

P1306

A large cardiac mass of left sections in a young man

Scheggi V.; Stefano PL.; Alterini B.

Careggi University Hospital, Department of Cardiology, Florence, Italy

Background: Heart tumors are very rare lesions. Their prevalence is about 0.001 to 0.03 % in an autopsy series.

In most cases, primitive lesions are benign, with atrial myxomas that represent up to 2/3 of cases. Malignant neoplasms have a high mortality; sarcomas are the most frequent typologies. The most aggressive tumors are characterized by greater size, muscle invasion and pericardial effusion.

Clinical case: A 39-year-old man with recent history of worsening dyspnea went to the emergency room because of an aggravation of the symptoms.

An echocardiogram showed a large atrial inhomogeneous mass, adherent to the mitral ring and involving both left atrial and ventricle, causing a severe valvular stenosis, suggestive for malignancy. Thus the patient performed a cardiac-MRI, confirming the neoplasm localization with parietal infiltration, pericardial extension and effusion. A total-body CT scan ruled out metastasis. The patient underwent heart surgery and a partial excision was performed. Macroscopically the tumor had a scirrhous consistency and a diameter of about 5 cm. The histologic examination showed a high-grade sarcoma with fused cells and with condrosarcomatous areas.

Discussion: The study of heart masses includes the execution of echocardiographies as first-line examinations, while the in-depth diagnostics (necessary in the anticipation of surgery) require cardiac-MRI or CT. Malignant lesions are characterized by an inhomogeneous appearance, with a wide plant base and sizes larger than 5 cm, they are also able to take contrast medium during diagnostic examinations. High grade neoplasms are rapidly evolving with a very severe prognosis. The symptoms are essentially due to the localization and the mass bulk. In our case, its development on the mitral valve caused severe hemodynamic impairment, requiring immediate intervention. The treatment of these lesions is necessarily surgical. The only positive prognostic factor is a complete excision of neoplasm with free resection margins. As the diagnosis is often not early, chemotherapy or radiotherapy are often required after surgery.

Conclusion: Cardiac masses are rare entities and their evaluation may be a diagnostic challenge. Myxoma represent the most common primary cardiac neoplasm in adults, while about 25% of other primary ones are malignant. Our patient was suffering from a sarcoma, whose incomplete debulking made further therapies necessary. The correct interpretation of instrumental findings together with a possible radical surgery are mandatory for a successful therapeutic strategy.

Abstract P1306 Figure.

