



## A Sudden Onset of Parossistic Atrial Fibrillation

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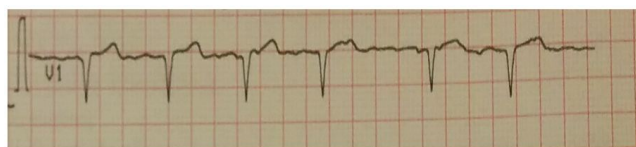
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### Case Report

A 67 years old woman with a medical history notable for arterial hypertension presented with sudden onset of parossistic atrial fibrillation and shortness of breath. On examination, she appeared in good health condition. The blood pressure was 155/85 mm Hg, the pulse 125 beats per minute and the axillary temperature 36.5°C; the respirations were 24 breaths per minute. There was a grade 3/6 holosystolic murmur above the cardiac apex radiating posteriorly. Electrocardiography confirmed the presence of parossistic atrial fibrillation (Figure 1); a transthoracic echocardiography revealed a mass (3.4 by 7.8 cm) (Figure 2) attached to the left atrial septum and protruding through the mitral valve into the left ventricle, suggestive of a myxoma. Given the risk of systemic embolization and sudden syncope, the patient underwent prompt surgical resection of the mass (Figure 3). Pathological evaluation revealed a benign myxoma (Figure 4). The patient had a postoperative good course and was discharged home on the seventh postoperative day.



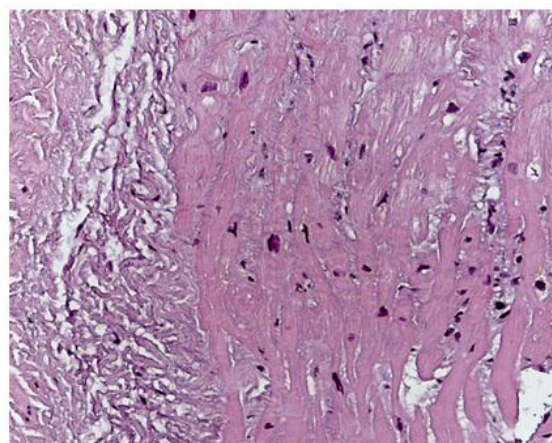
**Figure 1:** ECG showed the presence of the Atrial Fibrillation.



**Figure 2:** Transthoracic echocardiography showed the presence of the CM in left atrium.



**Figure 3:** Myxoma mass after surgical procedure.



**Figure 4:** Histologic slide of the myxoma with vascular structures and myxoid ground substance.

### Discussion

Primary tumors of the heart are rare with an incidence between 0.0017% and 0.19% in unselected patients at autopsy [1]. Although secondary tumours are more common than primary ones, these because secondary are metastasis of other tumours that, of course, are more frequent. Secondary tumours, often, don't need a surgical approach due to the clinical state of patient.

Such as every other neoplasia heart tumour can be divided in two categories: malignant (20%) and benign (80%) [2,3]

Among the benign tumours myxoma is the most common, while among malignant sarcoma is more frequent [4]. Myxoma is also more frequent in woman and can be familiar with an autosomic dominant transmission [5]. About 75% of myxoma is localized in left atrium, while remaining is located in the right atrium.

About clinical presentation, first sign of CM is, often, heart failure derived by the obstruction of blood flow through the mitral valve or by the obstruction of the venous return. For these syncope is one of the first symptoms that occurs, but unfortunately is not a specific symptom. Other signs of CM can be:

Presence of a“tumor plop”during auscultation, embolization of a fragment from the neoplastic mass, fever, loss of weight, other constitutional symptoms (myalgia, arthralgia).

Due to the aspecific symptoms linked to this pathology, diagnosis is often an excluding diagnosis and the gold standard are imaging

techniques like echography, even in 2D then 3D, CT-scan and RMN. In this case, the patient’s cardiac arrhythmia and nonspecific symptoms were due to an obstruction of blood flow through the mitral valve.

Immediate and complete surgical resection is the treatment of choice and long-term follow up is essential to look for any tumor recurrence.

## References

1. Reynen K (1995) Cardiac Myxomas. *NEJM* 333: 1610–1617.
2. MacGowan SW, Sidhu P, Aherne T, Luke D, A. Wood E, et al (1993) Atrial myxoma: national incidence, diagnosis and surgical management. *Ir. J. Med. Sci* 162: 223–226.
3. Silverman NA (1980) Primary cardiac tumors. *Ann. Surg* 191: 127–138.
4. Burnside N, MacGowan SW (2012) malignant primary cardiac tumours. *Interact. Cardiovasc. Thorac. Surg* 15: 1004–1006.
5. Carney JA (1985) Differences between nonfamilial and familial cardiac myxoma. *Am. J. Surg. Pathol* 9: 53–55.