

Myxoma of the Left Atrium : A Case Report

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ABSTRACT

Introduction: Cardiac myxomas are the most common primary intracardiac tumors in adults with a frequency of 0.5 per million inhabitants per year [1]. It is a benign tumor with the left atrial location the most common. Most often the finding is fortuitous on a cardiac ultrasound.

Case presentation: We report the observation of an 83-year-old female patient with a history of hypertension who consults for headache, dizziness, anorexia, drowsiness and dyspnea on exertion. Trans-thoracic cardiac ultrasound objectivizes a left intra-auricular floating mass occupying 2/3, dilation of the right chambers with significant pulmonary arterial hypertension (PAH). The thoracic CT scan found a mass in the left atrium, while the brain CT shows focus of ischemic stroke. Medical treatment was initiated for right heart failure and ischemic stroke, after hemodynamic stabilization, extension workup was indicated followed by surgical evaluation.

Conclusion: Atrial myxoma complicated by ischemic stroke in an elderly patient constitutes a surgical emergency, the management of which must be rapid in order to avoid a poor prognosis.

Key words: : Myxoma, Ischemic stroke, CHU Kati

INTRODUCTION

Cardiac myxomas are the most common primary intracardiac tumors in adults with a frequency of 0.5 per million inhabitants per year [1]. It is a benign tumor with the left atrial location the most common. The clinical presentation may be dominated by signs of mitral stenosis and peripheral embolic events. Depending on the size and mobility of the intracavitary mass, which can interfere with valve clearance and simulate a pseudo-valve syndrome. The friability of the tumor exposes to embolic accidents. Syncope and even sudden death are feared. They are thought to be due to the entrapment of a tumor

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mass in a valve opening, to a massive coronary embolus or more rarely to a major arrhythmia. Most often the discovery is fortuitous on cardiac ultrasound. It remains nevertheless serious by its complications, in particular embolic. We report the case of an incidentally discovered myxoma complicated by ischemic

cerebrovascular accident (stroke) in an elderly subject. Atrial myxoma complicated by ischemic stroke in an elderly patient has a poor prognosis in the absence of surgical management, which motivated us to report this case.

CASE DESCRIPTION

This is an 83-year-old patient with a history of hypertension in irregular care, gynecology-obstetric history: 13 pregnancies, parity 12, alive 6, abortion 1 and death 6. She was seen in cardiology for headache, dizziness, anorexia, drowsiness, NYHA stage II dyspnea, left hemiparesis. The physical examination found a weight = 60 kg, height = 172 cm, turgor of the jugular veins, the general condition was fair, the conjunctivae moderately colored, peripheral pulses perceptible and symmetrical, the heart sounds were audible regular not fast with no over added noises. HR: 60 BPM, blood pressure 120/80 mm Hg, respiratory rate at 20 cycles/min, SO₂: 98%, temperature: 36.7 degrees, fine crackling rales at the pulmonary bases, painful hepatomegaly on palpation with hepato-jugular reflux. On the basis of these clinical signs an admission was proposed. The EKG showed 1st degree atrioventricular block, repolarization disorder (Figure 1), while the trans thoracic cardiac ultrasound found a large floating left intraauricular myxoma attached to the interatrial septum, very mobile crossing the mitral orifice and ending up in the left ventricle during diastole with subtotal obstruction of the mitral orifice and repressed into the left atrium during systole, dilation of the left atrium and right chambers with a High pulmonary arterial hypertension, PAPS = 85 + 15 = 100 mmHg (Figure 2, Figure 3 and Figure 4). The blood count showed anemia (Hb = 7.9g/dl, hematocrit = 25.5%, MCV = 68 fl, TGMH = 20.8 Pg, CCMH = 20.8 g/dl). Hyper leukocytosis = 17.1 10³/ul. The biochemical assessment presented hyper creatinine (1.47 mg/dl), glycemia (0.85 g/l). Transaminases were normal, Ionogram showed hypokalemia, LDL cholesterol = 300 mg/dl, Pro BNP = 9365 pg/ml, thyroid hormones TSH = 2.662 IU/ml. The brain scan found signs of an ischemic stroke. Medical treatment was instituted for hemodynamic stabilization: blood transfusion of 3 bags relay with oral iron, diuretic (injectable furosemide 80 mg per day), low molecular weight heparin (Enoxaparin 0.60 ml 1 dose subcutaneously twice per day), anti-vitamin K (acénocoumarol 4mg 1 tablet per day), IEC (Captopril 25 mg 1 tablet 2 times a day), statin (Atorvastatin 20mg 1 tablet per day), Beta blocker (Bisoprolol 2.5 mg 1 tablet per day), the antibiotic therapy (amoxicillin acid clavulanique 1g 2 times a day). A surgical evaluation was underway, unfortunately she died before the preparations for the surgery were completed.



