

Case images

Olgu görüntüsü

'Ping-pong' ball thrombus in the left atrium

Sol atriyumda pin-pon topu trombüs

Bayram Köroğlu

Adnan Kaya#

Ahmet Öz*

Muhammed Keskin*

Zekeriya Nurkalem*

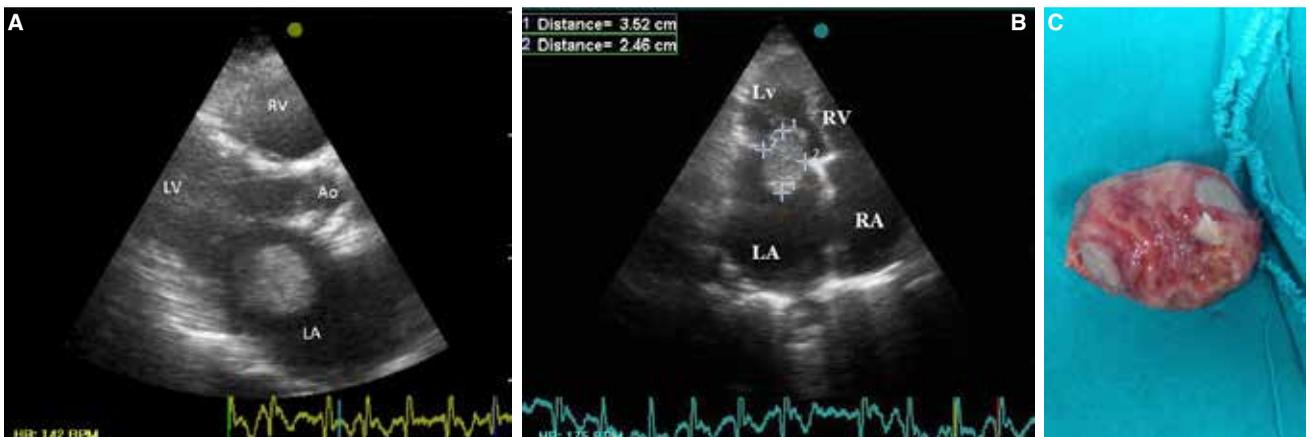
Department of Cardiology, Bingöl State Hospital, Bingöl, Turkey

#Department of Cardiology, Süruç State Hospital, Şanlıurfa, Turkey

*Department of Cardiology, Dr. Siyami Ersek Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Turkey

A 65-year-old woman with earlier diagnosis of severe rheumatic mitral stenosis (MS) presented to emergency department with severe dyspnea and 4 episodes of syncope. Since diagnosis with rheumatic MS 10 years earlier, patient had used warfarin. International normalized ratio of the patient on admission was 1.56, which was suggestive of inappropriate warfarin

use. Patient was dyspneic and tachypneic with altered mental status at admission. On physical examination she was in orthopnea position with respiration effort. Electrocardiogram showed atrial fibrillation with high ventricular response, frequent ventricular ectopic beats, and 148 beats per minute. Her blood pressure was 138/79 mmHg and oxygen saturation was 86% with pulse oximetry. Auscultation revealed loud first heart sound, constant early opening snap, and mid-diastolic murmur that vanished when patient's position was changed. Transthoracic echocardiography revealed thick, stenotic mitral valve with valvular area of 1.1 cm² and large echogenic left atrial mass diagnosed as free-floating left atrial ball thrombus (LABT) (Figure A). Severe tricuspid regurgitation was present with 90 mmHg pulmonary artery systolic pressure. Ejection fraction was preserved. Thrombus had no apparent pedicle and was floating in left atrium during systole phase and obstructing mitral orifice during diastole (Figure B, supplementary material). Patient subsequently underwent urgent surgery to remove "ping-pong" LABT, replace mitral valve (CarboMedics 27 mm mechanical prosthesis; CarboMedics, Inc., Austin, TX, USA) and repair tricuspid valve. Resected mass resembled a ping-pong ball, and there was no attachment to atrial wall. No additional mural thrombus was found (Figure C). First 3 days after surgery were uneventful. Patient was intubated on postoperative fourth day due to carbon dioxide retention and died on postoperative 30th day as result of ventilator-associated pneumonia.



Figures– (A) 2D transthoracic echocardiography revealed large echogenic left atrial mass diagnosed as free-floating thrombus. **(B)** Figure B and supplementary material. 2D transthoracic echocardiography view of thrombus floating in left atrium during systole phase and obstructing mitral orifice during diastole. **(C)** Macroscopic view of "ping-pong" ball thrombus extracted from left atrium.