

## Case images

## Olgu görüntüsü

## Right atrial myxoma causing distortion of interventricular septum in diastole

## Diyastolde interventriküler septumun distorsiyonuna neden olan sağ atriyal miksoma

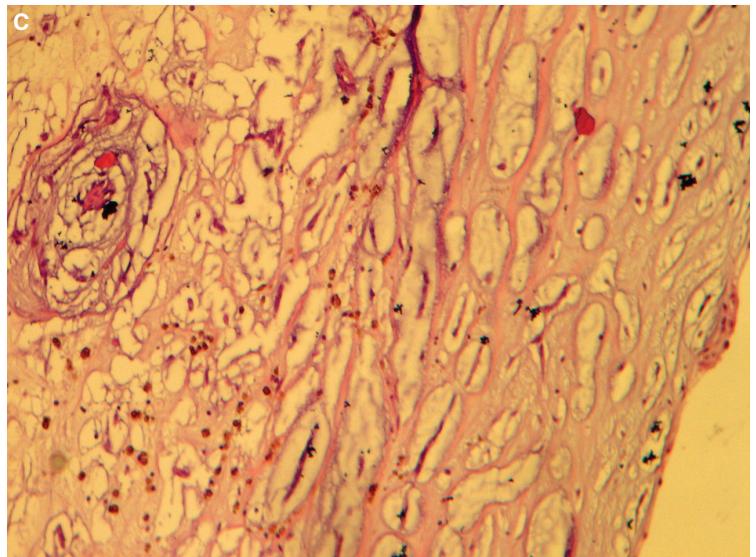
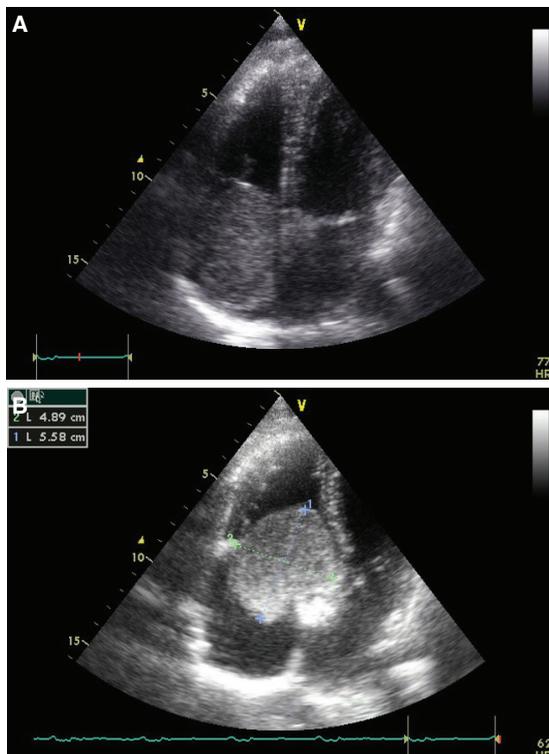
Rezvaniyeh Salehi  
Leili Pourafkari  
Behrouz Shokouhi#  
Nader D Nader\*

Cardiovascular Research Center,  
Tabriz University of Medical  
Sciences, Tabriz, Iran  
#Department of Pathology,  
Tabriz University of Medical  
Sciences, Tabriz, Iran  
\*Department of Anesthesiology,  
University At Buffalo, New York,  
United States

A 57 year-old male presented to our emergency department with syncope and resting dyspnoea. The patient reported worsening dyspnoea upon exertion for the past 6 months. Past medical history was negative, and he did not take any medications except for bronchodilators with minimal effect. He was not a smoker. Vital signs included blood pressure of 90/62 mmHg,

heart rate of 98 beats per minute, and respiratory rate of 22 breaths per minute. Physical examination found jugular vein distension, pedal edema, III/VI diastolic murmur, and abnormal early diastolic sound. Electro-

cardiography showed normal sinus rhythm with tall P waves (P pulmonale) and no irregularities. Echocardiography showed a large right atrial (RA) mass (Figure A) originating from the interatrial septum, nearly obstructing the RA cavity and protruding through the tricuspid valve (TV) in diastole, causing mechanical distortion of the interventricular septum (IVS) (Figure B, Video 1\* and Video 2\*). Rapid diastolic movement of the tumor through TV was hampered by its sudden collision with IVS, causing paradoxical bulging of IVS into the left ventricle in diastole (Video 3\*). The inferior vena cava was dilated with reduced respiratory collapse (Video 4\*). The patient underwent surgery, and a 5.6x5x5 cm mass originating from the fossa ovalis was resected. Pathological examination showed the tumor to be composed of round polygonal or stellate cells, which were surrounded by abundant loose stroma rich in acid (Figure C). Mitoses, pleomorphism, and necrosis were absent. The pathological report was consistent with atrial myxoma. The patient made a full recovery.



**Figures– (A)** Echocardiogram obtained in apical 4-chamber view showing a large mass occupying the right atrium in systole. **(B)** Apical 4-chamber echocardiographic view showing prolapse of the mass through the tricuspid valve in diastole. **(C)** Pathological examination showing round and polygonal cells surrounded by abundant loose stroma rich in acid in favour of myxoma. \*Supplementary video files associated with this presentation can be found in the online version of the journal.