Ruptured pseudoaneurysm of mitral-aortic intervalvular fibrosa to aorta simulated paravalvular leakage

Paravalvüler kaçağı taklit eden mitral-aorta kapakları arasındaki fibröz doku psödoanevrizmasının aorta rüptürü

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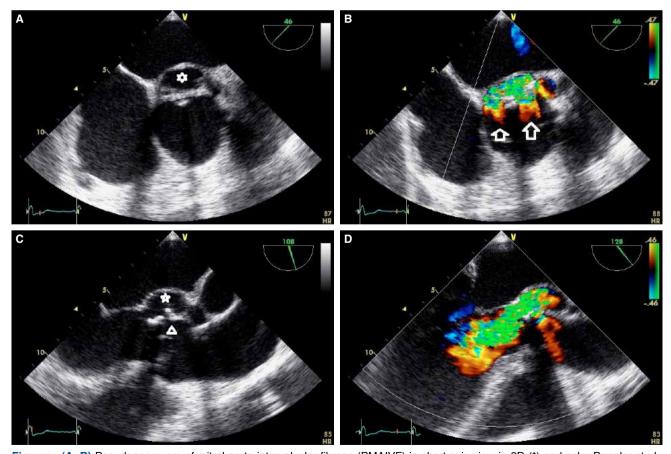
Department of Cardiology, Tehran University of Medical Sciences, Tehran, Iran A 57-year-old male referred to our center for further evaluation of a paravalvular leakage of an aortic bioprosthesis. Because of symptomatic severe aortic valve

stenosis, he had undergone aortic valve replacement (AVR) 9 months previously in another center. Severe paravalvular leakage was reported in a follow-up echocardiography in that center. Physical examinations and lab data were unremarkable. Multiple blood cultures showed no microorganism growth. Transthoracic and transesophageal echocardiography

showed an echo-free space, expanding in systole and collapsing in diastole, between the ascending aorta and left atrium. Also, there were two small orifices (3mm) con-



necting this echo-free space to the ascending aorta, resulting in diastolic turbulent flow that, through this space, entered the left ventricle. (Figure A-D, Video 1-4*) These findings were compatible with a pseudoaneurysm of the mitral-aorta intervalvular fibrosa (PMAIVF) ruptured to the ascending aorta. PMAIVF is a complication of AVR, and may be complicated by rupture to the ascending aorta, so in evaluating patients with a history of AVR, these unusual complications should be kept in mind.



Figures— (A, B) Pseudoaneurysm of mitral-aorta intervalvular fibrosa (PMAIVF) in short axis view in 2D (*) and color Doppler study in transesophageal echocardiography. Two arrows show two connections between PMAIVF and ascending aorta. (C, D) PMAIVF in long axis view in 2D (*) with connection to aorta (arrow) and color Doppler study in transesophageal echocardiography. Arrow shows connection between PMAIVF and ascending aorta. *Supplementary video files associated with this presentation can be found in the online version of the journal.