Case Report
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Malignant fibrous histiocytoma in thoracic wall

Abstract

The 6% of sarcomas are located in the chest wall. The malignant fibrohistiocytoma has a survival of 38% at 5 years of diagnosis and 20% of the patients present metastasis. The treatment of choice is the extensive surgical resection that may be accompanied by radiotherapy and chemotherapy depending on itself with concomitant metastasis, range of adequate surgical margins and histological grade. The aim of the present study is to describe a case of a rare disease. This case of a 65 year old patient who consults for a mass in the left sub axillary region; which turned out to be a sarcoma, specifically, a malignant fibrous Histiocytoma. The patient, who was referred from a routine to be consulted by the mass of 10x15 cm and 2 years of evolution, was hospitalized and treated by resective surgery without complications, with negative spreading study. After 4 days in the post operative period, he was discharged.

Keywords: chemotherapy, lymphadenopathy, malignant fibrohistiocytoma

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Introduction

Soft tissue sarcomas of the thoracic wall represent approximately 45% of the primary tumors in this area. The incidence of sarcomas corresponds to 1% of all malignancies.[1] These can have multiple locations, of these, 6% corresponds to the chest wall. There are more than 50 different types of sarcoma, the most common being malignant fibrohistocytoma and liposarcoma.[2] The age of presentation varies according to the type of sarcoma. Malignant fibrohistiocytoma has a 5-year survival of 38% and at diagnosis 20% of patients have metastases. The purpose of the present study is to describe a case of a rare disease.

Case

A 65-year-old male patient, with no morbid interest history, presenting a mass in the left sub axillary region, painless, attached to deep planes, of 2years of evolution (Figure 1). The patient had no weight loss or lymphadenopathy. CT scan (computed tomography) describes a mass of 10x15cm, sarcomatous aspect, between the broad dorsi and pectoralis major muscle, with an important ventilatory restriction (Figure 2).

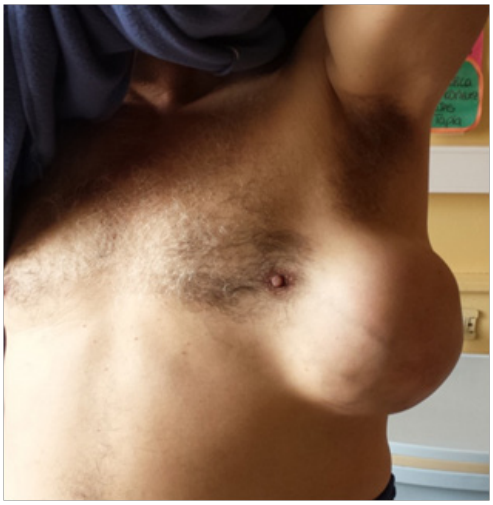

Figure 1 Tumor mass on the patient's chest wall.

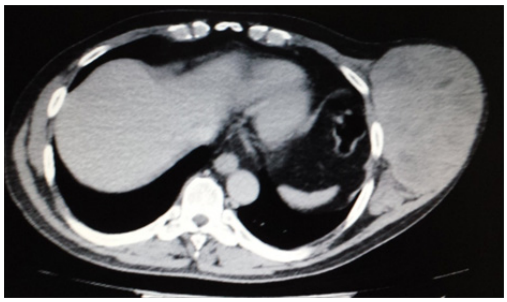

Figure 2 Axial tomography Computer showing tumor mass on chest wall.

It was performed a resective surgery, where a mass of 10x15cm was identified, at the level of the broad dorsi muscle. The resection mass, was with a margin of 2cm (Figure 3). A flap was made at the level of the broad dorsi muscle and reinforced with a Prolene mesh (Figure 4). The patient in his post-operative period was kept in hospital for 4 days, during which he did not present any complications. The study of dissemination was negative. The biopsy report showed a G3 pleomorphic sarcoma and was complemented by an immunohistochemical study, which led to the final diagnosis of malignant fibrous Histiocytoma-type Sarcoma without distant dissemination.

