The echocardiogram of a twenty-year-old man, previously healthy, suffering from paroxysmal nocturnal dyspnea and fatigue after moderate exertion that intensified over a period of about ten days, showed the left atrium myxoma working as severe mitral stenosis.

Giant Atrial Myxoma Mimicking Severe Mitral Stenosis in Young Patient

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A physical examination revealed blood pressure of 110X70 mmHg, regular two-beat heart rhythm, systolic murmur in mitral area and without any changes in the rest of the physical examination. The electrocardiogram revealed a right bundle branch block. The echocardiogram showed a large mass that occupied almost the entire left atrium (4.3 x 8.0 cm in size). This mass was stuck to the posterior superior wall of the left atrium. The diameter of the left atrium was 5.6 cm and the estimated volume was 98 cm³. Part of the mass protruded through the mitral valve to the left ventricle during the atrial systole (the estimated valve area was 1 cm²), causing a restriction of the mitral flow that was compatible with severe stenosis (severe mitral stenosis). Then, surgery was indicated for removal of the tumor.

In preoperative examinations, the only change found was microcytic and hypochromic anemia. Then, the exeresis of the tumor was performed with resection of the fossa ovalis and atrioseptoplasty was performed with the use of bovine pericardium. The histopathology of the specimen confirmed the diagnosis of left atrial myxoma. There were no complications in the postoperative period and the patient was discharged five days after surgery.

Discussion

This above case describes a rare disease, myxoma, which accounts for approximately 75% of primary cardiac neoplasms and, even though it is histologically benign in character, it may be responsible for severe complications and even sudden death, depending on location and size. Thus, early diagnosis and surgical removal improve the prognosis of patients.

Unlike the pattern observed in the literature, this is a male patient in the second decade of life. The clinical classification of the case, class II, also contradicts the most common classification, in which 70% of patients have signs and symptoms of heart failure. The occurrence of heart murmur, a sign that is very common in the literature, was also observed in this patient. It is important to highlight that the occurrence of fatigue on exertion and heart murmur in a young and previously healthy patient should not be neglected, and it requires the differential diagnosis of valve disease and hypertrophic cardiomyopathy.

General laboratory tests (blood, ECG and X-ray) can be nonspecific and contribute modestly to the diagnosis, as noted in this patient.

Several supplementary methods can be employed for diagnosing myxoma: Computed tomography, magnetic...
Echocardiography has been an excellent supplementary examination with a high rate of certainty in the diagnosis of myxoma\(^1\). In this case, the diagnosis of myxoma was made by using two-dimensional transthoracic echocardiography and the use of a hemodynamic study was not considered necessary for indicating the surgery.

Myxomas are usually pedunculated. They can vary in terms of macroscopic aspects, and many times these tumors are not unaccompanied. This case refers to a non-pedunculated, large solitary tumor that is not stuck to the wall of the atrium\(^6\) (Figure 1).

In a way that was consistent with the literature, the surgical procedure was performed without technical difficulties, and there were no complications. The patient was discharged and the 19-month postoperative period was uneventful.

This case demonstrates the occurrence of a rare cardiac neoplasm. Even though it is benign, it can evolve in an unfavorable way. Thus, early diagnosis and removal improve the prognosis of the patient. A carefully taken medical history and the use of a simple supplementary method, such as echocardiography, are effective for the diagnosis. And the surgical removal has shown a high rate of cure, with safety and low mortality.

**Potential Conflict of Interest**

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**Study Association**

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**Figure 1** - Surgical specimen, 8.3-cm atrial myxoma.
Case Report

References


