

## Right Atrial Myxoma Versus Highblood Pressure And Coronary Artery Disease In The Development Of Chest Pain And Dyspnoea

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**Abstract:** Myxomas are the most common cardiac tumors but Right atrial myxoma is very less common among myxomas. Clinical presentation varies considerably. We report about a 52 years old man who was admitted in our unit for chest pain, dyspnoea which developed progressively among the last 4 years. Investigations found near a left ventricular dysfunction a large right atrial myxoma, known 10 years ago. Management involved a CABG and surgical removal of this tumor anatomopathological as myxoma described. The patient did well 3 months after this procedures.

### INTRODUCTION

More than 80% of myxomas are found in the LA [1] and in decreasing frequencies in the RA, RV and LV. the incidence of cardiac myxoma peaks at 40-60 years of age, with a female to male ratio of 3:1 [2]. They are thought to arise from remnants of subendocardial cells or from pluripotential mesenchymal cells in the region of the fossa ovale.

The only treatment is surgical removal by either right or left atriotomy or combined atriotomy, with a time of recurrence in different series variable from 0,5 to 6,5 years [3].

Clinical presentations are various and in some cases atypical. We report a case of RA myxoma which was discovered after patient develop chest pain.

### case presentation

A 52years old male patient was admitted for chest pain and dyspnoe in our unit. This patient was symptomatic 4 years ago, essentially chest discomfort and progredient dyspnoe on effort.

He has as particular risk an arterial hypertension. It was nothing significant among family members as said by the patient.

His examination found an irregular rythm with an loud 3/6 systolic murmur at the lower xyphoid. Blood pressure was normal, pulses didn't show anomalies.

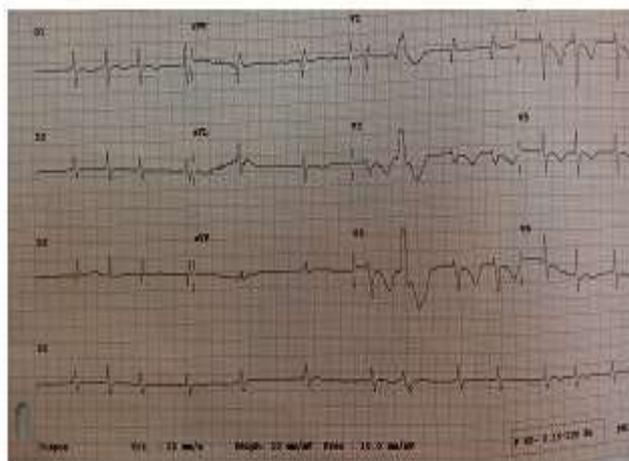
Labor parameters revealed following:

- a cardiomegaly on chest radiography
- an AF, right axis deviation with right bundle block, isolate ventricular extrasystole (fig. 1 )
- the thoracic echocardiography (TTE) showed cardiac enlargement, a large 9,9x7,2 cm right atrial mass in large contact with the atrial septum. Further a tricuspid regurgitation was noted.

Further investigations and management were performed abroad. Surgical removal of the cardiac mass with myxoma confirmation and CABG were successfull realized for a three-vessel significant stenosis.

The patient is 3 months post operationem in very good state.

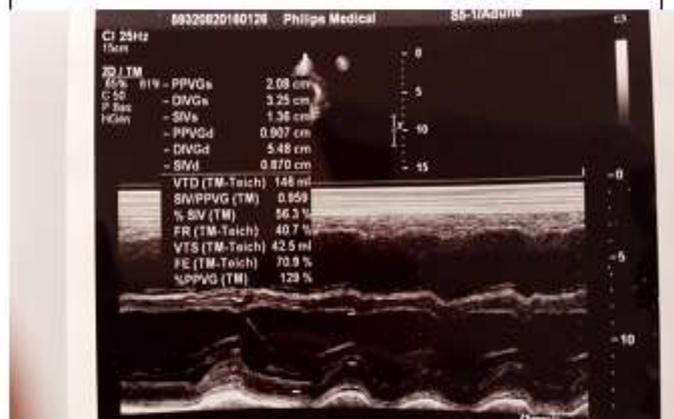
**Fig.1:** 12-leads ECG showingatrial fibrillation, right axis deviation and right bundle block as well as repolarisation disorders and isolated ventricular extrasystole



**Fig.2:** echocardiogramm showing the large right atrial myxoma



**Fig. 3:** parasternal long axis view showing left ventricular size and function as well as right ventricular enlargement



**Fig. 4:** chest radiogramm with cardiomegaly



### Discussion

Myxomas are very frequent among cardiac tumors, about fifty percent [4 ] but right atrial myxoma is less common as noted in the literatur [5, 6] and myxoma occurs in a female:male ratio of 3:1[2].

Clinical presentations varied and can be grouped in 3 types: obstructive, constitutional and embolic [7]. Our patient presented symptoms related to the first group namely chest discomfort and dyspnoe.

Constitutional type of symptoms was not found but questions about embolic muss be discussed.

They may be at earlier time developed and not noted by the patient.

Pulmonary embolism which should be the immediately possible complication was not clearly found and paradoxical systemic embolism occur should be ruled out in absence of data on TTE and from the surgical report.

As this myxoma was 10 years ago recognized by the patient, questions about symptom development should involve 3 conditions which all can lead to chest discomfort and dyspnoea : highblood pressure, right atrial tumor and coronary artery disease. We think that coronary artery disease leads the patient to our unit.

This patient needs survey not only because of the CABG but as a recurrence of myxomas could occur in the next 6 years [3]. Even in left atrial myxoma, myocardial infarction is rare [8], estimated to 0,06% by Lehrman et al. [9]. Explanations for that were given by Panos and colleagues [10].

We muss finally consider the chest pain as consequence of an independant development of a coronary artery disease.

Myxoma can be for a long time asymptomatic and incidentally discovered.

We shall not forget that patients sometimes underestimates symptoms occurrence and will not be checked even labors and echocardiography are available.

#### Conclusion:

Atrial myxomas had variables clinical presentations but could also be for long time asymptomatic as for our patient or incidentally discovered. If present highblood pressure, coronary artery disease can lead to hospital visit.

TTE performing gives the key and confirmation after pathological study of the surgical piece. Surgical removal as the only definitive procedure for such tumour, which necessity to survey due to the risk of recurrence.

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