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A VOLUMINOUS SARCOMA OF THE RIGHT ARM AGGRESSIVELY LOCALLY AND AT DISTANCE

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ABSTRACT

SOFT-TISSUE SARCOMAS ARE A GROUPS OF TUMORS ORIGINATING IN THE MESENCHYMAL CELL, WITH DIFFERENT HISTOLOGY, EVOLUTION AND PROGNOSIS.

OFTEN, THEY ARE LOCATED IN THE MUSCLE, ADIPOSE TISSUE OR CONNECTIVE TISSUE, AT THE LEVEL OF THE EXTREMITIES (50%), TRUNK, RETROPERITONEUM (40%), HEAD AND NECK (10%).

REGARDING THE AGE GROUP, THE MAXIMUM INCIDENCE OF SOFT-TISSUE SARCOMAS IS FOUND IN PATIENTS OVER 50 YEARS OLD.

AS RISK FACTORS FOR SOFT TISSUE SARCOMAS SPECIALTY LITERATURE MENTIONS HEREDITARY SYNDROMES, RADIATIONS, CHRONIC LYMPHEDEMA, FOREIGN BODIES AND VIRUSES.

SURGERY IS VERY IMPORTANT IN THE TREATMENT OF SARCOMAS. ALSO, OTHER TREATMENTS LIKE CHEMOTHERAPY AND RADIOTHERAPY MAY BE APPLIED BEFORE AND/OR AFTER THE SURGERY, THUS, SIGNIFICANTLY IMPROVING THE PROGNOSIS.

KEY WORDS: GIANT LIPOSARCOMA, LOCAL AGGRESSIVENESS, RIGHT HAND FINGERS PARESTHESIA

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INTRODUCTION

Soft-tissue sarcomas are a groups of tumors originating in the mesenchymal cell, with different histology, evolution and prognosis.

Often, soft-tissue sarcomas are located within the muscles, adipose tissue, or connective tissue at the extremities (50%), trunk, retroperitoneum (40%), head and neck (10%). Soft-tissue sarcomas are rare tumors, representing 1% of the total malignant tumors of the adult, with varying evolutions depending on histological subtype, degree of differentiation, localization and tumor size[7].

The gross incidence of soft sarcomas in E.U. is 1-3 cases / 100,000 inhabitants / year.

Regarding the age group, the maximum incidence of soft-tissue sarcomas is found in patients over 50 years old.

As risk factors for soft tissue sarcomas specialty literature mentions:

- hereditary syndromes (retinoblastoma - Rb1 mutations, Li-Fraumeni syndrome-p53 mutations, neurofibromatosis);
- radiations (radiotherapy);
- chronic lymphedema;
- foreign bodies;
- viruses (HIV1- Kaposi sarcoma; cytomegalovirus)[8]

Histological, soft sarcomas seem to develop from the residual mesenchimal stem cell in the muscle, adipose and connective tissue, whose origin still remains unclear.

Regarding molecular biology, there are two large groups of sarcomas:

- With simple and specific reciprocal chromosomal rearrangements – often found in young patients, rarely associated with p53 mutations or other genetic syndromes
- With complex karyotype and non-reciprocal non-random rearrangements – often in older patients, frequently associated with p53 mutations or other genetic syndromes[9].

The unfavorable prognosis of patients with soft-tissue sarcomas is due to the local aggressiveness tendency and early progression to haematogenic metastasis, especially in the lung, but also in the liver and bones. Metastases in the central nervous system are very rare, with the exception of soft –tissue alveolar sarcomas.[10]

MATERIAL AND METHOD

The presented case study refers to a 81 year old male patient who was admitted in the IV Surgery Clinic of Clinical CF Hospital of Craiova for investigations regarding a giant formation located at the middle third of the right arm, on the postero-medial face accompanied with right hand paresthesia – mostly located on IVth and Vth fingers.

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[7] Brennan AF. Singer S, Maki RG, et al. Soft tissue sarcoma, In: DeVita VT Jr, Hellman S, Rosenberg SA, eds. Cancer: principles & practice of oncology. 7th ed. Philadelphia, Williams & Wikins, 2005: 1581-1637.

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The patient was fully examinated, blood tests were taken, several imaging examinations were performed (ultrasound, radiography, doppler ultrasound) in order to fully understand the patient's disease and collateral pathology and also to be able to provide the best medical care for our patient.

