ONGOING TESTICULAR TUMOUR OF 8 YEARS WITHOUT LOCO REGIONAL SPREAD – AN ENIGMA FOR TREATMENT

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ABSTRACT
Spermatocytic seminoma is a rare testicular germ cell tumor associated with a good prediction. Spermatocytic seminoma with sarcomatous transformation is an extremely rare with only few cases reported. The presence of a sarcomatous component is associated with an aggressive behaviour, metastasis, and poor prognosis. We present an unusual case of a spermatocytic seminoma with rhabdomyosarcomatous transformation in a long-standing testicular swelling of 8 years.
Keywords: Spermatocytic seminoma, Rhabdomyosarcoma, High inguinal orchidectomy

1. Introduction:

Spermatocytic seminoma is a rare germ cell neoplasm. The incidence is 1-2% of all testicular tumors. It occurs with a mean age of 53.6 years (range 19-72 year) [1, 2, 3]. The great majority of spermatocytic seminomas occur in pure form, do not metastasize, and have very good outcome. On the odd occasion it is associated with sarcomatous change which makes it aggressive and increases the chance of metastasis [4, 5, 6]. We present a rare case of long standing testicular swelling diagnosed as spermatocytic seminoma with rhabdomyosarcoma.

2. Case report:

A 43 year old male presented with eight year history of right scrotal swelling gradually increasing in size (Figure 1). Clinically, the preoperative diagnosis was of a secondary hydrocele with an underlying testicular tumour.

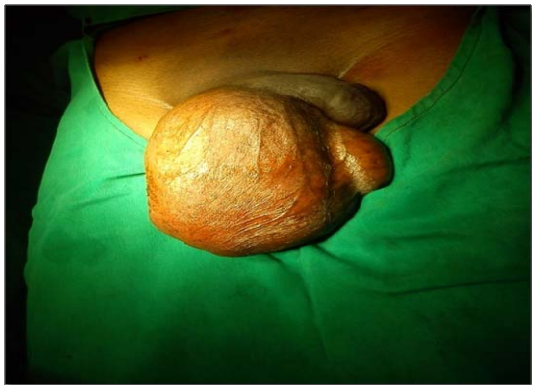

Figure 1- Right scrotal swelling

Ultrasound revealed a large irregular testicular mass with heterogeneous echo texture with foci of calcifications (Figure 2).

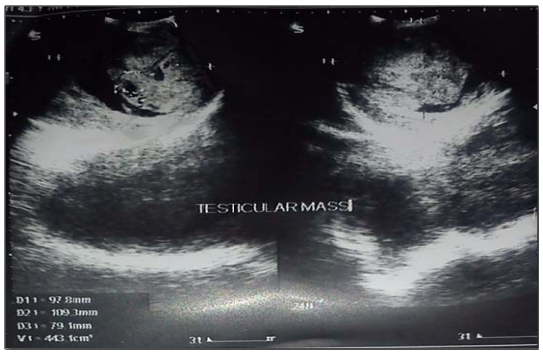

Figure 2- Ultrasound of scrotum showing testicular mass

Tumour markers were within normal limit (beta-human chorionic gonadotropin [βHCG] <1, alpha-fetoprotein [AFP] =2.5, Lactate dehydrogenase [LDH] = 400). A Computed tomography of thorax, abdomen and pelvis revealed no metastasis.
Patient underwent right high inguinal orchidectomy (Figure 3).

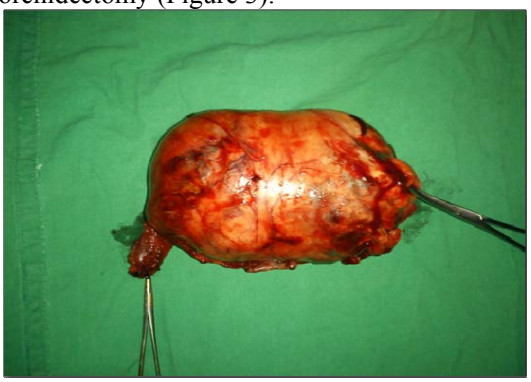

Figure 3- Post operative specimen of testicular mass

Histopathology report showed 15×10×8 cms spermatocytic seminoma with embroyonal carcinoma component and sarcomatous component -Rhabdomyosarcoma (figure 4).

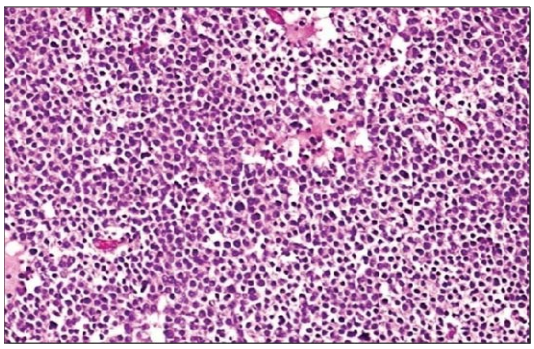

Figure 4- Spermatocytic seminoma with three cell types and follicle-like edema fluid-filled spaces. (H and E, ×20)

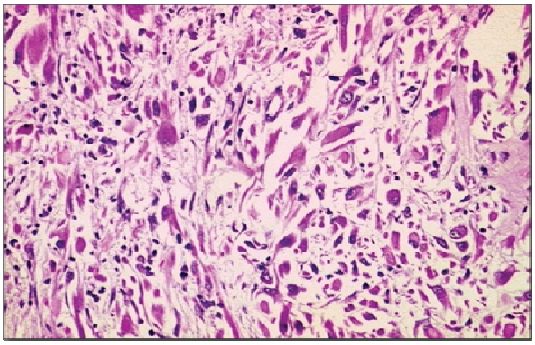

Figure 5- Rhabdomyosarcomatous component comprised spindle to pleomorphic cells with prominent nucleoli and abundant eosinophilic cytoplasm (H and E, ×40)

Patient has received adjuvant chemotherapy with no recurrence of 1 year follow up.

3. Discussion:

Spermatocytic seminoma with sarcomatous transformation is a rare entity (about 6 %) [7]. Spermatocytic seminoma is a relatively rare but well-defined pathologic entity, first described by Masson [8] and characterised by long duration of symptoms, early stage at presentation, and absence of metastasis.

Sarcomatous component is usually a rhabdomyosarcoma or undifferentiated, high grade sarcoma [5]. The sarcomatous transformation in the spermatocytic seminoma is associated with aggressive behaviour, presence of metastasis, and poor outcome [4, 5, 10]. In the present case, the patient had a neglected, slowly enlarging testicular swelling which gained a rapid and alarming increase in size over 8 year duration.

Orchidectomy is a treatment of choice in spermatocytic seminoma, followed by close watch to detect a contralateral testicular tumor. The presence of a sarcomatous component requires adjuvant chemotherapy and radiotherapy. As risk of metastasis is increased with the presence of a sarcomatous component, close follow-up is essential [7, 10]. The prognosis of such a patient is always poor.

Conclusion:

The above case highlights that a spermatocytic seminoma although lazy in its behaviour can rarely undergo sarcomatous dedifferentiation, especially in long-standing cases. Orchidectomy is the treatment of choice for spermatocytic seminomas whereas in tumors with sarcomatous differentiation, in addition, chemotherapy and radiotherapy may be beneficial.

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