

Görüntülü olgu örnekleri

Case images

Mitral valve perforation mimicking chordal rupture

Kord yırtığına benzeyen mitral kapak perforasyonu

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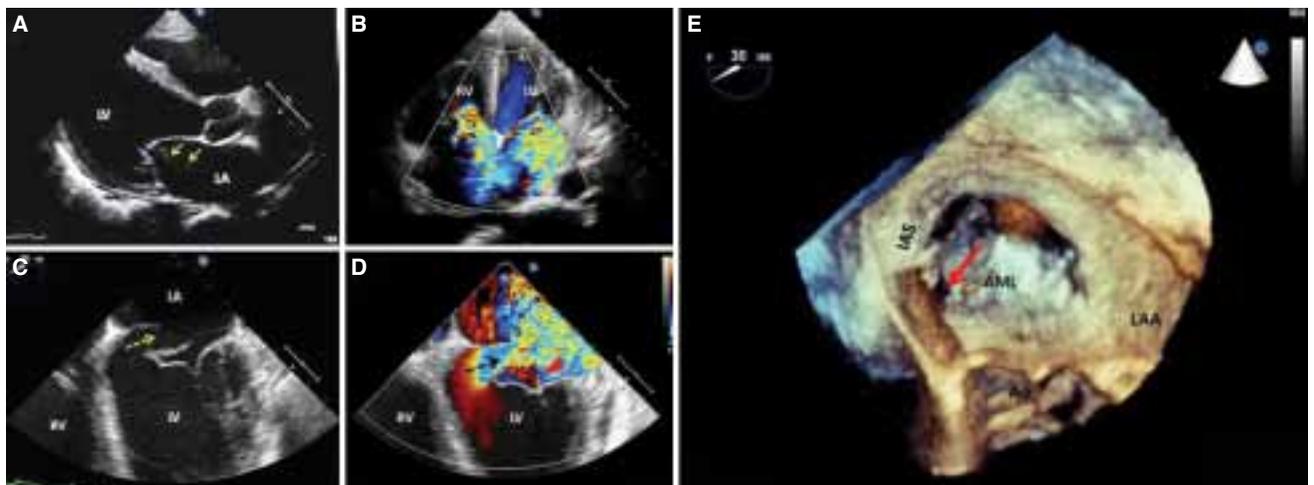
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A 45-year-old male was referred to our institution for the assessment of a two-week history of febrile illness, fatigue and a two-day history of progressive dyspnea. Cardiovascular

examination revealed a 3-4/6 pansystolic murmur at the apex radiating to the axilla, and infective endocarditis was suspected. Laboratory markers were significant for inflammatory markers. Transthoracic echocardiography (TTE) showed severe mitral and tricuspid regurgitation with normal systolic function and a mobile mass on the anterior leaflet of the mitral valve (Figures A, B and Videos 1-2*). Echocardiographic appearance of the mass resembled vegetation or chordal rupture. Transesophageal echocardiography (TEE) was planned for precise identification, and revealed a mitral valve aneurysm that paved the

way for perforation on the anterior mitral leaflet at the region of the A3 scallops as the cause of severe mitral insufficiency (Figures C-E and Videos 3-5*).

He was initially managed with intravenous antibiotic therapy and subsequently underwent mitral valve replacement and tricuspid valve repair. Mitral valve aneurysm and perforation are rare complications of infective endocarditis that necessitate surgical intervention with significant morbidity and mortality, and they are more likely to be associated with significant regurgitant jet. TEE is an excellent technique for revealing detailed anatomical localization of the perforation because of its ability to provide a precise demonstration of the mitral valve. Mitral valve perforation may be confused with chordal rupture, vegetation or mass on TTE due to the comparable echocardiographic appearance. With the unique en face view, TEE imaging makes possible the identification and characterization of this entity and determination of the surgical procedure.



Figures- (A) Transthoracic parasternal long-axis view revealed a fibrillar mass (arrows) attached to the anterior mitral leaflet, consistent with vegetation or chordal rupture. (B) Transthoracic apical four-chamber color Doppler imaging showing severe mitral and tricuspid regurgitations. (C) Transesophageal 2-D echocardiography showing aneurysm and perforation (dotted arrow) of the anterior mitral leaflet. (D) Transesophageal 2-D color Doppler imaging showing mitral regurgitation (dotted arrow) secondary to perforation of the anterior mitral leaflet. Arrowhead shows transvalvular mitral regurgitation. (E) On the left atrial perspective, 3-D transesophageal echocardiography revealed perforation (red arrow) of the anterior leaflet at the A3 scallop. (LV: Left ventricle; LA: Left atrium; RV: Right ventricle; IAS: Interatrial septum; Ao: Aorta; LAA: Left atrial appendage; AML: Anterior mitral leaflet). *Supplementary video files associated with this presentation can be found in the online version of the journal.