CASE IMAGE

Absence of posterior mitral valve leaflet detected in late adulthood

Geç yetişkinlik dönemde saptanan posteriyor mitral kapakçık yokluğu

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62-year-old woman Α suffering from dyspnea and palpitation was referred. Electrocardiography (ECG) revealed left bundle branch block and atrial fibrillation. Transthoracic echocardiography revealed absence of posterior mitral valve leaflet (PMVL) and mild mitral regurgitation (Figure A, Video 1^{*}). Posterior myocardial wall replacement of the posterior leaflet had pro-

ceeded to coaptation line of the mitral valve (Figure B, Video 2*). Chordae tendineae and papillary muscles were attached to the tip of posterior myocardial wall. Coronary sinus was dilated. However, contrast echo-cardiography was normal during agitated saline injec-

tion into right and left upper extremity intravenous line. Ejection fraction was 40%, measured by Simpson's rule. Subsequent transesophageal echocardiography (TEE)

confirmed transthoracic echocardiography findings (Figure C; arrow: absent PMVL; Video 3*; all midesophageal views; 87°). Color Doppler examination revealed mild mitral regurgitation in TEE examination (Figure D). Coronary arteries were near normal on angiography. Medical follow-up was decided upon. Congenital malformations of the posterior mitral leaflet are extremely rare and present with a wide spectrum. Hypoplasia of the posterior mitral valve leaflet has been reported, and a few cases of absent PMVL have been described. Absence of the PMVL is usually symptomatic, due to severe mitral regurgitation and coexisting abnormalities such as intracardiac shunt. The present patient was asymptomatic until late adulthood, and no other cardiac anomaly was present. Absent PMVL may be more prevalent in asymptomatic adults than is known.



Figures– (A) Transthoracic echocardiography examination showed absent posterior mitral valve leaflet and the thick muscular formation replacing the posterior mitral leaflet. (B) Apical 4-chamber view. (C) Transesophageal echocardiography revealed that the muscular formation proceeded to coaptation line of the mitral valve. (D) Color Doppler revealed mild mitral regurgitation. LA: Left atrium; AMVL: Anterior mitral valve leaflet; LV: Left ventricle; RA: right atrium; RV: Right ventricle; PMVL: Posterior mitral valve leaflet. **Supplementary video files associated with this presentation can be found in the online version of the journal.*