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CLINICAL CASE

An astounding inguinal lump: malignant fibrous histiocytoma of the spermatic cord

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Abstract

A case of an elder male patient with a weird inguinal lump is presented. Neither physical examination nor computed tomography correctly identified the tumor. Only just after surgery, a malignant fibrous histiocytoma of the spermatic cord was diagnosed. The spermatic cord malignant tumors generally originate below the external inguinal ring growing into the scrotum and rarely prevail in the groin as in our case.

Keywords: *Groin. Lymphadenopathy. Malignant fibrous histiocytoma. Sarcoma. Spermatic cord tumors. Surgery.*

Un tumor inguinal sorprendente: histiocitoma fibroso maligno del cordón espermático

Resumen

Se presenta el caso de un paciente varón de edad avanzada con una extraña masa inguinal. Ni el examen físico ni la tomografía computarizada identificaron correctamente el tumor. Justo después de la cirugía se diagnosticó un histiocitoma fibroso maligno del cordón espermático. Los tumores malignos del cordón espermático generalmente se originan debajo del anillo inguinal externo y crecen hacia el escroto, y rara vez predominan en la ingle, como en nuestro caso.

Palabras clave: *Ingle. Linfadenopatía. Histiocitoma fibroso maligno. Sarcoma. Tumores del cordón espermático. Cirugía.*

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Introduction

The patient centered interviewing and physical examination, with appropriate laboratory exams, and radiologic testing, represent the cornerstone of medical diagnosis. However, we should be aware that any method has its own constraints. In the usual medical practice, the causes of inguinal lymphadenopathy are infectious, autoimmune, or neoplastic disorders[1]. In the latest, it is extremely unusual to cope with the primary malignant spermatic cord neoplasms, even for urologists[2]. However, in these uncommon tumors, there are exceptional ways of presentation seldom seen[3,4].

Case presentation

A 66-years-old male patient presented with his family physician with a 3-year history of a left groin slow-growing lump; just recently, the swelling generated pain. The general practitioner established the clinical diagnosis of lymphadenopathy, and the patient was sent to our service. On the physical examination, a hard, irregular, and immovable 19-cm groin swelling, extending to the upper pole of the homolateral testis, was found (Fig. 1A); excluding local discomfort, the patient denied any other symptom. A computed tomography revealed a solid tumor affecting the spermatic cord, groin lymph nodes, abdominal wall, and epididymis (Fig. 1B). With this evidence, a wide groin tumor excision including an inguinal radical orchiectomy was scheduled. During surgery, the left testis with its spermatic cord was extirpated, with an abdominal wall segment, in block with the superficial groin lymph nodes to obtain macroscopic free margins (Fig. 2A); post-operative evolution was uneventful. The surgical specimen revealed a spermatic cord tumor spreading to abdominal muscle wall, lymph nodes, and epididymis (Fig. 2B); using immunohistochemical studies, a malignant fibrous histiocytoma of the spermatic cord was diagnosed (Fig. 2C). Considering the tumor size, and invasion to surrounding structures, the patient received adjuvant radiotherapy. For 14 months, the patient was tumor-free. Later, a right groin 2-cm lymphadenopathy appeared and was extirpated; a metastasis of the malignant fibrous histiocytoma was diagnosed. A radical inguinal lymph node dissection was suggested, but the patient declined the surgery. Radiotherapy was applied on the right groin; unfortunately, even though all treatments, the patient progressed and died.

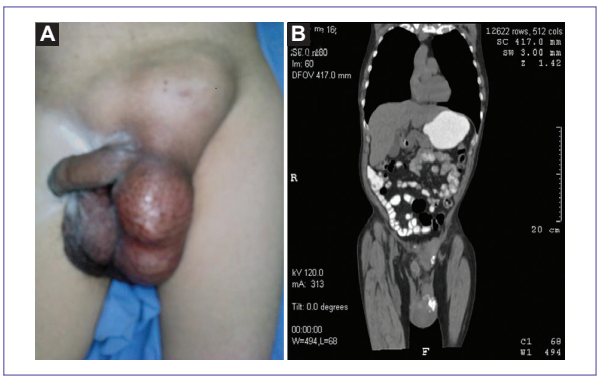

Figure 1. A: Clinical aspect of the left inguinal tumor. **B:** Coronal image of computed tomography showing tumor activity in the left side of the scrotum and groin.

