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Case Report

A Lipomatous Mass Excision in an Elderly Patient

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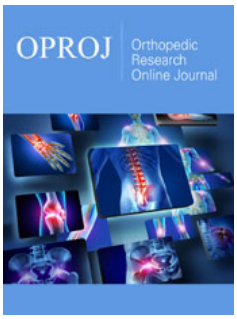

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Introduction

We present a case report of an elderly patient with lesion of the right thigh of a size such as to make impossible the normal activities of daily living for functional limitation in walking. We present the clinical case, discuss the treatment and make a review of the literature [1-3].

Clinical Case Report

In September 2015 comes to our attention Ms. S., octogenarian in good general health. The patient complains from about 1 year pain at the anterior-medial region of the right thigh and feeling obstacle at load and gait due to the presence of a massive swelling extending anteriorly and medially at the right thigh. She also reported a worsening of the clinical picture in the last six months with a considerable increase in the size of the swelling and consequent reduction of her walking autonomy [4,5]. The patient brings with her ultrasound and MRI of the affected region. MRI shows a visible homogeneous neoformation which extends longitudinally in the subfascial area of the right thigh, with compression of the superficial femoral nervous vascular district, but not infiltrating.

In October 2015, the patient is subjected, in the DH system and under local anesthesia, in surgery of incisional biopsy of the described lesion. The histology reports diagnosis of lipoma. In November 2015, the patient underwent surgery to remove completely the lesion. The removed material was sent for histological examination [6-9].

Post-operative indications: elastic stockings, walking with crutches, antithrombotic prophylaxis. After 15 days the sutures have been removed: the wound is healed without complications. She gradually started walking without crutches; elastic stockings and antithrombotic prophylaxis were abandoned when she started walking with full load without crutches. The second histology reports diagnosis of well-differentiated liposarcoma, so the patient was referred to a reference center for cancer disease where she received indication for conservative treatment and follow-up controls. Then she returns to our hospital for controls. After 9 months of follow up, the patient has not recurrence of the disease and she returned to her normal daily activity [10,11].

Discussion

Any district of our body can be affected by soft tissue tumors. Locating limbs is the most frequent (60%), followed by trunk (30%), neck-face (12%), retroperitoneum (10%). The diagnosis of soft tissue tumors is not easy either for the pathological and topographic definition both for the extreme heterogeneity of histological forms. Also, it has to consider the particular characteristic of sarcomas, especially of liposarcomas, that has the capacity of "re-differentiation" during the development phase, giving rise to mixed forms that make the diagnosis more difficult [12,13]. The causes are unknown. All ages can be affected by soft tissue tumors, with a prevalence for the fourth and fifth decade. Among cancers of the thigh,

liposarcoma is the most common histological type (12-40%), but in other sites the incidence is low (10%).

There are different varieties of liposarcomas, which correspond to variable degrees of differentiation and prognosis: well-differentiated liposarcoma (lipoma-like), myxoid type, polymorphic form, lipoblastic (round cells form). Well-differentiated liposarcoma is the most frequent histological type, has a better prognosis, has not metastasis but local recurrence is possible if the removal is not complete. The polymorphic form and round cells form represent tumors to more severe prognosis both for the high incidence of distant metastases for both the frequent local recurrence. Myxoid type has an intermediate trend. It is typical the presence of different histological types within the same tumor, which is found especially in large tumors. Therefore, a very accurate and focused histological examination is an indispensable condition for both a therapeutic program and an adequate follow-up both for a better prognostic evaluation.

Macroscopically, liposarcomas are presented as a single mass, frequently of considerable size, which rarely infiltrates the neighboring organs but more often displaces them, provided with a capsule apparent. The capsule consists of flattened peripheral neoplastic cells from the same tumor growth and, therefore, the removal usually has to be the widest possible, moreover facilitated by the presence of rather lax adhesions with surrounding tissues but that may be the site of neoplasia. The etiology is still unknown. Some Authors reported correlations between sarcoma and increased incidence of mammary neoplasia, or the association between sarcoma and radiation therapy. Among the many lines of research, an attractive hypothesis is the possibility of genetic alteration in the perirenal adipocyte, although currently it is not yet identified the oncogene responsible.

Local recurrence is almost constant (20-85%) and usually appears within the first two years after surgery. Recurrence is closely related to two main factors: grading of the tumor and radical surgery.

