

## Images in cardiovascular medicine

### **Partial left-sided pericardial absence mimicking a cardiac tumor**

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In December 2000, a 67-year-old woman was referred to the Outpatient Cardiology Clinic to be evaluated for dyspnea after an attack of acute bronchitis. The transthoracic echocardiogram revealed a normal left ventricular function. However, a mass adherent to the lateral wall of the left atrium was seen (Fig. 1). In the belief that this mass was a cardiac tumor, a transesophageal echocardiogram was performed. A particularly poor transesophageal window was noticed and this examination did not clarify the nature of the mass. Therefore, a cardiac magnetic resonance imaging study was done (Fig. 2).

Magnetic resonance imaging showed: 1) partial absence of the left-sided pericardium, with a marked shift of the heart to the left; 2) indentation of the left atrium by the vertebral column.

The shift of the heart to the left explained the bad transesophageal window. The compression of the vertebral column explained the tumor-like mass in the left atrium. No other anatomical or functional anomaly was noticed.

Currently, the patient is asymptomatic, and has recovered completely from the episode of bronchitis.



**Figure 1.** Transthoracic echocardiography, parasternal long-axis view. The arrow points to the mass adherent to the lateral wall of the left atrium (LA). LV = left ventricle.



**Figure 2.** Cardiac magnetic resonance imaging, long-axis view. The arrows point to the mass adherent to the lateral wall of the left atrium (a) and to the lateral wall of the left ventricle where the pericardium is lacking (b). The cardiac structures are left-right rotated with respect to the echocardiogram. Note also that in the thorax the aorta lies to the right of the vertebral column. AO = aorta; LL = left lung; RL = right lung. Other abbreviations as in figure 1.

Partial left-sided pericardial absence is sometimes complicated by herniation of the left atrial appendage, left atrium or ventricle with associated chest pain and/or syncope<sup>1</sup>.

Echocardiography and cardiac magnetic resonance imaging represent the best non-invasive techniques for the evaluation of this rare condition<sup>2</sup>.

## **References**

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