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RETROPERITONEAL LIPOSARCOMA MIMICKING INGUINAL HERNIA

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Abstract: Retroperitoneal sarcomas are a group of rare tumors, originating from mesenchymal cells and difficult to diagnose due to their slow and insidious growth, leading to symptoms only when they are already advanced, presenting as large abdominal masses. In this article we will report a case that occurred at the Military Police Central Hospital in 2021 of patients who presented with a retroperitoneal sarcoma that simulated a right inguinal hernia. During the Pre-operative imaging examination, a large abdominal mass was revealed, extending through the inguinal canal.
Keywords: inguinal hernia, liposarcoma, retroperitoneal sarcoma

INTRODUCTION

Sarcomas are malignant tumors derived from mesenchymal cells, that is, they originate from tissues such as: fat, muscle, connective tissue and vessels. Soft tissue sarcomas, when compared to other neoplasms, are rare and constitute less than 1.5% of all cancers with an annual incidence of around 6 in 100,000 people. Liposarcomas are malignant tumors of adipose tissue, representing around 30% of soft tissue sarcomas, affecting mainly the retroperitoneum, around 70% and less frequently the genital region.

Regarding spermatic cord liposarcomas, there are just under 200 cases described in the literature.

Due to their deep location and slow growth, retroperitoneal sarcomas are generally diagnosed in advanced stages when they have already reached large dimensions, displacing or invading adjacent vital structures.

Among the symptoms presented by spermatic cord liposarcomas, the most common are the presence of a mass in the inguinal region or scrotum, and/or pain in this region, which were generally confused with an inguinal hernia or hydrocele. Delayed diagnosis and complex anatomical position imply a worse prognosis and difficulty in resecting these tumors with a safety margin.

Furthermore, local recurrence after curative-intent treatment is the Achilles heel of current treatment methods, reaching rates of 40 to 75% after 5 years in the largest published studies. In addition, local recurrence can occur late (14% between 5 and 12 years after initial surgical resection.

This work aims to report the case of a patient with retroperitoneal sarcoma that simulated an inguinal hernia.

MATERIAL AND METHOD

This is a 43-year-old male patient, with no comorbidities and no history of neoplasms in the family, referred to the general surgery service of the Central Military Police Hospital, Rio de Janeiro, Brazil, with bulging in the right inguinal region.

On detailed physical examination, a palpable mass was observed in the right iliac fossa, with a slightly harder consistency than usual. Due to the consistency of this mass, in addition to Pre-operative exams, a computed tomography of the abdomen and pelvis was requested to better elucidate the condition.

The CT showed a large right infrarenal retroperitoneal mass, complex, heterogeneous, with a fatty component, septations and a solid component of soft tissue, anterior to the ileopsoas muscle and external iliac vessels, with insinuation towards the right inguinal region (Figure 1)

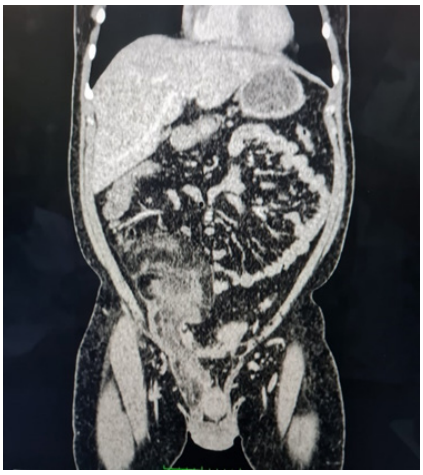
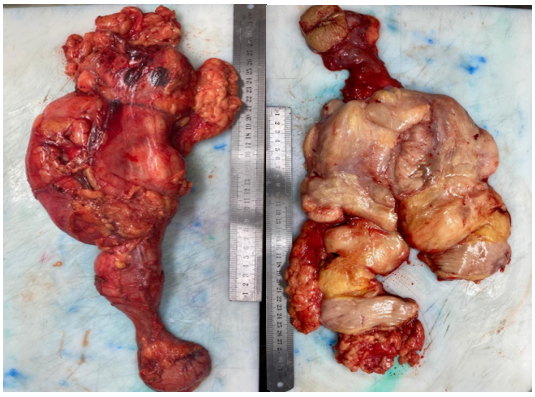


Figure 1. Computed tomography demonstrating a large heterogeneous retroperitoneal mass extending into the right inguinal canal.

The patient was referred to Oncological surgery and underwent radical resection of the tumor and ipsilateral orchiectomy. The initial approach was via median laparotomy and it was necessary to associate right inguinotomy for resection with a more appropriate safety margin. (Figure 1, 2 and 3)



Figures 1 and 2. Surgical specimen consisting of spermatic cord, testicle and epididymis.

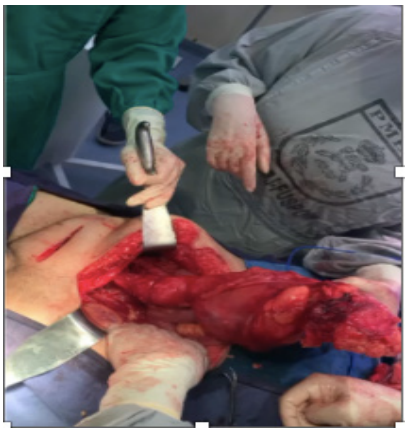


Figure 3. Intraoperative image demonstrating resection of the specimen.