RESULTS

From the personal pathological history, we retained atrial fibrillation, for which the patient is receiving oral anticoagulant therapy (Trombostop) and also a high blood pressure history for which our patient is receiving treatment.

The objective examination with inspection and palpation reveals on the postero-medial face of the right arm, a voluminous tumor of about 20/10 cm, painless, imprecisely delineated in depth, with regular margins, firm consistency, reduced mobility on the posterior plane, with normal overlying skin, without clinically detectable loco-regional adenopathies. Rectal examination revealed a large prostate adenoma and a supple rectal ampoule.

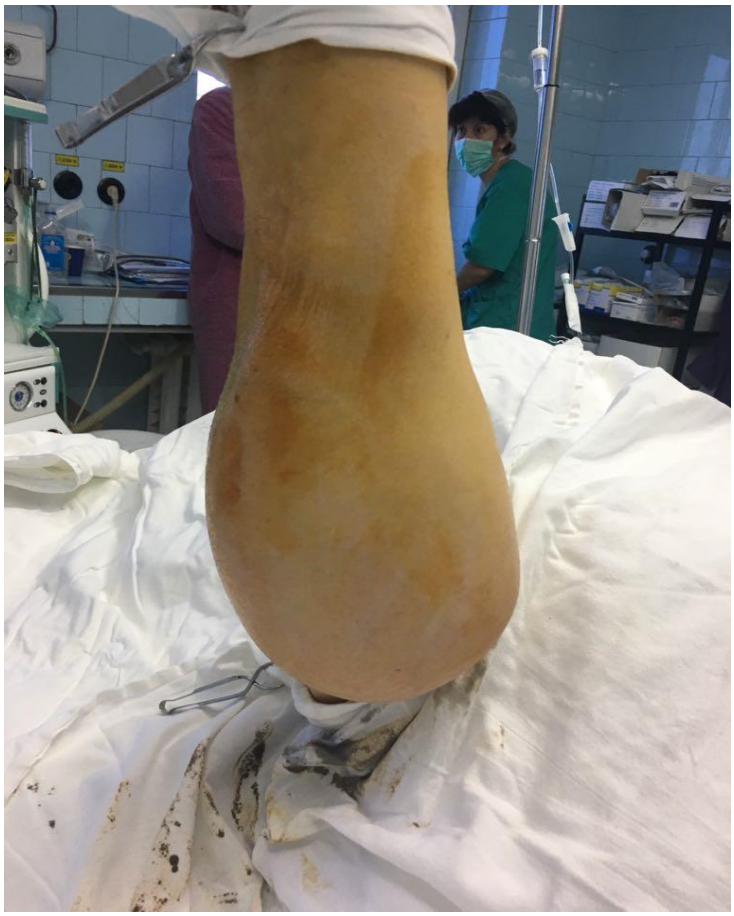

Figure 1. Pre-operative aspect of the right arm

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Laboratory analyzes showed a slight anemia of 11.9g / dl, and an INR-3.46. From radiological point of view we found aortic ateromatosis and a moderately enlarged cord in transverse diameter. No pulmonary or bone metastases are noted. The abdominal ultrasound performed at admission reveals a moderate hepatomegaly, a large prostate volume and no localized liver processes. Doppler arterial ultrasound performed for the right arm highlights: mean 0.8 mm intima, without stenosis plaque, fully permeable arterial shaft, present fluxes, quasi-normal morphology and spectral dispersion.Venus Doppler for the right arm showed free deep venous axis, current flow, fingerprinting and deflection of superficial veins - basal vein by the mass phenomenon developed by the tumor at the arm level.

After a cardiovascular balancing (TA-140 / 70mmHg) and coagulation (Thrombostop is discontinued and Fraxiparine therapy is instituted), surgical intervention is performed and the removal of the tumor formation is carried out with great difficulty. It is worth mentioning that the patient is suggested the arm amputation, of course after confirmation of the neoplasia by an extemporaneous histopathological examination, but which he refuses.