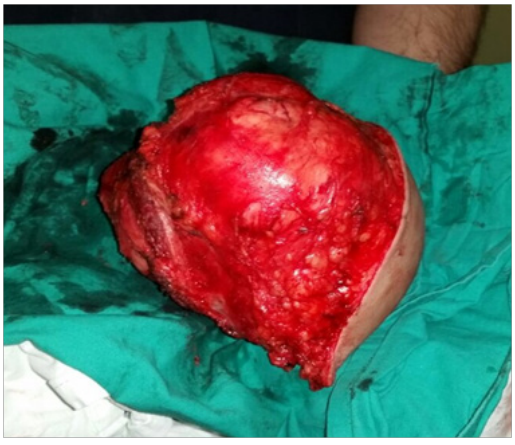

Figure 3 Surgical piece 10x15 cm.

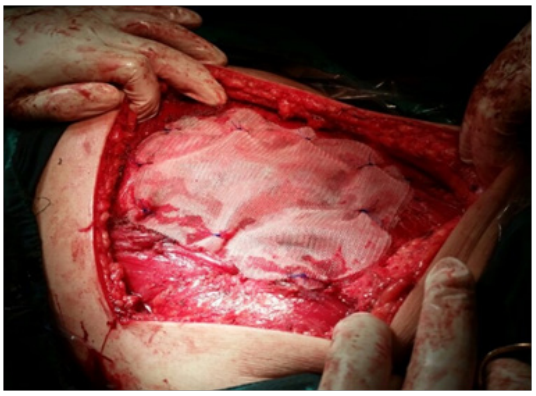

Figure 4 Reinforcement of broad dorsi muscle flap made with Prolene mesh.

Discussion

The confrontation of a patient with an increase in volume in the chest wall begins with an adequate anamnesis consulting for the time of evolution of the mass, the speed of growth. The physical examination should focus on size, depth of mass and adherence to deep planes as well as assessing consistency and associated skin lesions.[3] For the imaging study MRI (nuclear magnetic resonance) has been shown to have the highest sensitivity for soft tissue involvement. In our center, routine NMR is not performed because there is no available resonator, however, comparative studies between CT and MRI do not show large differences, so we opted to perform a CT scan.[4]

The treatment of choice is the extensive surgical resection that can be accompanied by radiotherapy and chemotherapy depending on whether there is concomitant metastatic disease, range of surgical margins adequate and degree histological. The most important prognostic factors for distant recurrence are tumor size and histological grade, whereas for local recurrence, age>50 years and extensive surgical resection are influenced.[5]

Differential diagnosis should include benign tumors, chondromas, fibrous dysplasia, etc. Malignant tumors such as chondrosarcoma, Ewing's sarcoma, etc. should also be included. The usual clinical presentation is that of a painless mass associated with compressive symptoms characteristic of the mass that generates progressive discomfort and, depending on the degree of importance given by the patient, generate an early or late consultation according to the degree of tolerance that the patient has.

Conclusion

Malignant fibrous histiocytoma (MFH) is the most common sarcoma of adult soft tissue. The Tumors acquire a large size, they are multinodular and little encapsulated, with areas of hemorrhage and necrosis. Histologically, these tumors are characterized by large pleomorphic and definitive diagnosis is by immunohistochemical study.[6] The treatment is surgical resection margins of 5cm to 1cm are proposed if the fascia overlying the tumor is healthy. Radiation therapy is indicated in histiocytoma of medium and high grade or low grade with inadequate margins of resection, the technique depends on the location of the tumor. Adjuvant chemotherapy should be discussed case by case.[7]

Acknowledgements

This study has no ethical problems and was approved by the medical center.

Conflicts of interest

Authors declare there is no conflict of interest in composing this manuscript.

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