RESULTS

Histopathological analysis identified liposarcoma of the spermatic cord, measuring 26 cm in the longest axis, with a well-differentiated component of the lipoma-like and sclerosing type, in addition to a dedifferentiated component of the pleomorphic sarcoma type, without areas of evident tumor necrosis, without testicular involvement and without lymph node involvement., with free margins, characterizing an R0 resection.

The patient presented excellent postoperative evolution, being discharged and referred for follow-up in clinical oncology. Adjuvant therapy was not indicated due to the absence of metastases, affected lymph nodes and free margins.

However, as expected for this pathology, 8 months after surgery, in the post-operative control magnetic resonance imaging, new tissue thickening was visualized next to the anterior fascia of the right, inferior psoas muscle and adjacent to the ipsilateral kidney, measuring approximately 6 x 1.7 cm, exhibiting contrast enhancement.

He was referred to the general surgery sector where the hypothesis of tumor recurrence was raised and a new surgical approach was scheduled, with resection of the mass, associated with right segmental

colectomy and right nephrectomy due to the proximity of the mass to these structures. The histopathological results confirmed local recurrence of retroperitoneal liposarcoma, of the dedifferentiated liposarcoma type, with R0 resection.

The patient once again had a good post-operative evolution and remains free of neoplasms, with continued follow-up with general surgery and the oncology clinic.

CONCLUSION

The bulging of the inguinal canal can have several reasons, neoplasms must always be remembered. If it is not considered in the initial diagnosis, there is an increase in patient morbidity due to the chance of metastases and the need for adjuvant treatment.

The currently recommended liposarcoma treatment is radical surgery with wide local excision and, in some cases, adjuvant therapy. This case illustrates well the primordial need for a good clinical examination and investigation using appropriate imaging methods when faced with a condition with characteristics that differ from the usual, so that the best planning can be carried out for this disease, which is so aggressive. We also remember that these cases must be treated, whenever possible, in a specialized Sarcoma service.

REFERENCES

1. AMERICAN CANCER SOCIETY. What is a Soft Tissue Sarcoma?, 2022. Disponível em: <https://www.cancer.org/cancer/softtissue-sarcoma/about/soft-tissue-sarcoma.html>. Acesso em: 19 de maio de 2022.

2. Vos M, Boeve WC, van Ginhoven TM, Sleijfer S, Verhoef C, Grünhagen DJ. Impact of primary tumor location on outcome of liposarcoma patients, a retrospective cohort study. *Eur J Surg Oncol.* 2019;45:2437–2442.

3. Keenan RA, Nic An Riogh AU, Stroiescu A, et al. Paratesticular sarcomas: a case series and literature review. Ther Adv Urol. 2019;11: 1756287218818029

4. Yamamichi G, Nakata W, Yamamoto A, et al. Liposarcoma of the spermatic cord associated with scrotum lipoma: a case report and review of the literature. Urol Case Rep. 2018; 17: 114-6.

5. Abecasis, N., & Damas, C. (2011). Sarcomas Retroperitoneais - um artigo de revisão. Revista Portuguesa de Cirurgia II série; nº 17.

6. De Nardi P, Bissolati M, Cristallo M, Staudacher C: Recurrent giant liposarcoma of the spermatic cord. Urology. 2012, 79: 113-114. 10.1016/j.urology.2011.02.004.

7. GALERA MARTINEZ, Cristina et al . Liposarcoma retroperitoneal complicado: a propósito de un caso. Rev Chil Cir, Santiago, v. 69, n. 6, p. 498-501, dic. 2017 . Disponible en <http://www.scielo.cl/scielo.php?script=sci_arttext&pid=S0718-40262017000600498&lng=es&nrm=iso>. accedido en 25 mayo 2022. http://dx.doi.org/10.1016/j.rchic.2016.11.007.

8. Li, F., Tian, R., Yin, C. et al. Liposarcoma of the spermatic cord mimicking a left inguinal hernia: a case report and literature review. World J Surg Onc 11, 18 (2013). https://doi.org/10.1186/1477-7819-11-18

9. Schwartz SL, Swierzewski SJ, Sondak VK, Grossman HB: Liposarcoma of the spermatic cord: report of 6 cases and review of the literature. J Urol. 1995, 153: 154-157. 10.1097/00005392-199501000-00055.

10. Swallow C.J.; Strauss D.C.; Bonvalot S. et al.Management of Primary Retroperitoneal Sarcoma (RPS) in the Adult: An Updated Consensus Approach from the Transatlantic Australasian RPS Working Group.Ann Surg Oncol. 2021; 28: 7873-7888

11. Valério, P. G., & Fonseca, E. F. (2019). Lipossarcoma Retroperitoneal Gigante: um relato de caso. Revista Médica de Minas Gerais vol. 30.