

A huge left atrial mass “not a myxoma”

Thomas Strecker¹, Petra Rümmele², Timo Seitz¹, Ehab Nooh¹

¹Center of Cardiac Surgery, Friedrich-Alexander-University, Erlangen, Germany

²Institute of Pathology, Friedrich-Alexander-University, Erlangen, Germany

Intracardiac masses could be asymptomatic and coincidentally discovered and can result in severe life-threatening cardiovascular complications necessitating emergency surgery. Herein, is presented a successful surgical resection and histological examination of a large mass in the left

atrium (LA) detected in a 75-year-old Caucasian female with symptoms of heart failure (NYHA class III) which had lasted for about 4 weeks. Furthermore, she noted progressive severe edema in both lower extremities over the previous week upon admission. The electrocardiogram (ECG) showed

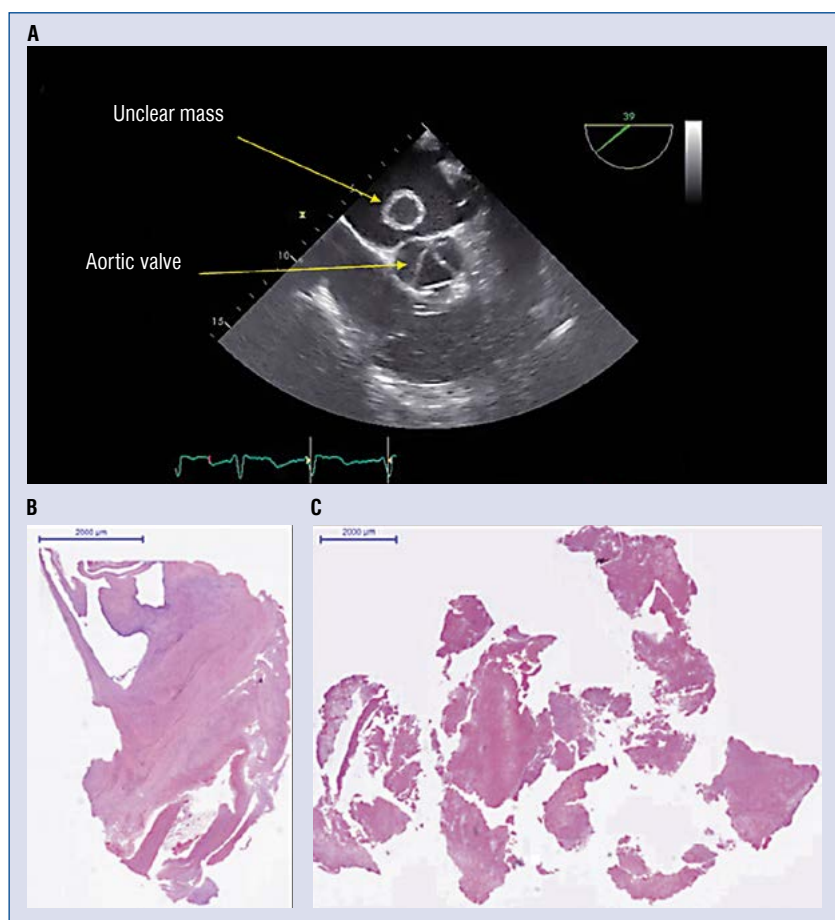


Figure 1. A. Transesophageal echocardiography demonstrated a large suspicious mass within the left atrium; **B.** Histological examination revealed an organizing mural thrombus (HE, 10×); **C.** A mobile thrombus, fragmented (HE, 7×).

Address for correspondence: Thomas Strecker, MD, PhD, Center of Cardiac Surgery, Friedrich-Alexander-University, Krankenhausstrasse 12, 91054 Erlangen, Germany, tel: +49-9131-85-37023, fax: +49-9131-85-37058, e-mail: thomas.strecker@uk-erlangen.de

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rate controlled atrial fibrillation; therefore the patient was anticoagulated with phenprocoumon.

At hospital admission, duplex sonography of the pelvic and lower limb vessels revealed a thrombus which was approximately 10 cm in size in the left superficial femoral vein, and occlusion of both superficial femoral arteries. Subsequently, transthoracic echocardiography (TTE) and transesophageal echocardiography (TEE) demonstrated a large suspicious mass (diameter: 37 mm × 28 mm) within the LA attached to the interatrial septum with moderately impaired left ventricular ejection fraction of 40%. This mass showed a dense margin and a light echogenic center (Fig. 1A). The cardiac valves appeared almost normal with slight aortic and mitral valve regurgitation. Invasive coronary angiography showed no evidence of significant stenosis in all coronary arteries (**Supplementary Video — see journal website**).

Initially, the patient underwent a necessary embolectomy of the left and right popliteal, fibular and tibial arteries. Subsequently, 10 days post initial diagnosis of the intracardiac mass, the patient was operated upon to remove the mass through a median sternotomy, the cardiopulmonary bypass was established using aorto-bicaval cannulation. After opening the LA and right atrium, only a very small (10 mm × 2 mm) retractile mass with a tiny pedicle attached to the interatrial septum was found in the LA cavity and was excised with a safety margin. The resulting

defect in the septum was then directly closed. The patient was easily weaned from cardiopulmonary bypass. She made an almost uneventful recovery; especially neurologically. She was extubated on the first postoperative day, and transferred to intermediate care on day 5. Before leaving the hospital, the TTE showed a moderate impairment of ventricular function, well-functioning heart valves, no intracardiac masses and no pericardial effusions.

Histological examination of the excised mass showed only thrombotic tissue without atypical lipoblasts, atypical stromal cells or other features of malignancy (Fig. 1B, C).

The reported case illustrates an unusual example and imaging of an intracardiac thrombus. The potential cause of initial thrombus size reduction from 37 × 28 mm to 10 × 2 mm was the preoperative administration of anticoagulation and intraoperative use of heparin before using the heart-lung-machine. The surgical intervention was justified to prevent later circulatory obstructions and further embolization.

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