Accessory mitral valve associated with cerebrovascular thromboembolism

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 www.anakarder.com).
Porcelain left atrium

Porcelain sol atrium

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.