



Recurrent Leiomyosarcoma of The Scrotum

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Abstract

Leiomyosarcoma of the scrotum is a rare tumor. These tumors usually present as firm, rubbery, nontender, irregular masses. Scrotal leiomyosarcomas tend to be slow growing tumors that tend to be present for years. It is best treated by wide local excision. We present a case of recurrent leiomyosarcoma of scrotum in a 57 year old patient, who recurred four times after excision in 3 years and was controlled by combination chemotherapy.

Key Words

Leiomyosarcoma, Neoplasam

Introduction

Soft-tissue sarcomas are rare, malignant neoplasms that arise from mesenchymal tissues; they account for 1% of all adult malignancies. Subcutaneous leiomyosarcomas account for 1% to 2% of all superficial soft tissue malignancies. It arises from smooth muscle in the walls of arterioles and veins (1). Leiomyosarcoma of the scrotum is a rare tumor. We herein report the case of recurrent leiomyosarcoma of scrotum in a 57 year old patient, who recurred four times after excision in 3 years.

Case Report

A 57-year-old patient was referred to the Department of Radiotherapy. He had a history of recurrent swelling over the left scrotum for the last 3 years. The swelling had been excised 4 times in last year and a half. Every time the swelling was excised, it would recur after 3-4 months after excision. He was referred to our hospital for further management. Examination revealed a healthy surgical scar over the left scrotum, beneath the scar was a well defined swelling of 0.5 centimeter. There was no other positive finding. The preoperative ultrasound showed a small swelling on the anterior wall of scrotal sac, which was separate from the left testis and

epididymus. Ultrasonography of the scrotum done two months after the surgical excision revealed a hypoechoic lesion of size 5×7 mm in the anterior wall of scrotum on the left side. Histopathological examination of the excised swelling revealed it to be a leiomyosarcoma (*Fig-1*). Contrast enhanced CT scan of the abdomen revealed no retroperitoneal lymphnode enlargement.

The patient was advised radical surgery, but the patient refused for the same. He was given 6 cycles of chemotherapy with vincristine, doxorubicin and cyclophosphamide combination after taking written informed consent from him. The lump regressed completely after 4 courses of chemotherapy. The patient is on regular follow-up and is disease free 20 months after completion of chemotherapy.

Discussion

Smooth muscle is seen in the skin in three locations, the arrectores pilorum muscles, the wall of vessels and the specialized muscles in genital skin (the dartos, vulvar, and mamillary muscles of the scrotum, labia majora, and the breast, respectively) (2). Leiomyosarcoma of the scrotum is a rare tumor. These tumors usually present as

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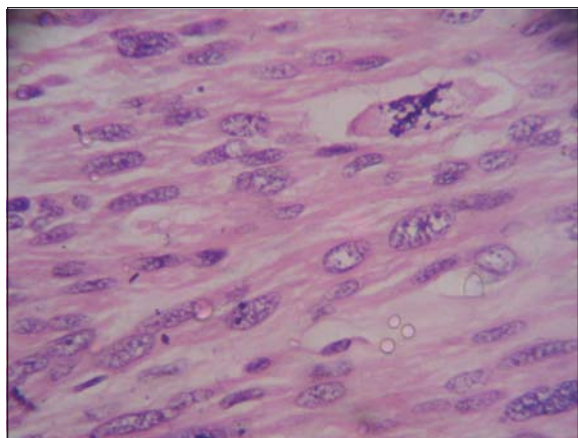


Figure-1 Pictomicrograph Showing Leiomyosarcoma of the Scrotum with Abnormal Mitosis (400 X)

firm, rubbery, nontender, irregular masses. Scrotal leiomyosarcomas tend to be slow growing tumors that tend to be present for years (3). Johnson H Jr in 1987 reported the first known case of leiomyosarcoma of the scrotum (4). Only 34 cases have been reported in the literature worldwide till now. Recently also it has been reported by Limaïem *et al* (5). It is often mistaken for a benign lesion. It is best treated by wide local excision.

Owing to the small number of patients, well documented data regarding the adjuvant therapy is limited. Inguinal lymph node dissection is not advocated, unless a high degree of suspicion is present for lymph node metastasis (6). Radiation therapy has been of doubtful value in

treatment of leiomyosarcoma except for palliation. Chemotherapy with gemcitabine, paclitaxel, vincristine, doxorubicin, actinomycin-D has been used with limited success.

Conclusion

The recommended treatment of localized leiomyosarcoma of the scrotum is wide excision. Adjuvant treatment is not considered necessary. However, locally aggressive tumors may recur. Chemotherapy may be effective in selective group of patients who refuse surgery. Long-term follow-up is essential, because of the risk of delayed local recurrence and distant metastasis.

References

1. Yajima K, Shirai Y, Fujita F, Sato D, Umezu H, Hatakeyama K. A giant subcutaneous leiomyosarcoma arising in the inguinal region. *World J Surg Oncol* 2005; 3:14
2. Flotte TJ, Bell DA, Sidhu GS, Plair CM. Leiomyosarcoma of the dartos muscle. *J Cutan Pathol* 1981;8(1):69-74.
3. Echenique JE, Tully S, Tickman R, Walther MM, O'Brien DP, Judd RL. A 37-pound scrotal leiomyosarcoma: a case report and literature review. *J Urol* 1987 ; 138(5):1245-6.
4. Johnson H Jr. Leiomyosarcoma of scrotum. *Urology* 1987 ; 29(4):436-38.
5. Limaïem F, Chelly I, Bellil S, *et al*. Primary cutaneous Leiomyosarcoma : A histological and Immunohistochemical study of 4 cases. *Pathologica* 2007; 99(6):415-19
6. John T, Portenier D, Auster B, Mehregan D, Drelichman A, Telmos A. Leiomyosarcoma of scrotum--case report and review of literature. *Urology* 2006 ; 67(2):424.e13-424.e15.

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