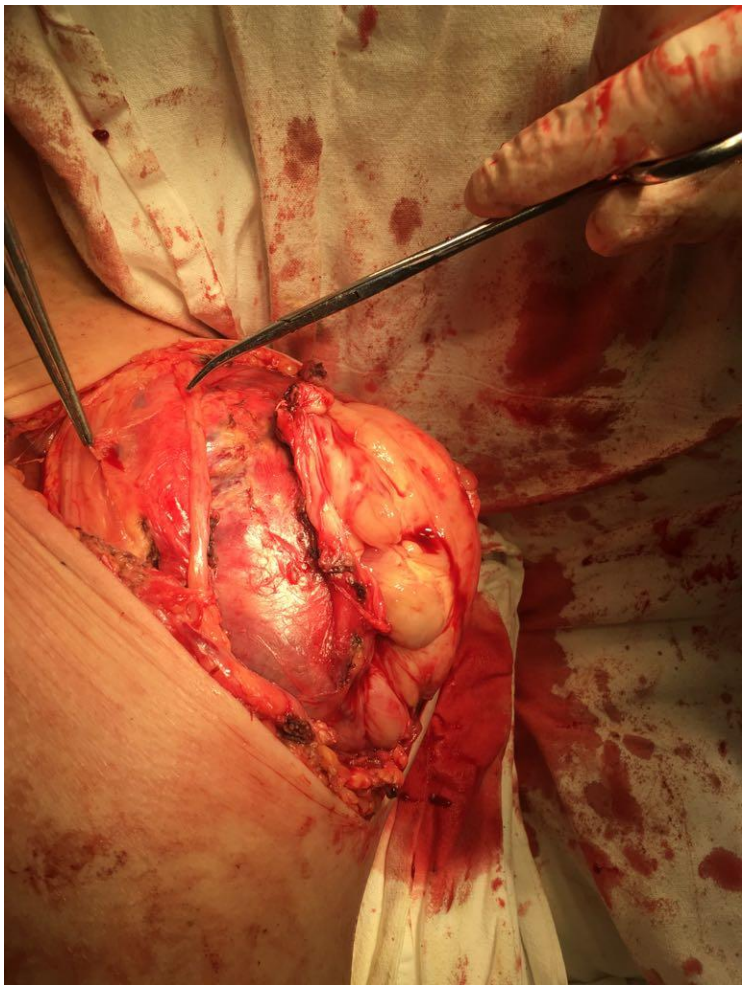

Figure 2. Intra-operative aspect of the tumor

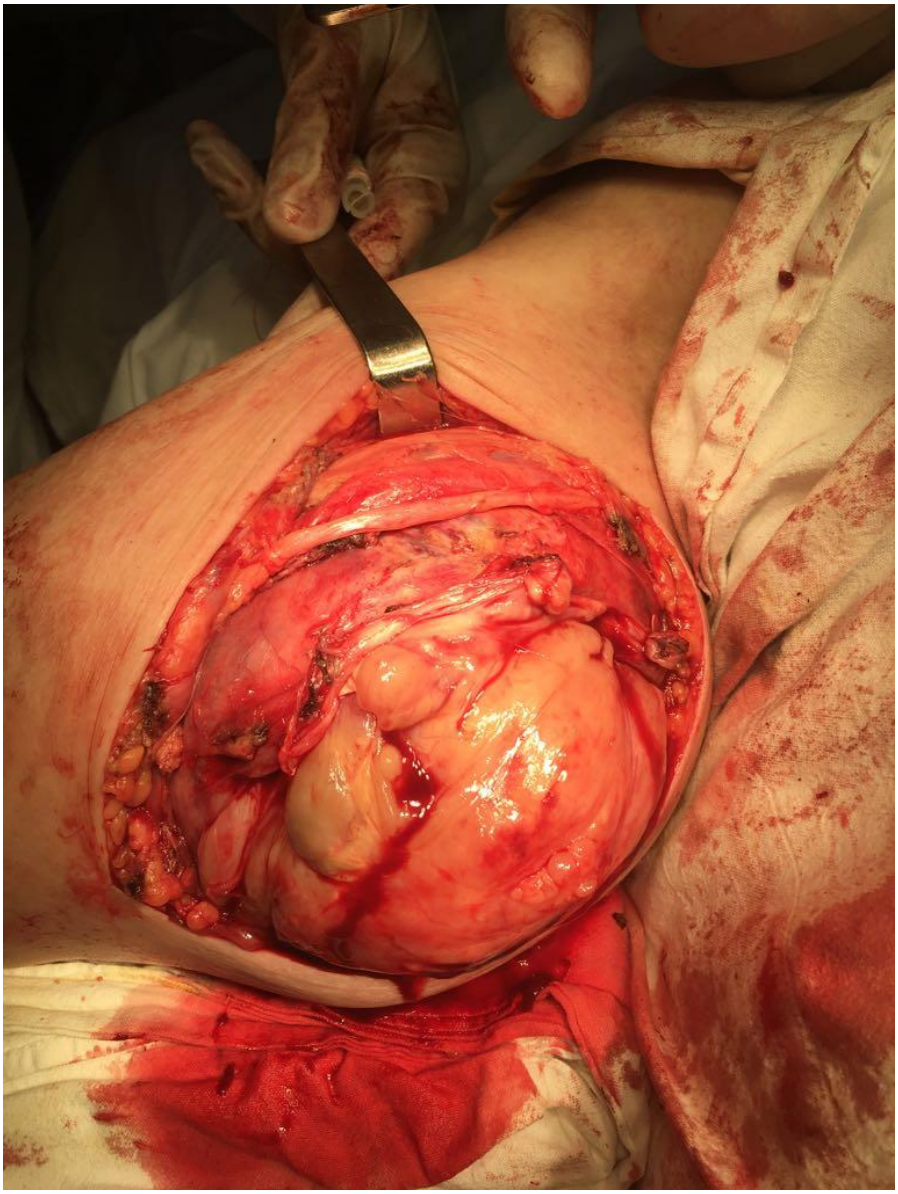

Figure 3. Intra-operative aspect of the tumor

A longitudinal incision is applied to the antero-medial face of the right arm, the subcutaneous cellular tissue is dissected, longitudinally incisions are made within the superficial fascia of the arm, and immediately below it we found a 20/15 /10cm, multilobate, encapsulated, with firm-elastic consistency with necrosis inside (with clots and faired tissue inside).

In the anterior section of this formation we observed the displaced brachial vasculonervous plex which is deeply in contact with the tumor formation. The greatest difficulty in the intervention was the prolongation of the tumor to the right axillary vein.

The whole tumor was removed by sending a fragment to an extemporaneous histopathological examination (March 20, 2017). The result showed anaplastic sarcoma

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proliferation. After tumor extirpation, a large diffuse bleeding area remained that could only be managed by the fest message and the drainage of the remaining space.

