Myxoma of the right and left ventricles, A Case Report

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Introduction

Myxoma is the most common benign tumor of the heart , with an estimated incidence of 0/5 to 1 per million per year. Over 75 percent originating in the left atrium and 15 to 20 percent originating in the right atrium , with the remaining 8% arising in either the right or left ventricle . The mean age of patient with nonfamilial myxoma is 56 years and 60 to 70 percent of these patients are female. These myxomas occur most frequently between the third and sixth decades of life . Most myxomas are grossly round or oval in shape with polipoid features and others are gelatinous' many are prone to fragment spontaneously (figure 1) . They are essentially nonmalignant. In the 90% of cases. The tumors originate in the atria and the pedunculated masses typically have a base of attachment in the atrial septa . Myxomas analyzied in surgical series typically average 4 to 8 cm in diameter, but the range varies from 1 to 15 cm in the literature. One study reported the weight of resected myxomas ranging from 8 to 175 g . A diagnosis of myxoma requires the presence of myxoma cells. On microscopy, myxoma characteristically shows patterns of lipidic cell embedded in a myxoid stroma.

Case report

A 23 year – old women refered to our center with previous dyspnea. She was pregnant and her gestational age was 12 weeks . Two weeks ago, she found spotting , therefore she went to gynecologist. In routine examination, she revealed murmer, in upper left sternal border and was refered to cardiologist . Transthoracic echocardiography performed revealed two large masses in the right and left ventricles. In the past history , she had previous abortion about 8 months ago . She was nominated for urgent operation. TEE revealed large masses in the right and left ventricles (figures 2,3).The operation was performed through a sternotomy incision. Using standard bicaval and aortic canulation the CPB was established and using standard cardioplegic arrest,right atrium opened, but resection of tumor was impossible from the tricuspid valve and we opened the pulmonary artery. A tumoral mass had protruted the pulmonary artery and its base was near to pulmonary valve on septal band that was removed entirely. To approach to left ventricular mass we tried from left atrium that was inconclusive thus transvers aortotomy was performed but complete resection of tumor was impossible and we performed left ventriculotomy and both masses (one attached to septum and another to LV free wall) were resected . The atriutomy , ventriculotomy and arteriotomy were closed in routin manner. In the second day of ICU hospitalization she aborted her fetus and after ten days she discharged from hospital with good condition . After one month she came to our hospital , transthorasic echocardiography was performed which reaveled only mild PI .No sign of recurrence was noted.

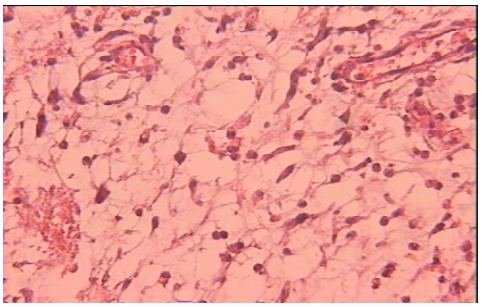

figure 1

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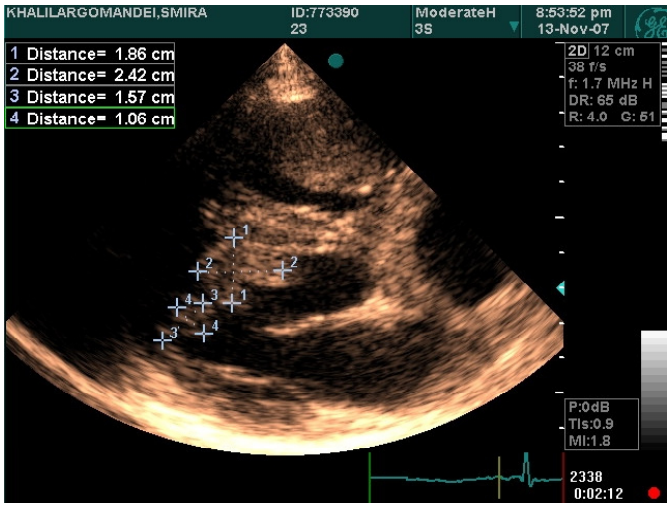

figure 2

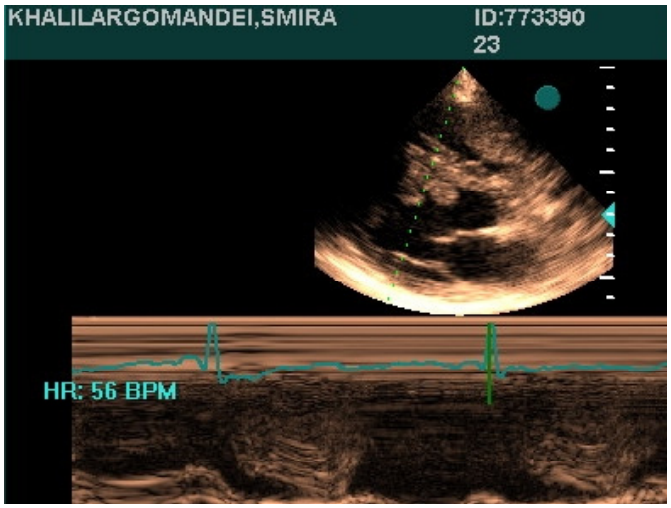

figure 3

Discussion

In 90% of cases, the tumors originate in the atria . Myxoma analyzed in surgical series typically average 4 to 8 cm in diameter, but the range varies from 1 to 15 cm in the literature .

A diagnosis of myxoma requires the presence of myxoma cells. (figure 2). In microscopy , mixoma characteristically shows patterns of lipidic cell embeded in a myxoid stroma. The clinical manifestation of cardiac tumor is based on the location and size and the mobility of the tumor rather than its histology. It is not uncommon for primary cardiac tumor to be diagnosed incidentally , primarily through echocardiography but also by MRI and CT. Surgical resection is the only curative modality among the treatment options for primary cardiac tumor, mostly for cardiac myoma. The standared approach for resection of benign tumors is through a median sternotomy.

Operative mortality is related to advanced age or disability and comorbid conditions. Excition of ventricular myxomas carries a higher risk (approximately 10%) .

Recurence rate of nonfamilial sporadic myxoma is approximately 1% to 4% .Most recurrent myxomas occur within the heart, in the same or different cardiac chambers and may be multiple.Recurent tumors often don't occur at the site of the original tumor. Death after hospital discharge is uncommon, but recurrence of the myxoma can lead to fatal complication.Most other late deaths are often related to causes other than the cardiac tumor.

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