The Cardiology 2(1) : 16-18, 2006

Left Atrial Myxoma and Descending Aortic Dissection in a Patient with Cerebrovascular Accident, Incidentally Coexistent Findings

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Abstract: Cardiac myxomas are benign tumors of the heart with a surgical incidence of about 0.5/million population/year. They usually present during 4th to 6th decades and are more commonly seen in woman. About 75% arise in the Left Atrium (LA), most are single pedunculated, although multiple and villous forms have been described. Echocardiography has greatly facilitated the diagnosis of cardiac tumors. We report a case of left atrial myxoma as a source of emboli and incidental finding of localized descending aortic dissection subsequent a remote traumatic deceleration injury of the thoracic aorta. This is the first case of coexistence LA myxoma and aortic dissection.

Key words: Myxoma, aortic dissection, echocardiography

INTRODUCTION

Cardiac myxomas are benign primary tumors of the heart[1]. Echocardiography has greatly facilitated the diagnosis of cardiac tumors[2]. Cardiac myxoma and dissection of aorta have a wide range of clinical presentation. In a case of apparent aortic dissection other diagnosis such as myxoma embolism should be considered[1]. Cardiac myxomas are benign tumors of the heart with a surgical incidence of about 0.5/million population/year. They usually present during 4th to 6th decades and are more commonly seen in woman. About 75%arise in the Left Atrium (LA), most are single pedunculated, although multiple and villous forms have been described[3].

CASE REPORT

A 62-year-old man was referred to our institution for evaluation for cardiac source of emboli. He had a history of hemiparesis and transient aphasia 15 days before. There was no previous history of episodic loss of consciousness, dyspnea, chest pain or other manifestations of probable heart disease .The patient had a previous history of car accident.

Physical examination was unremarkable. ECC and CXR were normal. TTE and TEE revealed a large non homogenous multi lobulated highly mobile prolapsing mass in LA cavity with multiple large highly mobile frond like particles on its surface(high risk for embolization).The attachment site was fossa region of interatrial septum (Fig. 1). There was neither obstruction nor regurgitation

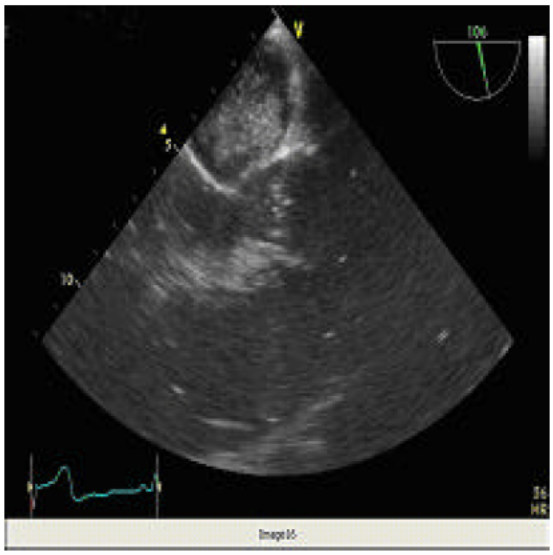

Fig. 1: Transesophageal view on 110° showed large LA myxoma

based on color Doppler study .On TEE there was a thick non mobile localized intimal flap at proximal descending aorta after subclavian artery take off (Fig. 2) secondary to previous traumatic injury of thoracic aorta which was left untreated without any imaging modality.

Cardiac surgery was done and LA myxoma was removed, without additional procedure respect to localized type B dissection. On gross examination the mass was consist of a large (4 by 3 cm) pale gelatinous mass consist of villous type myxoma and on microscopic examination by low power view there was individual tumor

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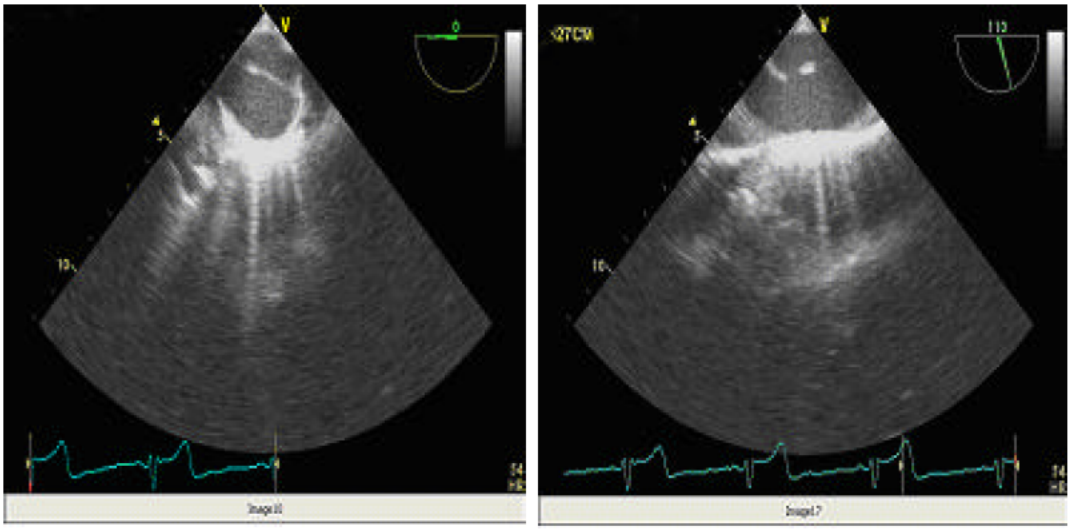

