

# Right Atrial Primary Cardiac Lymphoma

## Clinical Case Portal

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### Case Report

A 61-year-old woman was referred to our Emergency Room for rapidly progressive dyspnoea. Previous history was remarkable for an allergic syndrome. She didn't had any cardiovascular risk factor or history of heart disease. She reported progressive dyspnoea, fatigue and abdominal tension during last months. At admission, she was dyspnoeic (blood saturation 86%), her cuff blood pressure was 90/60 mmHg, and pulse rate was 103 beats/min. She was obese and her clinical examination was otherwise unremarkable. Electrocardiogram showed sinus tachycardia (130 bpm) and diffuse low voltages of QRS complexes. Chest X-ray demonstrated a pleural effusion on the left. Transthoracic echocardiography revealed normal left ventricular volumes and systolic function, mild pericardial effusion, and a possible mass within the right atrium. However, image quality was poor, and a transesophageal examination was requested.

Transesophageal echocardiography confirmed the presence of a large mass occupying the right atrium fig. 1 and extending into the superior vena cava fig. 2. The mass was homogeneous in texture with a smooth surface and it was prolapsing through the tricuspid valve during diastole fig. 3. Venous return through the superior vena cava was impaired fig. 2.

Thorax and abdominal Computed Tomography scan (CT) and Magnetic Resonance Imaging (MRI) confirmed the atrial mass fig. 4 and its extension from the right atrium to the femoral veins through the inferior vena cava, and the right jugular vein through the superior vena cava fig. 5.

The patient's conditions deteriorated progressively, with refractory hypotension and right cardiac failure, and a fatal outcome occurred 20 days after admission.

On autopsy, a large whitish polypoid mass with multiple nodules was found in the right atrium and superior vena cava fig. 6. There was also mediastinum lymphadenomegaly, and thrombosis on the iliac venous. Histopathological examination of the mass revealed a monotonous population of B-cell lymphoma, infiltrating the atrium wall fig. 7.

Video 1 :

[Primary right atrial lymphoma. Longitudinal view of the right atrium at transesophageal echocardiography](#)



Video 2 :

[Primary right atrial lymphoma. Extension of the tumour within the superior vena cava that is nearly completely occluded](#)



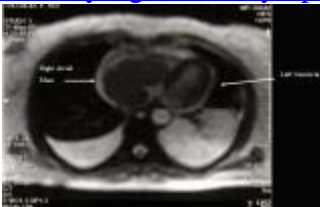
Video 3 :

[Primary Right Atrial Lymphoma. Transesophageal echocardiography \(4 CH view at upperoesophagus\)](#)



Fig. 1 :

[Primary right atrial lymphoma. Magnetic Resonance Imaging](#)



**Fig. 2 :**  
Primary right atrial lymphoma. CT scan of jugular veins



**Fig. 3 :**  
Primary right atrial lymphoma. Autopsy findings



**Fig. 4 :**  
Primary right atrial lymphoma. Histological finding

