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# A Case of Left Atrial Myxoma Presenting with Repetitive Fainting Episodes and Cerebrovascular Accident and the Utmost Importance of Transesophageal Echocardiography

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# **ABSTRACT**

We report a case of 70-year-old female patient with no relevant medical history presenting with repetitive fainting episodes and recent ischemic cerebrovascular accident. Transthoracic echocardiography showed a mobile oval mass in the left atrium, and transesophageal echocardiogram confirmed the presence of mobile pediculated left atrial mass with intermittent prolapse between mitral leaflets. Surgical removal was performed and anatomopathology revealed a myxoma. We highlight the importance of echocardiography for establishing the initial diagnosis, also transesophageal echocardiography for explaining the symptoms, and for guiding the surgeon to remove the mass.

**Keywords:** Myxoma, Surgical, Fainting, Echocardiography

Abbreviations: CRP: C-Reactive Protein; EKG: Electrocardiogram

#### INTRODUCTION

Cardiac myxoma occur most frequently in the left atrium [1], though they may be asymptomatic for a significant course period, they may present with complications such as emboli or syncope and sudden cardiac death consecutive to prolapse of the mass into the mitral valve. Echocardiography is a paraclinical test of utmost importance for diagnosis of myxoma, also transesophageal echo is essential given the extensive detailed data it may provide in order to localize and characterize the mass.

#### CASE PRESENTATION

A 70-year-old female patient presenting with repetitive fainting episodes, along with a minor ischemic cerebrovascular accident was diagnosed in another medical facility. The patient had no relevant previous medical history. Her physical examination and EKG were normal, also basic blood test revealed normal parameters except mild elevation in inflammatory biomarkers (CRP=20 mg/L). Transthoracic echogram with limited signal quality revealed a suspicious mass in the left atrium, and transesophageal echo revealed an oval mass of 17 mm pediculated behind the posterior mitral leaflets with intermittent prolapse between mitral leaflets (Figure 1); Of note, echo findings revealed moderate mitral regurgitation, normal systolic function, no intercavitary shunt, diastolic dysfunction grade 2 with elevated LV filling pressure. In this context, surgical removal was performed, with a left atrial posterior access behind the posterior mitral leaflet, yielding immediately an oval mass (Figure 2) of nearly 19 mm × 12 mm. Pathology revealed nature as calcified myxoma.

# DISCUSSION

Myxomas are the most common primary cardiac tumors and they account for approximately 50% of all cardiac tumors. Most of myxomas are located in the left atrium and they present with variable clinical manifestations like dyspnea, murmur, systemic embolization, fever, anemia, fatigue, etc. Microfragmentation of myxoma may lead to specific clinical scenario like acute coronary syndrome and vision loss. Moreover, the protrusion of pediculated tumors into mitral valve predisposes to syncope and sudden cardiac death [2,3].

The manifestation of this case includes, 1) the repetitive fainting episodes, a finding that was explained by the

intermittent protrusion of the pediculated mass into the mitral valve; 2) the concomitant occurrence of cerebrovascular accident, which is, until proven otherwise, the result of fragmentation of the myxoma with distal emboli.

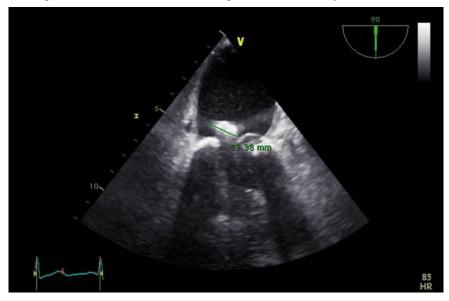


Figure 1 Transesophageal echo (mid esophageal 2 chamber view) at 35 cm from incisors showing anterior mitral leaflet (A1, A2, A3) and posterior mitral leaflet (P3), with an oval pediculated mass of 17.38 mm length, with protrusion between mitral leaflets

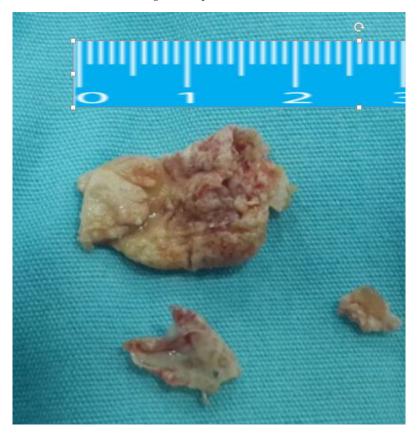


Figure 2 View of the mass after surgical resection

In the presented case, data acquired with transthoracic echocardiography were important for initial diagnosis, also the transesophageal echocardiography was essential in confirming the diagnosis, describing the physical characteristics of the mass, also in localizing the mass which is helpful to guide the surgical access and resection [4].

# **CONCLUSION**

This is a case of left atrial myxoma presenting with repetitive fainting episodes, and ischemic cerebrovascular accident; echocardiography is a fundamental step for the diagnostic and management process. Surgical resection was performed successfully.

# **DECLARATIONS**

#### **Consent for Publication**

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

#### REFERENCES

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