

## IMAGE IN CARDIOLOGY

# An atypical case of left atrial myxoma

## Caso atípico de mixoma arterial esquerdo

Sherif Moustafa<sup>a,b,\*</sup>, David J. Patton<sup>c</sup>, Michael S. Connelly<sup>d</sup>, Nanette Alvarez<sup>d</sup>,  
Timothy Prieur<sup>d</sup>, Farouk Mookadam<sup>b</sup>



<sup>a</sup> Department of Cardiovascular Diseases, Prince Salman Heart Center, King Fahad Medical City, Riyadh, Saudi Arabia

<sup>b</sup> Division of Cardiovascular Diseases, Mayo Clinic Arizona, AZ, USA

<sup>c</sup> Section of Pediatric Cardiology, Alberta Children's Hospital, University of Calgary, Calgary, AB, Canada

<sup>d</sup> Division of Cardiovascular Diseases, Peter Lougheed Hospital, University of Calgary, Calgary, AB, Canada

Received 12 June 2014; accepted 16 August 2014

Available online 8 January 2015

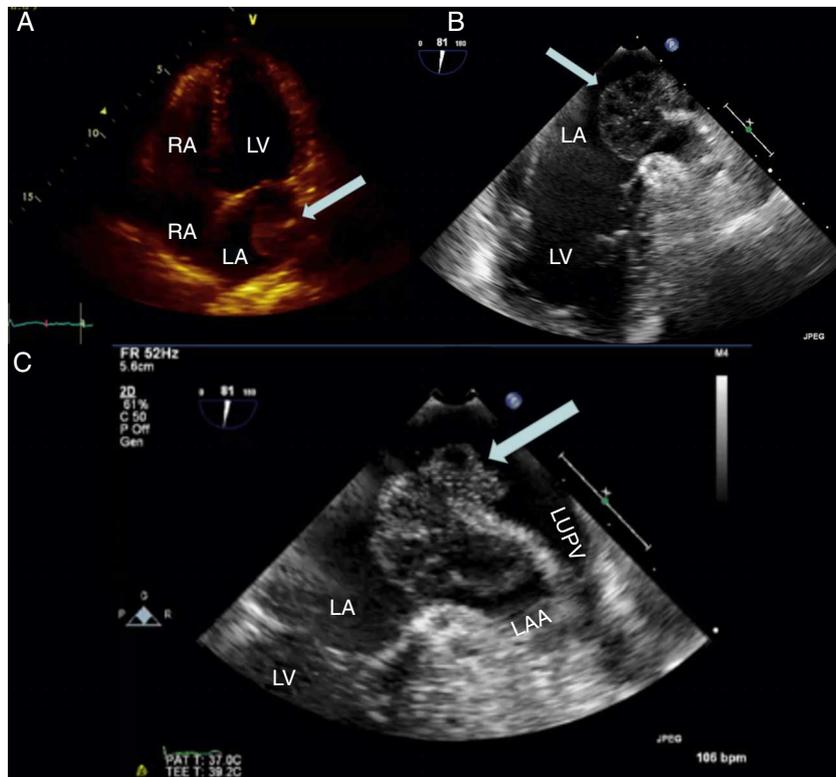
A 51-year-old woman presented with acute onset of left eye blindness and right-sided weakness. Her past history included hypertension and type 2 diabetes. The physical examination was notable for right-sided motor deficit and central retinal artery occlusion of the left eye. The electrocardiogram was unremarkable. Brain computed tomography showed no acute lesions. Magnetic resonance imaging of the brain identified multiple small ischemic lesions in the left cerebral hemisphere along the territories of the left middle and anterior cerebral arteries.