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Fig. 2: Upper transesophageal view on 0° and 90° showed localized dissecting flap

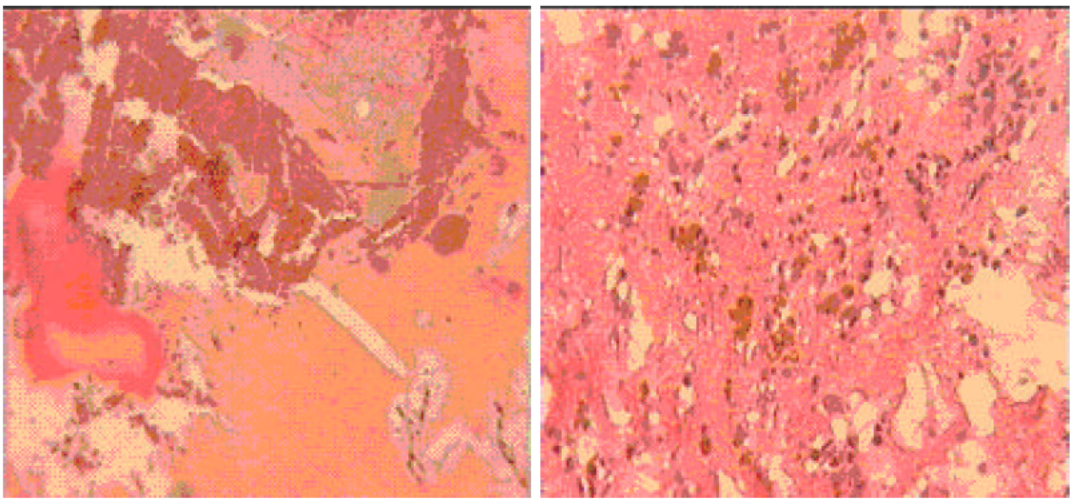

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Fig. 3: Microscopic examination on low (a) and high (b) power field revealed individual tumor cells, clusters and islands scattered throughout the pale granular extracellular matrix

cells, clusters and islands scattered through out the characteristic pale-staining granular extracellular matrix and hemorrhagic area, high magnification view showing variably rounded to elongated myxoma cells (Fig. 3).

The post operative course was uneventful and patient discharged after one week.

DISCUSSION

Although cardiac myxoma are histologically benign, they may be lethal because of there strategic position. Cardiac myxoma must be included in the differential diagnosis of a wide variety of heart disease including source of systemic emboli (30-40% of patients with myxoma), as cerebral emboli in our case. Two dimensional echocardiography is the imaging modality of choice for detection of myxoma. TTE is usually sufficient to make the diagnosis, but if the result is not optimal, TEE should be employed. Coronary angiography in patients over 40 years of age is generally required to rule out concomitant coronary artery disease and also tumor emboli to coronary arteries[3]. The point of view of this case was incidental finding of localized intimal flap in the descending aorta consistent with chronic dissection of aorta due to remote

history of car accident. There was only one report of LA myxoma and suspected aortic dissection which was related to total detachment and embolization of tumor into abdominal aorta and disappearance of foot pulse with no intimal flap by complete study[4]. More than 95% of intimal tears resulting from acceleration and deceleration injuries are usually single lesions mostly located at the level of aortic isthmus,(such as our case).The incidence of aortic intimal tear is probably underestimated as these are usually not visualized by aortography and it is felt that they will generally not lead to rupture, but regress with time. With this in mind ,many thoracic surgeon have requested an aortogram prior to contemplating surgery in a trauma patient .If the aortogram is normal the surgeon would not operate[5,6]. Medical therapy provides an outcome equivalent to that of surgical therapy in patients with uncomplicated distal dissection and medical therapy is recommended in all stable patients with chronic distal and proximal dissection of aorta[7].

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