

## Acute Pulmonary Edema Causing Giant Left Atrial Myxoma

### Akut Akciğer Ödemine Neden Olan Dev Sol Atriyal Miksoma

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Dear Editor;

Primer cardiac tumors are 80% benign, the half of the benign ones are myxomas. Even though myxomas derivate from any cardiac portions, they are generally localized in left atrium (75%) and they are sporadic (1). They may mimic mitral valve pathologies with symptoms of dyspnea, palpitation and syncope, and may mimic hyperthyroidism with constitutional symptoms like palpitation and anxiety. Also they may emerge with systemic embolization (2). They are rarely asymptomatic and cause hemodynamic problems when they are big enough in dimension (3).

Cardiac tumors may be symptomatic or they may be detected incidentally. They may either be detected via common and non-specific symptoms or they may present with atipic symptoms. Diagnosis is held by means of echocardiography, indebateably, and treatment is surgery (4). We aimed to represent a case with a left atrial myxoma, obstructing mitral opening which leads to acute pulmonary edema.



Figure 1. Preoperative chest X-ray

47 years old male patient presented to the emergency service with sudden dyspnea. Emergency surgery was planned after routine laboratory tests and echocardiography revealed a myxomatous mass that derivated from interatrial septum, prolapsed into to left ventricle, and obstructed mitral orifice (Figure 1,2). After process of median sternotomy, aortacaval bicannulation and cardiopulmonary bypass, left atrium was reached with superior septal incision. A mixoid mass which has a smooth surface attached with a 1-1,5 cm base, which has dimensions of 9\*6\*5 cm, excised with interatrial septum (Figure 3).



Figure 2. The mass of the left ventricle prolapsed in preoperative ECHO.

The defect remained in septum, closed with autogenic pericardial patch. Postoperative pulmonary edema findings healed quickly (Figure 4). Patient was discharged in the fifth day of hospitalization without any complication. The specimen of pathology was reported as benign myxoma. There has not been detected any problems during the routine polyclinic examination on 1th, 3rd and 6th months after the surgery.

#### İletişim Bilgisi / Correspondence

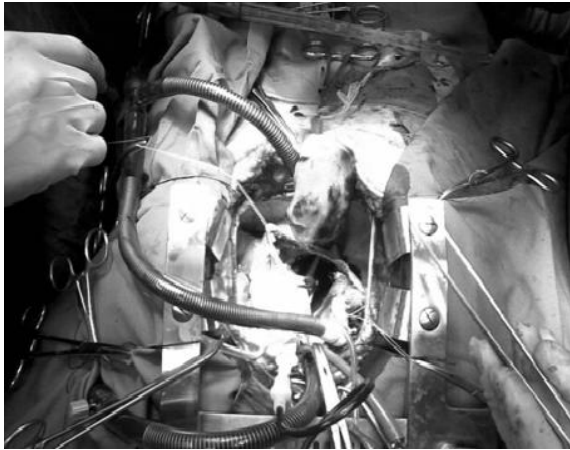
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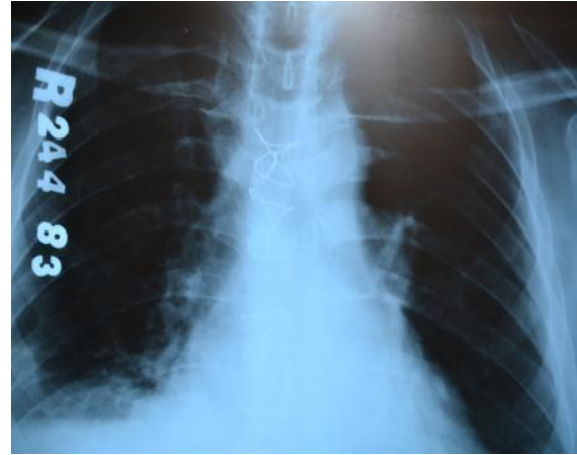
**Figure 3.** Intraoperative total excision of myxoma

Cardiac myxoma is a benign tumor with an unknown origin, especially derived from atrial septum (5). Dimensions of myxoma correlate with its symptoms. Smaller ones have irregular surface, and causes embolization more. Constitutional symptoms are seen in left atrial myxomas and may not be encountered in right atrial myxomas (6).

Myxomas generally grow slowly, but rarely do they reach big dimensions without any symptom (7). Cardiac myxomas may lead to hemodynamic symptoms by obstructing blood flow where they seated in the heart and by deformation of cardiac valves.

In our case, myxoma seated in left atrium, obstructed mitral opening and blocked the flow of blood, and leded pulmonary edema. Emergent cardiac surgery was performed because of

emerging cardiovascular instability and acute pulmonary edema.



**Figure 4.** Postoperative chest X-ray

Syncope or sudden deaths may be encountered in 2 % of left atrial, 30 % of right atrial and right ventricular and 50 % of left ventricular myxomas, because of intermittent obstruction. Symptoms are frequently with a short duration and episodic. Cardiac valve deformation may lead to regurgitation (8). Standard treatment of myxoma is surgery (9,10). It has an almost perfect short and long time survey after surgery (11). Our case is found to be noticeable with patient's attendance to the hospital with pulmonary edema without any previous symptom history and it is a well-known issue that myxomas are a cause of sudden death.

## References

1. Şahin MA, Güler A, Demirkol S, Dođancı S, Yokuşođlu M, Özal E, Demirkılıç U, Arslan M. Left atrial myxomas and surgical treatment. *Gulhane Medical Journal* 2011; 53: 38-42.
2. Gonzalez-Juanatey C, Regueiro-Abel M, Lopez-AgredaH, Peña-Martinez F, Gonzalez-Gay MA. Giant left atrialmyxoma mimicking severe mitral valve stenosis. *Int JCardiol* 2008; 127: 110-112.
3. Dođan A, Kaya MG, Zencir C, İnanç T, Günebakmaz Ö, Aksu R, Özdođru İ. Left Atrial Huge Myxoma with Asymptomatic Patient: Case Report. *Journal of the Faculty of Medicine, Duzce* 2008; 1:37-39
4. Yamak B, Tandođan A, Uygur F, Serçelik A, Pya Y. Right atrial mass: myxoma. *Turkish J Thorac Cardiovasc Surg*2004;12:50-51
5. Burke AP, Virmani R. Cardiac myxoma: A clinicopathologic study. *Am J Clin Pathol* 1993;100:671-80.
6. Bortolotti V, Maraglino G, Rubino M, et al. Surgical excision of intracardiac myxomas: A 20 year follow-up. *Ann Thorac Surg* 1990;49:449-53
7. Nurözler F, Tandođan A, Yamak B. Minimally Symptomatic Giant Left Atrial Myxoma: A Case Report. *Turkish J Thorac Cardiovasc Surg* 2003;11:52-3.
8. Kirklin JW, Barratt-Boyes BG. Kirklin JW, Barratt-Boyes. Cardiac tumor. In: Kirklin JW, Barratt-Boyes BG. *Cardiac Surgery* 1993;1635-54.
9. St John-Sutton MG, Mercier LA, Giuliani ER et al. Atrial myxomas: a review ofclinical experience in 40 patients. *Mayo ClinProc* 1980;55: 371-76.



10. Hanson EC, Gill CC, Razavi M, Loop FD. The surgical treatment of atrial myxomas: clinical experience and late results in 33 patients. *J Thorac Cardiovasc Surg* 1985;89:298-303.
11. Bhan A, Mehrotra R, Choudhary SK, et al. Surgical experience with intra cardiac myxomas: Long-term followup. *Ann Thorac Surg* 1998;66:810-3.

