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CASE REPORT

An Unusual Presentation of Spermatocytic Seminoma: A Case Report

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Abstract

Spermatocytic Seminoma is a rare yet distinct testicular germ cell tumor which represent less than 01% of testicular tumor. Herewe presented a case of testicular swelling in young male. On histopathological examination Spermatocytic Seminoma was confirmed. However, SpermatocyticSeminoma is common is elderly age group. Since the prognosis for this tumor type is favourable, accurate diagnosis and differentiation from other malignant testicular neoplasm (classical seminoma) is must for therapeutic management with long term follow up.

Key Words:

Spermatocytic Seminoma, Testicular tumor

Introduction

Spermatocytic seminoma (SS) is a very uncommon testicular neoplasm which presents as a slow growing mass. It represents 1 to 2% of germ cell tumours and 4 to 7% of all seminoma patients.[1,2] This tumour has no known counterpart in ovary in females or any other site in males.[3,4]

Spermatocytic seminoma occurs infrequently in young patients with the usual age of presentation after 50 years. Most of the time, it presents as a painless testicular mass. Right testis is more commonly involved and in contrast to classic seminoma there is no relation with cryptorchidism or intraepithelial neoplasia. It behaves in benign fashion and metastasis is extremely rare so that orchiectomy is usually sufficient therapeutic management with long term follow up.[5,6]

Case Report

A 26-year-old man presented complaining of gradually increasing right side testicular painless swelling for two years. On physical examination,right side testis enlargement was seen which was firm in consistency to palpation. Scrotal ultrasonography revealed a well-defined 61.0x28.0x23.0m.mright testicular solid tumour with heterogeneous echogenicity associated with a small hydrocele.

The patient underwent outside our department of a right orchiectomy via scrotal approach. On gross examination, the testicle measured 11.0x6.2x3.2 cm and weighed 176 g. On cut, the mass had fleshy, pale-grey cut surfaces with direct invasion of the tunica. (*Fig 1*)

A histological examination confirmed the diagnosis of spermatocytic seminoma showing anarchic cell proliferation, making pseudo- glandular areas located within a very small and oedematous stroma (*Fig 2*). Computed tomography of the thorax, abdomen and pelvis were inevident for lymphadenopathy or other metastases. After surgery, the patient was followed closely and was

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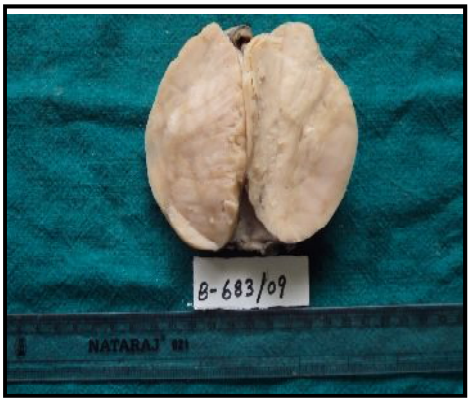

Fig 1: The cut section of testis shows homogenous, greyish white appearance with fleshy and firm areas. No necrosis or haemorrhage seen.

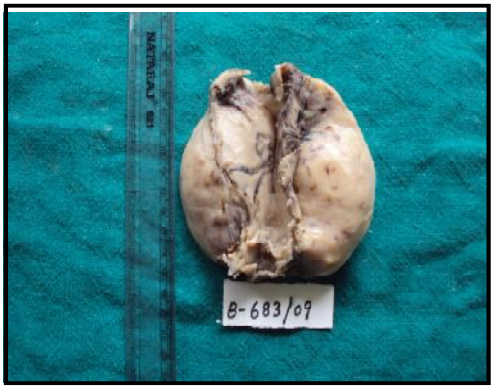

Fig 2: The cut section of testis shows that it has been completely replaced by tumor

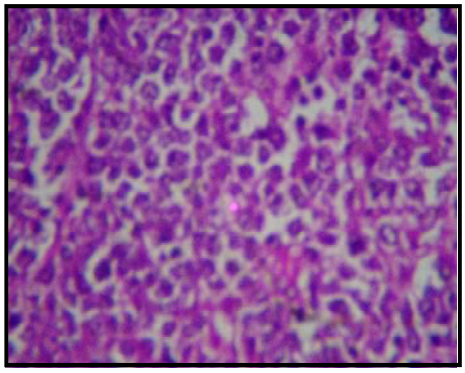

Fig 3: Microscopic section shows anarchic cells proliferation, making pseudo glandular area located within a very small and edematous stroma. H&E (10x)

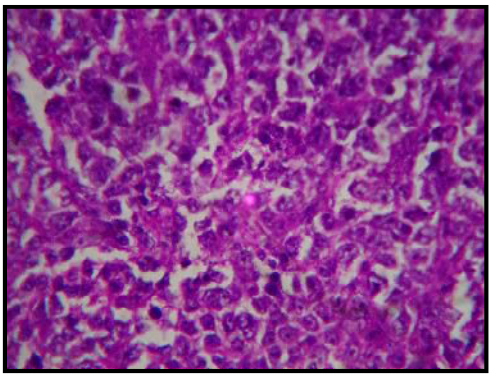

Fig 4:Microscopic section shows anarchic cells proliferation, making pseudo glandular area located within a very small and edematous stroma. No lymphocytic infiltrate or fibrous septae seen. H&E (40x)

not kept on any adjuvant therapy. He was in a good condition with no evidence of metastasis 24 months after the operation.

Discussion

Spermatocytic Seminoma was first described by Masson in 1946 and rarely occurs in younger age group.[3,7,8] Clinically, the main difference between spermatocytic and classical seminoma is the age group of occurrence. Spermatocytic seminoma tends to occur more commonly, in men aged over 50, while in classical seminoma, the age at diagnosis is between 25 and 40 years. In our case the spermatocytic seminoma is present in a 26 year old male which is an unusual age for spermatocytic seminoma occurrence. The duration of symptoms was longer compared with classical seminoma, indicating a slower evolution and less malignant biological behaviour.

Spermatocytic seminoma have anaplastic variant and 6% of Spermatocytic seminoma undergo sarcomatousdifferentiation.[9] The sarcomatous component is usually rhabdomyosarcoma or undifferentiated, high-grade sarcoma and it appears that the metastatic disease develops usually from the sarcomatous elements.[10] Tumors with sarcomatous differentiation have aggressive behavior, metastasis and poor prognosis.[11,12] Our case was devoid of both anaplastic and sarcomatous differentiation. No evidence of metastasis was present and prognosis was good.

Conclusion

Spermatocytic seminomawas an incidental histopathological finding in our case, as the patient came with complaint of hydrocele. The diagnosis was made and prompt treatment was given for both spermatocytic seminoma and hydrocele. The timely diagnosis and treating surgery made rare chances of metastasis and lymphadenopathy. Patient was asymptomatic on follow-up visits.

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