Figure 1 : First Degree Atrio Ventricular Block

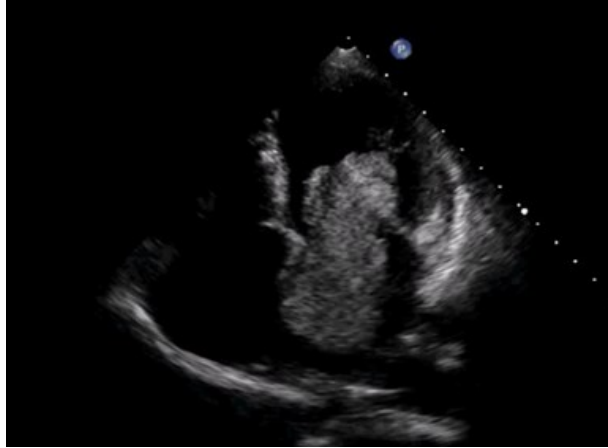


Figure 2 : 4 Cavity Apical Cut (Repolarization Disorderobstruction of the Mitral Valve Orifice by the Myxoma in Systole)

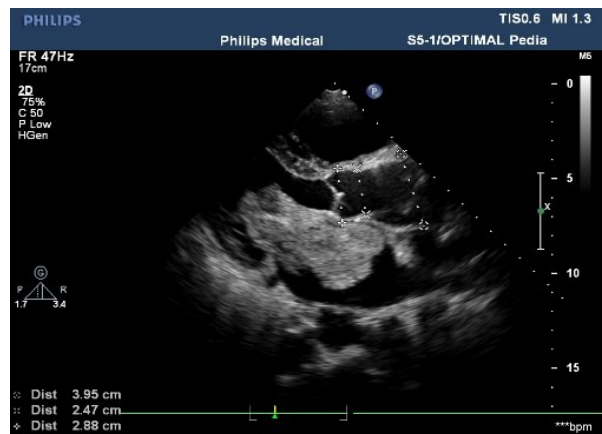


Figure 3 : Para Sternal Large Axis (Obstruction of the Mitral Orifice by Myxoma in Systole)



Figure 4 : Para Sternal Large Axis (Myxoma Inside the Left Atrium in Diastole)

DISCUSSION

Myxoma is a rare tumor representing 0.5 to 1% of soft tissue tumors [2]. Atrial myxoma is a benign heart tumor. It mainly affects women between 40 and 60 years old, its incidence decreases with age and it is exceptionally discovered at 83 years old. The clinical symptoms vary depending on the location of the myxoma, the shape, size, mobility and activity of the patient [3]. Its insidious symptomatology makes diagnosis difficult. For example, myxoma is sometimes seen incidentally during a heart ultrasound. Although histologically benign, its location and complications can be life-threatening. Cardiac myxomas are histologically made up of mesenchymal cells, left over from the embryonic period of cardiac septation. Their consistency is gelatinous, friable, which means that the diagnosis is often revealed by an embolic complication which occurs in 45 to 60% of cases and can involve different organs [4]. Embolus are fragments of the tumor or thrombi formed on its surface. Cardiac ultrasound is the key examination for a positive diagnosis, with a sensitivity greater than 93% [5]. The pedicled appearance of myxomas contributes to the flotation movement towards the mitral orifice and the left ventricle during diastole on the cardiac ultrasound. Our patient presented on physical examination signs of complicated valve syndrome of right heart failure associated with cerebral thromboembolic event. The obstruction of the mitral valve opening results in an increase in the left intra-auricular pressure, a dilation of the left atrium, which promotes blood stasis, the risk of formation of left intra-auricular thrombus, the appearance of arrhythmia, conduction disorder, subsequently pulmonary arterial hypertension sets in responsible for right ventricular failure. Downstream the signs of low flow, which can explain the symptoms of our patient. The hyper mobile aspect of the mass with a hemodynamic impact could be the cause of our patient's stroke. Due to the size and great mobility of the mass associated with the embolic complication, an emergency surgical evaluation was underway, unfortunately the patient died before the operation.

CONCLUSION

Myxoma is a benign tumor with a good prognosis when the diagnosis is made early and supported in particular by the surgical method. Late discovery through complications makes the prognosis grim, such is the case with our patient.

REFERENCES

1. Gregory SA, O'Byrne III WT, Fan P. Infected cardiac myxoma. *Echocardiography*. 2004 Jan;21(1):65-7.
2. Denguir R, Dhiab M, Meddeb I, Hermi N, Khanfir I, Romdhane RB, Khayati A, Gharsallah N, Abid A. Les myxomes cardiaques. Prise en charge chirurgicale. À propos de 20 cas. In *Annales de cardiologie et d'angiologie* 2006 Jan 1 (Vol. 55, No. 1, pp. 49-54). Elsevier Masson.
3. Murayama H, Tamaki S, Kato N, Yuji N, Yokote J, Mutsuga M, Okada M. Right atrial myxoma associated with atrial septal defect: a case report and review of the literature. *Annals of Thoracic and Cardiovascular Surgery*. 2001 Jun 1;7(3):166-9.
4. Braun S, Schrötter H, Reynen K, Schwencke C, Strasser RH. Myocardial infarction as complication of left atrial myxoma. *International journal of cardiology*. 2005 May 11;101(1):115-21.
5. Kosuga T, Fukunaga S, Kawara T, Yokose S. Surgery for primary cardiac tumors: Clinical experience and surgical results in 60 patients. *Journal of Cardiovascular Surgery*. 2002 Oct 1;43(5):581.