CASE REPORT

Case Report on Primary Intratesticular Leiomyosarcoma of the Spermatic Cord

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INTRODUCTION

We report on case of the man with primary intratesticular tumor with a histological diagnosis of pleomorphic leiomyosarcoma .He presented to the university teaching hospital, Lusaka, Zambia with one year history of left testicular swelling.

Testicular tumors are relatively rare with 2-3 cases per 100,000 males reported in the USA. [1]. When they occur 94% are germ cell tumors and the rest are gonadal stroma and secondary tumors and staging of these is the same as other testicular tumors and staging of these is the same as other testicular tumors. Although the etiology of testicular tumors is not known, there is strong association with history of cryptorchidism. Tumors of the spermatic cord are typically benign with most being the lipomas. Of the malignant lesions, rhabdomyosarcoma in the juveniles is most common, followed by leiomyosarcomas, fibrosarcoma and liposarcoma. The incidence of leiomyosarcoma is not known due to the rarity of the tumor. Consequently the value of retroperitoneal lymph node dissection as part of surgical treatment remains to be determined. However it is generally agreed that inguinal Orchidectomy is the primary treatment of choice for primary testicular sarcomas. [2]

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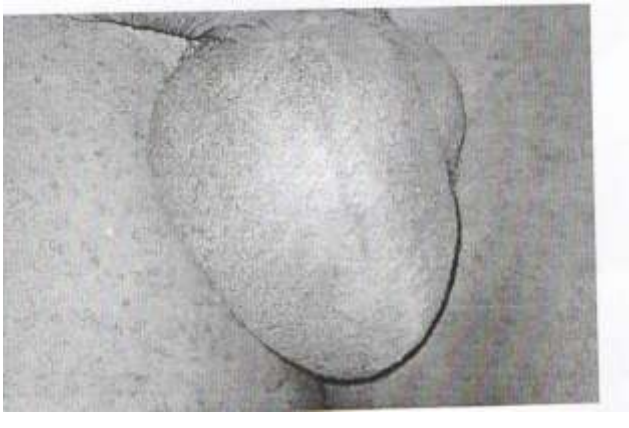
D.C. was a 50years old man who presented to the urology unit with a left testicular swelling for one year. There was no associated pain but sensation of heaviness. He denied systemic symptoms and any change in sexual life. There was no history of undescended testis in the patient.

Physical examination revealed a well built health man with no signs of wasting. General examination was normal and the chest was clear. Abdominal examination was normal with no palpable masses no ascites. He had no inguinal lymph nodes. Local examination showed a swollen left testis hard and nodular, non tender and free from the scrotum.

Figure 1. Preoperative clinical appearance of testis

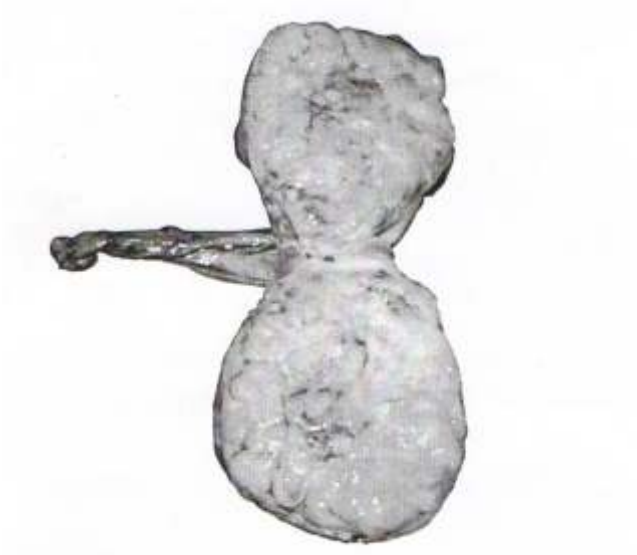


Key words: Spermatic Cord, Primary

Investigations done showed a normal liver function test. Renal function was also normal with creatinine of 110umol/l. Full blood count was essentially normal with hemoglobin of 13.9g/dl and normal white blood cell differentials. The ESR was 51mm/hr. Tumor markers could not be done. Abdominal ultrasound shows no ascites or retroperitoneal nodes other than an incidental finding of liver cysts. The rest of the organs were normal.

The patient underwent uncomplicated radical inguinal Orchidectomy with the presumptive diagnosis of intratesticular tumor. Staging showed no evidence of local regional or distance metastasis to the retroperitoneal. Post operative period was uneventful.

Figure 2: Gross section of the tumor.



Histology showed sections from the normal tissue with testicular tubules of normal consistence with spermatids and spermatogonia.
Sections from the tumor showed a highly cellular lesion composed of spindle cells, myoepithial cell with marked pleomorphism and significant mitotic figures consistent of smooth muscle tumor. Conclusion was that of pleomorphic leiomyosarcoma.
Follow up by the oncologist in the cancer diseases hospital relieved that he developed abdominal metastasis after six months of surgery and was commenced on radiotherapy and chemotherapy although the role of such treatment modalities in this cancer is not known due to the rarity of the type of cancer.

DISCUSSION

Primary leiomyosarcoma of the testis is an infrequently reported and rare indolent tumor with potential of distant metastasis. It's a paratesticular tumor arising from the spermatic cord within the testis. From our research about 126 cases have been reported in the literature[3]. The low incidence of the tumour and the resistance to conservative therapy such as chemotherapy presents a problem in establishing a treatment policy for this tumour. However it is generally agreed that inguinal orchidectomy is the treatment of choice as with other testicular tumours [2]. The fact that the tumors can spread strengthens the need for early diagnosis and treatment. Where there is high index of suspicion of tumor an inguinal Orchidectomy is a rule with high cord ligation as the spermatic cord may just be the primary site of the tumor. Scrotal Orchidectomy in such cases should be condemned as it not only leaves the tumor but predisposed to the spread of the tumor during manipulations. Its important to histological exclude rhabdomyosarcoma especially in younger ones which not only requires inguinal Orchidectomy, also needs retroperitoneal lymph node dissection and post operative radiotherapy and chemotherapy. [4]. In our patient the tumor recurred with abdominal metastasis despite the ultrasound not showing any evidence of retroperitoneal seedlings. It's therefore the view of the authors that such patients may benefit from post operative radiotherapy even in the absence of macroscopic metastasis.

In summary leiomyosarcoma arising from the spermatic cord is very rare. A patient with

leiomyosarcoma requires follow up to check retroperitoneal metastasis if on presentation they don't show such evidence. Abdominal ultrasound is not sensitive enough to pick up retroperitoneal metastasis hence a CT scan is mandatory in patients with cancer of the testis to exclude any metastasis. Due to the rarity of the condition, the role of chemotherapy, radiotherapy and retroperitoneal lymph node dissection is not known. Hence more cases needs to be reported to establish the role of other treatment modalities and the incidence of such a rare tumour.

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