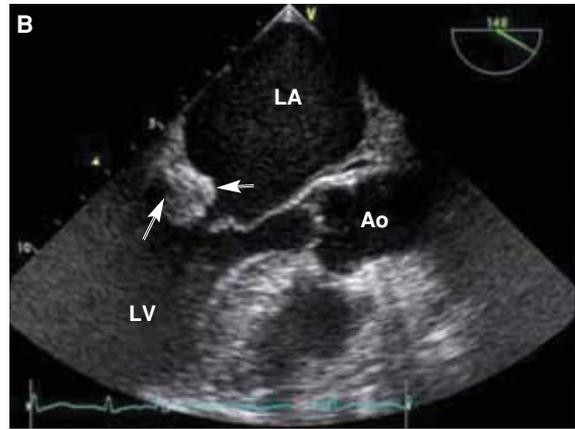
Mitral kapakta dejeneratif ve kalsifik kitle: Ekokardiyografi ve manyetik rezonans görüntüleme bulguları

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A 76-year-old woman presented with complaints of dyspnea and palpitation. Examination revealed a blood pressure of 100/60 mmHg and heart rate of 96 beats/min which was in sinus rhythm. A 2/6 systolic murmur was heard at the apex. Her pulmonary examination revealed bilateral basal rales. The patient's function capacity was of NYHA Class III. Transthoracic echocardiography revealed normal findings of left ventricular diameter and ejection fraction. The aortic valve was found to be calcific. A first degree aortic regurgitation and a second degree tricuspid regurgitation were detected. The pulmonary artery pressure was measured as 90 mmHg. The mitral valve was calcific with limited motion; a calcific mass of 2.4x2.7 cm in size was identified on the posterior leaflet of the mitral valve (Figure A). The transesophageal echocardiography which was performed to better evaluate the structure and position of the mass demonstrated a 2.0x2.4 cm mass on the ventricular surface of the mitral valve posterior leaflet (Figure B). The cardiac magnetic resonance imaging revealed nodular lesions of approximately 2.5x2.4 cm in size with sharp margins covering the surface of posterior leaflet of the mitral valve, and extending to the left ventricle (Figure C). A surgical valve intervention was scheduled following the coronary angiography during which the mitral valve was replaced. Following histopathological analysis of the removed mass, it was described as calcific and degenerative (Figure D, E). The patient was discharged following stable hemodynamics of the postoperative follow-up.



Figures. (A) Transthoracic echocardiography image showing a 2.4x2.7 cm mass on the posterior leaflet of the mitral valve in the parasternal short axis and modified apical two chamber view (B).

(C) The cardiac magnetic resonance imaging showing a nodular mass of 2.5x2.4 cm in size with sharp margins (D) Pathologic view of the mitral valve, with 40-fold magnification (E) Pathologic view hyalinization and calcification foci of the mitral valve, with 100-fold magnification (hematoxylin-eosin staining).