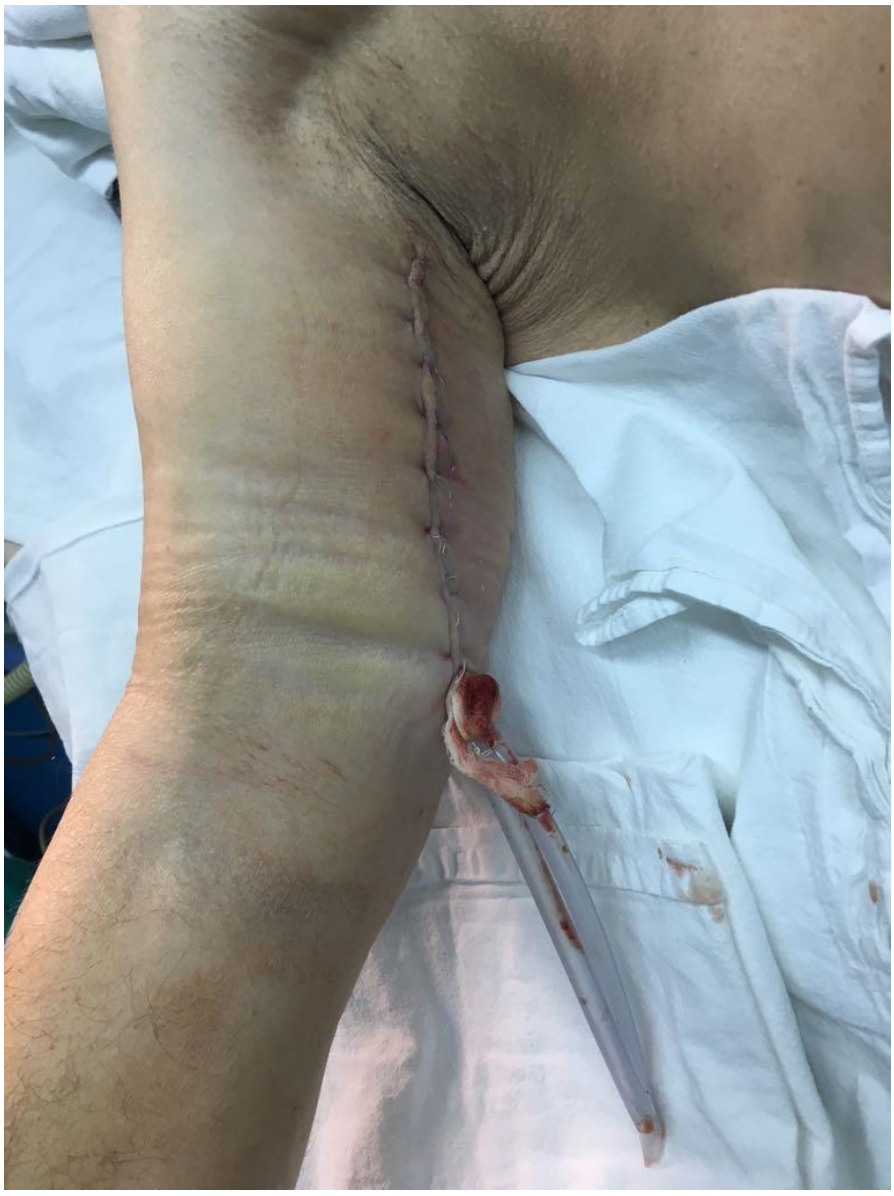

Figure 4. Post-operative drainage

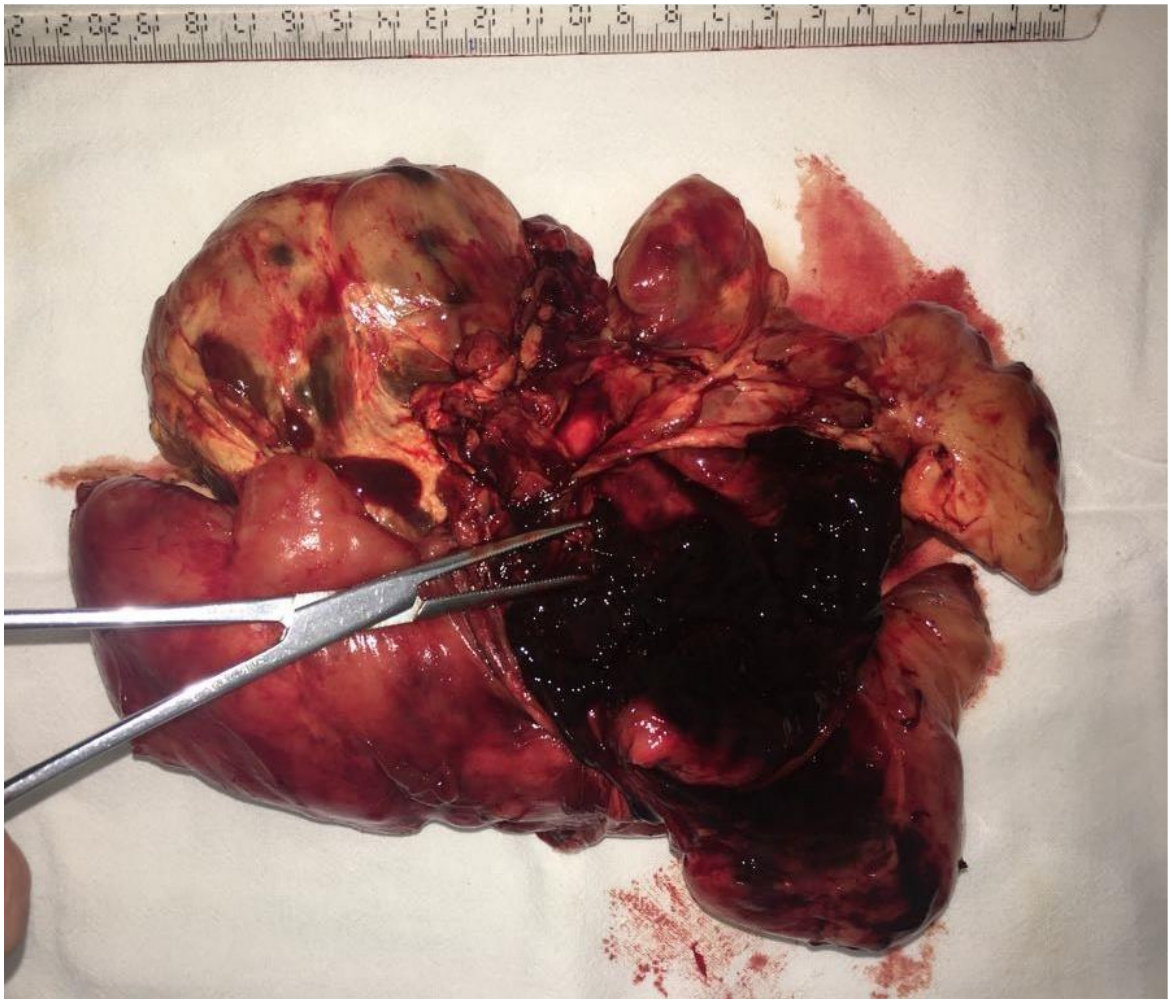

Figure 5. The tumor's aspect

48 hours after the surgery, under general anesthesia, a small bleeding on the drainage tube is repaired.

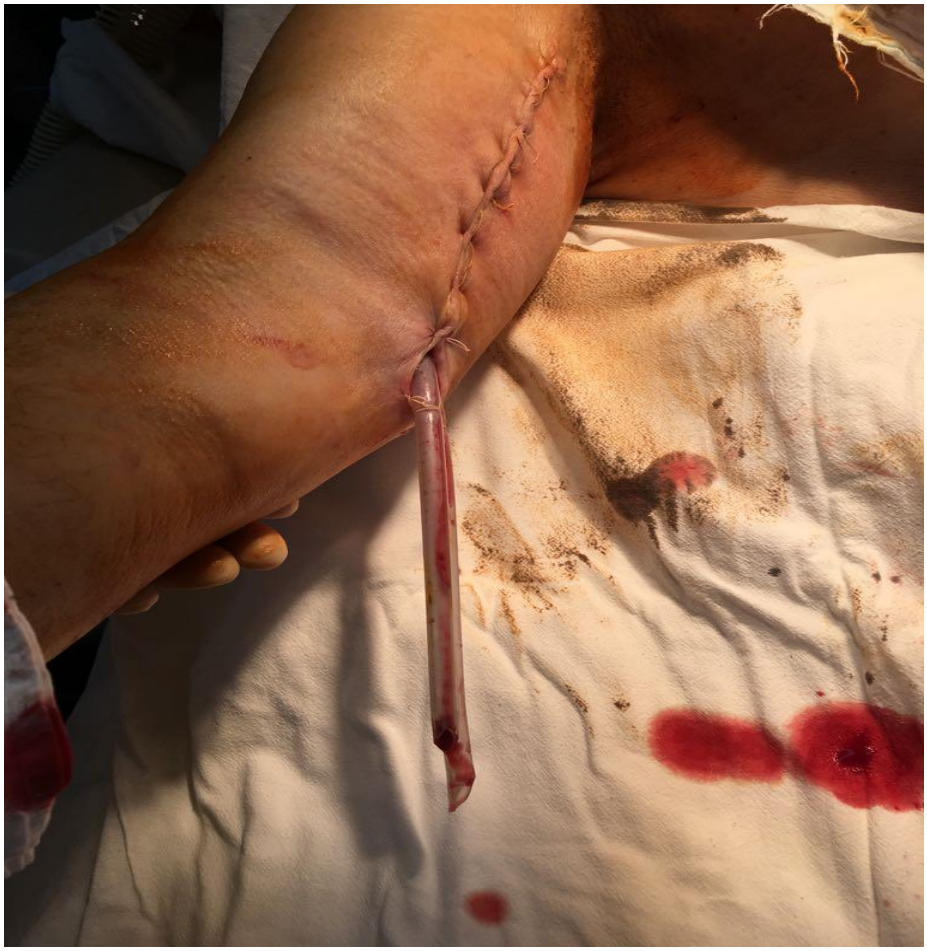

Figure 6. 48 hours after the surgery

Post-operative evolution was a favorable one and the patient was discharged 8 days after with the recommendation to go to the oncology service to complete the treatment. It should be noted that the histopathological examination of paraffin block confirmed the result of the extemporaneous examination.