Transthoracic echocardiography revealed a large (22 mm×26 mm) mobile left atrial (LA) mass attached to

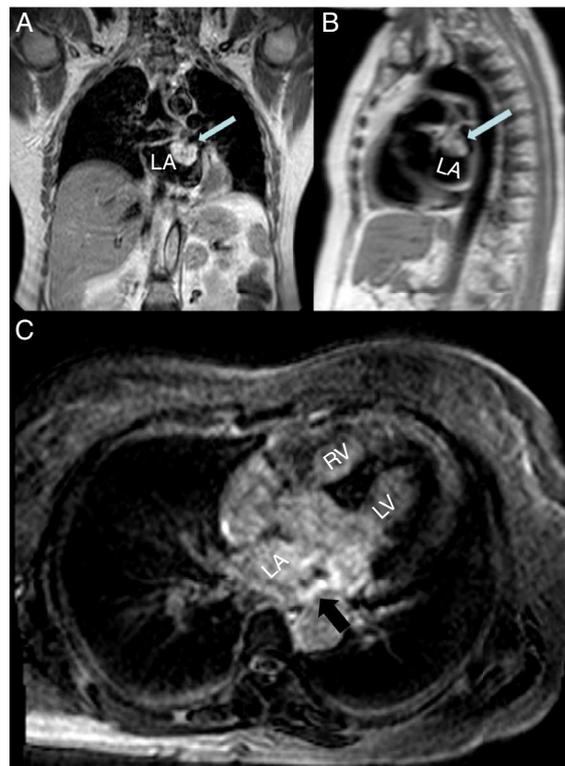
the lateral wall (Figure 1A, Movie 1). Transesophageal echocardiography showed a highly mobile heterogeneous oval pedunculated mass attached to the coumadin ridge and protruding into the LA appendage (LAA) during atrial systole (Figure 1B and C, Movies 2 and 3). The mass did not extend into the left upper pulmonary vein. Cardiac magnetic resonance imaging revealed the mass to have high signal intensity on T1- and T2-weighted sequences (Figure 2A and B). Late enhancement images revealed a hyperintense mass in keeping with LA myxoma (Figure 2C). The patient underwent surgical excision of the mass, due to its recurring embolic potential. Recovery was uneventful. Histology showed typical features of myxoma.

\* Corresponding author.

E-mail address: [sherifmoustafamd@yahoo.com](mailto:sherifmoustafamd@yahoo.com) (S. Moustafa).



**Figure 1** (A) Transthoracic echocardiography, 4-chamber view, showing a large mass attached to the lateral wall of the left atrium (arrow); (B and C) transesophageal echocardiography, modified 2-chamber views, showing a large mass attached to the coumadin ridge with a broad stalk (B) and protruding into the left atrial appendage during atrial systole (C) (arrows). LA: left atrium; LAA: left atrial appendage; LUPV: left upper pulmonary vein; LV: left ventricle; RA: right atrium; RV: right ventricle.



**Figure 2** (A and B) Cardiac magnetic resonance (CMR) imaging, coronal T1-weighted (A) and sagittal T2-weighted (B) sequences, revealing the high signal intensity of the left atrial mass (arrow); (C) CMR late enhancement image identifying a hyperintense mass (arrow). LA: left atrium; LV: left ventricle; RV: right ventricle.

Atrial myxoma is the most common cardiac neoplasm, constituting around 50% of all primary cardiac neoplasms. It is most often located in the LA (75–80%) and typically arises from the interatrial septum around the fossa ovalis. Rarely, myxoma may be situated in the LAA or attached to the coumadin ridge, as observed in our case.

### **Ethical disclosures**

**Protection of human and animal subjects.** The authors declare that no experiments were performed on humans or animals for this study.

**Confidentiality of data.** The authors declare that no patient data appear in this article.

**Right to privacy and informed consent.** The authors declare that no patient data appear in this article.

### **Conflicts of interest**

The authors have no conflicts of interest to declare.

### **Appendix A. Supplementary data**

Supplementary data associated with this article can be found in the online version at [doi:10.1016/j.repc.2014.08.014](https://doi.org/10.1016/j.repc.2014.08.014)