

Accessory mitral valve associated with cerebrovascular thromboembolism

Serebrovasküler tromboemboli ile ilişkili aksesuar mitral kapak

The patient was a 51-year-old man referred to our hospital for investigation of history of thromboembolic cerebrovascular event and detected heart murmur. He had experienced right-sided hemiparesis 5 days before previously, lasted up to date. Patient had complaints of a mild exertional dyspnea for 3 months, but did not have any predisposing factor for cerebrovascular ischemic attack such as smoking, hypertension, and diabetes. Electrocardiography showed left ventricular hypertrophy although patient was normotensive. A computed tomogram (CT) scan of brain structures showed large infarction in the area of left middle cerebral artery distribution (Fig. 1). CT angiography of aortic arch, neck and cerebral vessels were normal. Transthoracic echocardiography (TTE) demonstrated poorly defined obstructive mass in left ventricular outflow tract (LVOT) under aortic valve prolapsing through native aortic valve during systole (Fig. 2, 3 and Video 1. See corresponding video/

movie images at www.anakarder.com). A mild subaortic obstruction (maximum gradient 80 mmHg, mean gradient 55 mmHg) was demonstrated. Mild aortic regurgitation and mitral regurgitation were detected on color Doppler examination (Fig. 3, 4 and Video 2, 3. See corresponding video/movie images at www.anakarder.com). Transesophageal echocardiography (TEE) revealed an accessory mitral valve (AMV) tissue adhering to anterior mitral valve leaflet and ballooning into LVOT during systole (Fig. 5, 6 and Video 4-6. See corresponding video/movie images at

Figure 1. Computed tomogram (CT) view of a large infarction in the area of the left middle cerebral artery distribution



Figure 2. Transthoracic echocardiographic parasternal long-axis view of a mass in left ventricular outflow tract beneath the aortic valve (arrow, diastole)



Figure 3. Transthoracic echocardiographic apical 5-chamber view of a vegetation-like mass beneath the aortic valve (arrow)

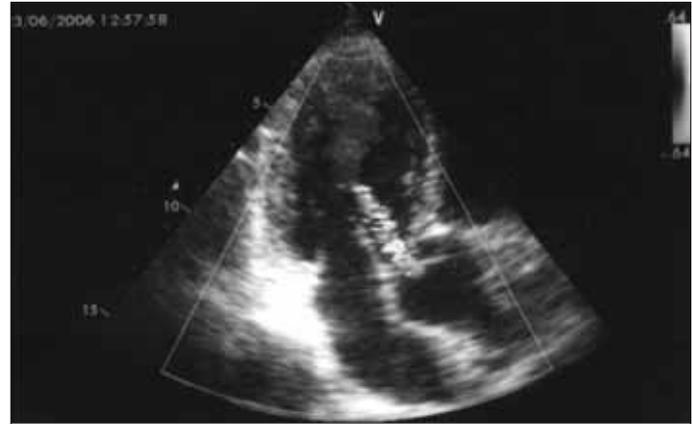


Figure 4. Colour Doppler image of a mild aortic regurgitation

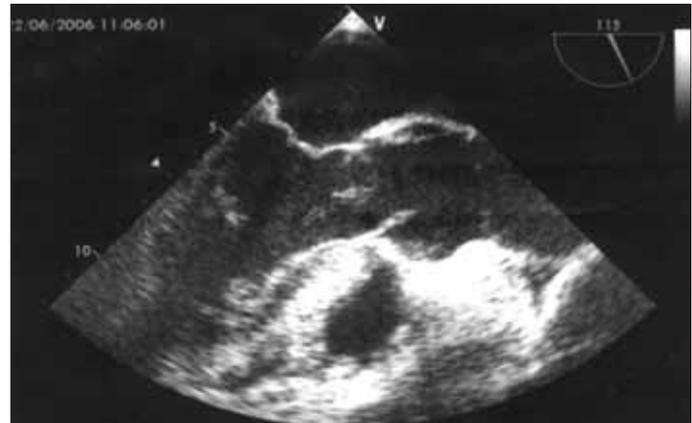


Figure 5. Transesophageal echocardiography, 115-degree, systolic frame view: An accessory mitral valve (arrow) prolapsing through the aortic valve during systole