Discussion

The spermatic cord malignant tumors are rare[1]. In general, these tumors are of considerable size, and they originate below the external inguinal ring growing into the scrotum, and rarely prevailing as a groin mass as in our case.

Like in this case, clinical impression is not enough to identify spermatic cord malignant tumors[1,3]. Therefore, imaging studies as ultrasound, computed tomography, and magnetic resonance are valuable tools to attempt their diagnosis[1,3]. Nonetheless, these lesions have not pathognomonic imaging findings and is difficult to obtain a pre-operative diagnosis. Therefore, surgical excision is essential for a precise histological diagnosis[1,3].

The indicated surgical management for spermatic cord sarcomas is radical inguinal orchiectomy with high ligation of the spermatic cord, including a wide excision of surrounding soft tissue to reach negative microscopic surgical margins[1,3,5]. Long-term follow-up is advocated given their excessive recurrence rates[3]. Disappointingly, adjuvant treatments like radiotherapy and chemotherapy have little value[1].

The malignant fibrous histiocytoma of spermatic cord is exceptional[1,3]. There have been reported few cases and most occurred in the elderly[4]. This neoplasm tends to cause lymph node metastases[6]; therefore, regional lymph node dissection may improve local control of this disease according to some surgeons[6]. Due to spermatic cord malignant fibrous histiocytoma rarity, there are no agreed treatment principles, and their generally prognosis is poor[7,8].

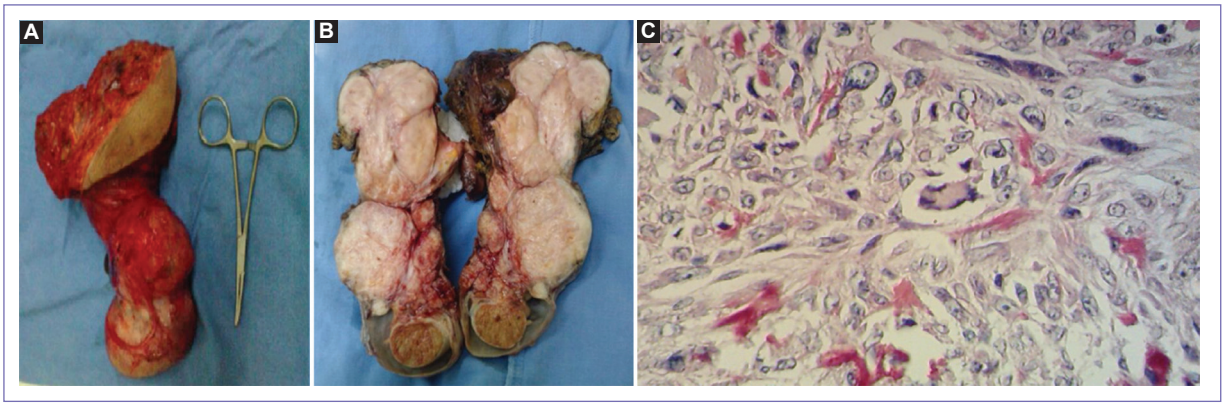

Figure 2. A: Macroscopic aspect of the fresh surgical specimen. **B:** Macroscopic aspect of the formalin fixed surgical specimen opened along its axis, shows fleshy-looking nodules, arising from the spermatic cord, which infiltrates the epididymis. **C:** Microphotography, phosphotungstic acid H-E staining, 100×. Storiform pattern, multiple spindle cells.

Conclusion

The spermatic cord malignant tumors are rare. They originate below the external inguinal ring growing into the scrotum, and rarely prevailing as a groin mass as in our case.

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Conflicts of interest

The authors declare that they have no conflicts of interest.

Ethical disclosures

Protection of human and animal subjects. The authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of data. The authors declare that they have followed the protocols of their work center on the publication of patient data.

Right to privacy and informed consent. The authors have obtained the written informed consent of the patients or subjects mentioned in the article. The corresponding author is in possession of this document.

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