Metastases are rare. The most common sites of metastases are lung, liver, bone; usually metastases occur after a few years after the first surgery (5 years) and after several episodes of local recurrence, often in association with it. This evolution of the disease justifies the different surgical procedures in order to remove the recurrence and increase survival. Patients with liposarcoma die generally from local disease and not for metastases. Survival at 5 years is 50% and at 10 years is 40%. The late diagnosis is a failure factor. The slow growth of this tumor and its insidious onset allow the progressive forms of development up to a size such that a radical surgery may no longer be executable. According to some Authors, the interval between onset and clinical diagnosis can reach 12-15 months.

There are many prognostic factors: grading, patient's performance status, type of surgery, have a key role.

The procession of symptoms of cancer of the thigh, and especially of liposarcomas, tends to become manifest belatedly, while the incidental finding of an asymptomatic cancer is a rare occurrence. The clinical expression of these tumors is extremely polymorphic, related to the presence of an occupying space mass that displaces, compresses but hardly infiltrates nearby organs: venous ectasia, phlebitis and pain with inability on walking are the most frequent symptoms.

The pain is present in almost all bibliographical references and is usually related to the size of the tumor even if, in some cases, may precede its clinical presentation. When there is an initial involvement of nerve bundles, the pain takes on the clinical features of a sciatica. Among the general clinical signs, fever, weight loss and asthenia (performance status) are important clinical elements because of the impact they have on prognosis. The careful objective evaluation of the neoformation, if possible, is enough to make one suspect a malignancy of the thigh and to suspect, at the same time, the relations it contracts with neighboring organs.

Among the diagnostic tests, the CT examination plays a central role in that it is able to accurately assess the extent and the relationship of the tumor and provide input on the very nature of the lesion. The histological definition usually arrives by TC or ultrasound-guided needle biopsy; when the sample is made up of cores of tissue, you can also make a histological examination to determine exactly histology. The lower extremity liposarcoma treatment is essentially surgical. It is frequently an "aggressive surgery" that needs in some cases the removal of structures involved in the neoplastic process itself in order to perform a task with radical intent.

The long-term results, despite the "aggressive" attitude of the therapy, are often unsatisfactory, since the local recurrence is almost a regular occurrence in the natural history of these tumors. The liposarcomas, in fact, are only seemingly well-capsulated: the capsule is actually a pseudocapsule, as constituted by flattened neoplastic cells from the same tumor growth. The removal of the lesion, therefore, is unlikely to be radical, and the almost constant presence of residual disease predisposes to recurrence. This risk could be minimized if the surgery would respect the principles of the surgery "compartmental" introduced by Enneking, meaning "compartment" an anatomic region well delimited muscles, periosteum, adventitial tissues, perinervio and serous. The removal of a non-affected fascia from the neoplastic process evidenced by the radical surgery, while a resection whose limits also fall within a few centimeters of the compartment, the seat of the lesion, does not protect the patient from the risk of recurrence.

Enneking identifies four types of surgeries:

1. Intralesional (macroscopic residual neoplastic, local recurrence 100%);

2. Marginal (absence of gross debris, the tumor reaches the limit of resection, local recurrence 60-70%);

3. Wide (neoplasia surrounded by healthy tissue, local recurrence 20-30%);

4. Radicals (around the site of the tumor compartment is removed, local recurrence 0%.

These different outcomes are correlated with better survival that occurs in liposarcomas of the extremities than those located in the head and neck and in the retroperitoneum. There are several articles in literature of therapeutic protocols involving the use of radiation therapy to supplement surgical intervention, in order to control residual disease. The combined treatment allows for liposarcomas increased survival by 20%. Finally, the role of chemotherapy is quite secondary even with the use of multidrug chemotherapy schemes.

Conclusion

In light of the global review of the literature and our experience, we believe that, where it is not possible to perform a radical operation compartmental or marginal, it is preferable not to proceed to an intralesional intervention since that would only encourage the seeding of tumor cells and therefore, a rapid spread of the disease itself. Radical interventions can be performed frequently for soft tissue tumors of the limbs, on the contrary this is rarely possible when the tumor is in the retroperitoneum or in the head and neck. The radical surgical resection and not cytoreductive, is the only therapeutic tool able to provide adequate answers, because these tumors have poor response to the complementary treatments, chemotherapy is that of radiotherapy.

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