Figure 6. Transesophageal echocardiography, 150-degree, systolic frame view: An accessory mitral valve (arrow) prolapsing through the aortic valve during systole

anakarder.com). During TEE, no other congenital cardiac abnormalities found and no spontaneous echo-contrast or thrombus formation were detected. Cardiac catheterization revealed normal coronaries and LVOT gradient of 30 mmHg. In the absence of relevant obstruction of LVOT, patient is being followed up without surgical intervention and was recommended to start oral anticoagulation treatment with phenprocoumon to prevent recurrent cardioembolic events and prophylaxis for bacterial endocarditis.

Accessory mitral valve should be considered in differential diagnosis of LVOT obstruction. Transesophageal echocardiography is superior to TTE for diagnosing of sources of intracranial emboli. Accessory mitral valve without serious LVOT obstruction carries a risk of thromboembolic complication. Antiplatelet drugs should be suggested even in the absence of predisposing factor for cerebrovascular thromboembolic complication and serious LVOT obstruction.

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Porcelain left atrium

Porselen sol atriyum

Calcification of the left atrium occurs especially long years after mitral valve operations. Extensive left atrium calcification after mitral valve replacement was reported in the literature and complete calcification has been described as a "coconut atrium" or "porcelain atrium".

A 76-year-old woman who had diabetes mellitus, hypertension and the story of open mitral commissurotomy for rheumatic mitral stenosis

was admitted to our department because of chest pain, dyspnea and pretibial edema. On physical examination she had arrhythmic heartbeats, 2/6 systolic murmur on the second left intercostal space, ++/++ pretibial edema, painful hepatomegaly and venous jugular distension. The electrocardiography revealed atrial fibrillation with a ventricular rate of 60 beats/min and ST depression in the inferolateral derivations. Chest radiography demonstrated an enlarged cardiac silhouette and linear calcification on the left atrial zone (Fig. 1). Echocardiogram demonstrated normal left ventricular function, moderate mitral stenosis (mean gradient was 6 mmHg), moderate aortic regurgitation and severe tricuspid regurgitation. Left atrium was dilated and the calcification covered entirely the left atrium (Fig. 2). Catheterization and coronary angiography showed normal coronary arteries, mitral stenosis (mean gradient 6 mmHg) and high systolic pulmonary artery pressure (65 mmHg). Ventriculography showed mild mitral regurgitation, extensive calcification of the left atrial zone (Fig. 3a). Aortography also showed extensive calcification of the left atrial zone (Fig. 3b) and 1-2° aortic regurgitation. The patient was discharged with suggestion of surgical operation on the mitral and tricuspid valves.



Figure 1. Chest radiography view of enlarged cardiac silhouette and linear calcification on the left atrial zone

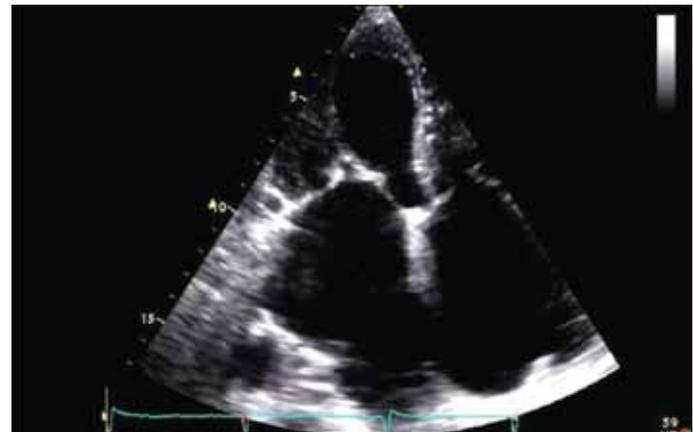


Figure 2. Echocardiography view of dilated left atrium and calcification covering entirely the left atrium