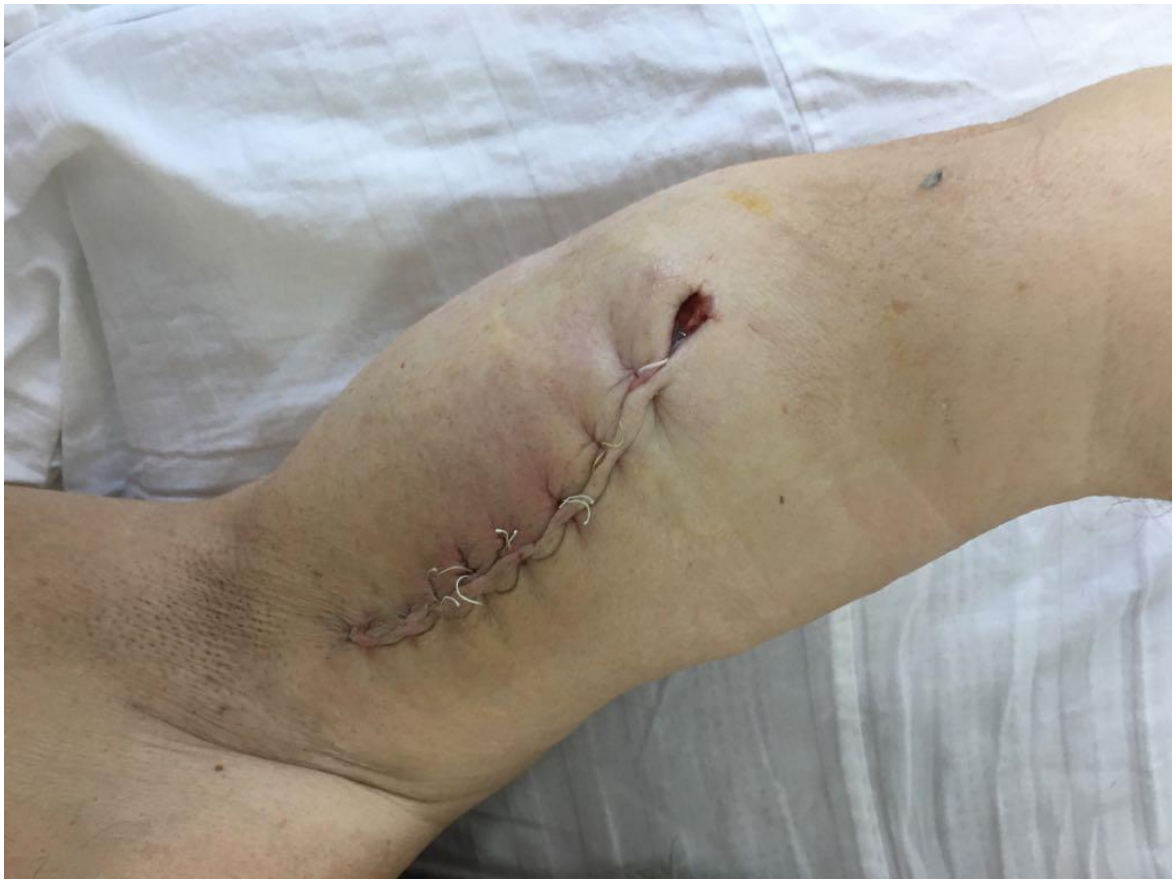

Figure 7. 8 days after the surgery

After about 4 months, the patient examination revealed no local relapse, but we need to mention that thus he presented to a oncological service, he refused (reasons we do not know) to undergo any treatment.

At 6-7 months after the surgery was performed, the patient presented with an increased arm volume (local relapse), massive hepatic metastases, concluding with patient loss 9 months postoperatively.

CONCLUSIONS

In conclusion, sarcoma has unpredictable loco-regional evolution and surgical treatment must always be strengthened with oncology treatment.

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