The Heart Surgery Forum #2004-1050
7 (1), 2004 [Epub June 2004]
doi:10.1532/HSF98.20041050

Online address: www.hsforum.com/vol7/issue1/2004-1050.html

Giant Left Atrial Myxoma in a Patient with Mitral Insufficiency: Case Report

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ABSTRACT

We describe a 57-year-old female patient with left atrial giant myxoma and peroperative defined mitral insufficiency who underwent surgery with a diagnosis of a left atrial myxoma without accompanying mitral insufficiency. Although no clinical findings of mitral insufficiency were noticed preoperatively, after myxoma resection moderate mitral insufficiency was observed during surgery. Mitral insufficiency was repaired with annuloplasty. The patient recovered without complication.

MATERIAL AND METHODS

A 57-year-old female patient with complaints of dyspnea, palpitation, and fatigue was referred to our clinic. Her performance status was evaluated as New York Heart Association class III. The patient's symptoms had appeared 1 year before and the severity and frequency of these symptoms had worsened in the previous 20 days. Auscultation revealed a murmur in diastolic phase in the mesocardiac region. No abnormal neurological symptoms or signs were found. Chest radiography showed cardiomegaly with bilateral lung congestion and pleural effusion. Diagnosis was made on the basis of the results of echocardiography and computed tomographic scan. Transthoracic echocardiography revealed a large left atrial mass originating from the interatrial septum and in the course of diastole prolapsing into the left ventricular cavity through the mitral valve (Figure 1). Left ventricular diameters were normal. Computed tomographic scan showed a left atrial mass and bilateral pleural effusion (Figure 2).

A midline sternotomy was performed. The operation was performed under cardiopulmonary bypass and moderate hypothermia. Right and left atriotomy were used. When the left atriotomy was performed, the mass was protruded out of the left atrium. The myxoma appeared to have a narrow base; it was centered between the left atrial posterior wall and left atrial side of the septum. A well-defined encapsulated gelatinous mass (6 × 5 × 4 cm) was totally resected, including the septal attachment. Primer suture was used to close the defect, which was approximately 1 cm in diameter. Then, the mitral valve was controlled. Moderate mitral insufficiency was detected and a successful mitral annuloplasty (Wooler annuloplasty) was performed. Peroperative transesophageal echocardiography was performed, and no mitral insufficiency was detected.

RESULTS

The postoperative course was uneventful. Pathologic examination showed a gelatinous myxoma. The patient was discharged on the eighth postoperative day. At the patient's 1-year postoperative evaluation, she had fully recovered and was asymptomatic.

DISCUSSION

Cardiac myxomas are benign tumors of uncertain etiology. Although rare, these tumors are the most common intracardiac neoplasm in adults [Kamiya 2001]. Myxomas can be seen in any cardiac chamber, but the majority arise in the left atrium, where they are attached to the limbus of the fossa ovalis by a short fibrovascular stalk. Rarely they may be attached to the posterior or anterior atrial walls [McAllister 1978]. In our patient, myxoma was centered between the left atrial posterior wall and left atrial side of the septum. In the more common sporadic form of myxoma, the patient may manifest one or more of the classic triad of symptoms, hemodynamic obstruction, embolism, and constitutional effect [Greenwood 1968]. Symptoms of constitutional effects and embolic complications were not present in our patient, whose only symptom was mitral obstruction. Myxoma is a progressive disability leading ultimately to death of the patient, which may occur suddenly due to embolism or intracardiac obstruction. It is very important to establish the diagnosis because myxoma is completely curable by open-heart operation.

The presence of mitral insufficiency is very rare in myxoma patients [Bozer 1975]. In myxoma, mitral insufficiency can be seen as primary or secondary. In our case mitral insufficiency was due to the mechanical trauma of the valve and annulus caused by the tumor mass without rheumatic or myxomatous degeneration. If mitral insufficiency exists, a valvuloplasty can usually be performed. If mitral leaflets are not suitable for repair, valve replacement should be per-

Received May 14, 2004; accepted May 24, 2004.

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Figure 1. In diastole, the mass obstructed the left ventricular inflow and protruded through the mitral valve into the left ventricular cavity.

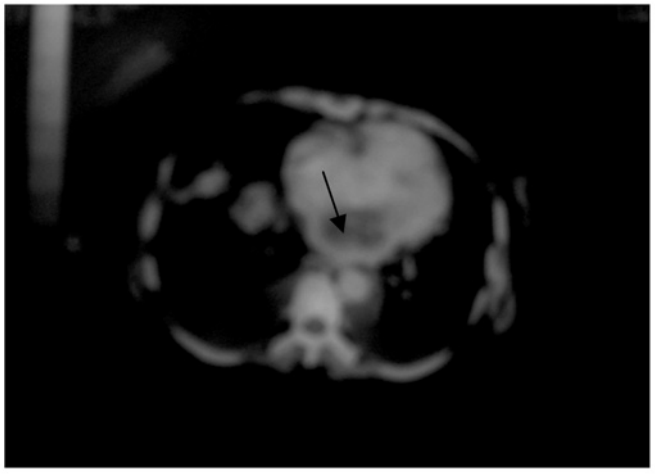

Figure 2. Computed tomographic image of the left atrial mass and bilateral pleural effusion.

formed [MacVaugh 1971, Saito 1995, Kamada 2003]. As in our case, surgical excision must be performed in myxomas. After resection, the mitral valve should be examined for any pathologic situation. In our case moderate mitral insufficiency was detected. After annuloplasty, peroperative transesophageal echocardiography was performed and no mitral insufficiency was detected.

As our case shows, left atrial myxomas may be the cause of mitral obstruction, but they may also be the cause of mitral insufficiency. Therefore, the mitral valve should be assessed peroperatively for any pathologic situation after tumor resection.

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