



LYMPHOMA OF TESTIS-A RARE CASE REPORT

Pathology

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ABSTRACT

Primary testicular lymphoma constitutes 1-2% of Non-Hodgkin's lymphomas affecting elderly men >60 years of age. The most common histologic type is Diffuse large B cell lymphoma (DLBCL). Differential diagnosis includes seminoma, embryonal cell carcinoma, granulomatous orchitis, pseudolymphoma and plasmacytoma. Treatment involves multimodality approach involving surgery, chemotherapy and radiotherapy. Despite aggressive therapy, prognosis of this neoplasm is poor.

KEYWORDS

Lymphoma, elderly, orchidectomy.

INTRODUCTION:

Testicular lymphoma is a rare neoplasm representing 1% to 2% of all non-Hodgkin lymphomas (NHLs) and approximately 5% of all testicular neoplasms.^{1,2} It is seen mainly in the elderly men over the age of 60.^{3,4} It usually presents as a firm, painless unilateral testicular mass. The tumour shows marked extranodal tropism and relapses frequently involve sites including the central nervous system (CNS), skin, contralateral testis, and pleura. The most frequent histology is Diffuse large B-cell lymphoma (DLBCL).^{5,6}

We are presenting a case of 50 year male who presented with a left testicular swelling which was diagnosed as testicular lymphoma.

CASE REPORT

Case. A 50 year old male presented in the surgical OPD with slow growing left testicular swelling since 3 months associated with mild pain. About 8 months back the patient had been operated for hydrocoele. Also he had complaints of left side scrotal abscess 4 month back which was incised and drained in some private hospital. Now, the patient presented with left testicular mass which was clinically suspected as chronic inflammatory mass. USG showed left testicular swelling measuring approximately 8x6x2.5 cm. Scrotal Doppler evaluation showed a globally enlarged left testis and epididymis with increased vascularity in the left testis, with the right testis being normal. Testicular tumour markers were normal. Left orchidectomy was performed and specimen was sent for histopathological examination.

Specimen received included distorted orchidectomy specimen in multiple pieces measuring together 8x5.5x3 cm. One of the soft tissue piece was skin covered with cut section grey white. No normal testicular tissue was identified grossly. Received along with was epididymis measuring 4 cm in length.



Fig-Gross photographs of left testicular mass- cut section showing grey white surface

Representative microsections studied show diffuse infiltration of neoplastic cells showing nuclear pleomorphism, grooving and

inconspicuous nucleoli. Background showed haemorrhage, necrosis and atypical mitosis. Histomorphological features were suggestive of lymphoma testis.

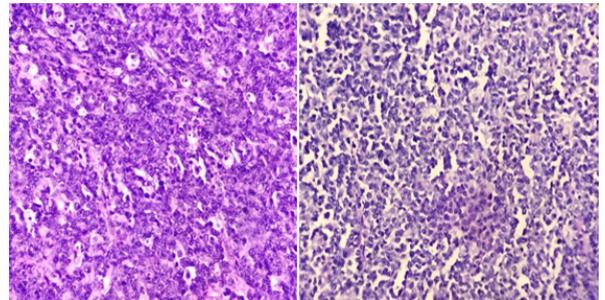


Fig- H&E sections from testicular mass showing diffuse infiltration of neoplastic lymphoid cells

DISCUSSION:

Non-Hodgkin's lymphoma as a primary testicular neoplasm accounts approximately 9% of all testicular malignant tumours and about 1-2% of all non-Hodgkin's lymphoma. With a median age at diagnosis of 66 to 68 years, PTL is both the most common testicular malignancy in men age >60 years and the most common bilateral testicular neoplasm. The incidence has increased over the last two decades with the emergence of human immune deficiency virus infection.⁴ The most common histotype in primary forms is the diffuse large B-cell lymphoma, whereas more aggressive histologies such as Burkitt's lymphoma are principal founded in cases of secondary involvement of the testis.⁷ Histopathological differentiation from seminoma is usually very difficult.⁸ Other conditions that might resemble testicular lymphoma are embryonal cell carcinoma, granulomatous orchitis, pseudolymphoma, plasmacytoma and rhabdomyosarcoma. Serum lactate dehydrogenase (LDH) levels have been found to be related with tumor aggressiveness whereas other tumor markers such as serum beta human chorionic gonadotropin (HCG) and serum alpha-fetoprotein (AFP) are rarely elevated in these cases.⁹ Most common clinical presentation is a unilateral painless scrotal swelling while 35% of cases show bilateral testicular involvement.⁷ In patients with advanced stage, the systemic B symptoms are present. Advanced stages with para-aortic lymph-node involvement are associated with ascites and abdominal pain. Several variables have been reported as prognostic factors of PTL: Age, B symptoms, performance status (PS), tumour size >9 cm, spermatic cord involvement, elevated LDH, histologic grade, vascular invasion, CNS involvement, Ann-Arbor stage and IPI score.¹⁰ Overall prognosis of the tumour is very poor with progressive systemic lymphomatous involvement. Testicular lymphoma often

disseminates to other extranodal organs, such as contralateral testis, central nervous system (CNS), lung, pleura, Waldeyer's ring and soft tissue. Treatment includes orchiectomy followed by rituximab, cyclophosphamide, doxorubicin, vincristine, and prednisone (R-CHOP) combination chemotherapy, with central nervous system (CNS) prophylaxis and prophylactic irradiation of the contralateral testis.

CONCLUSION:

Primary testicular lymphoma (PTL) is a very aggressive malignancy with a poor outcome. The most common type of primary testicular lymphoma is diffuse large B-cell type. Orchiectomy done in early-stage disease is advantageous because it provides tissue for pathologic evaluation and removes a sanctuary site, as the blood-testis barrier makes testicular tumors inaccessible to systemic chemotherapy. There is a high risk of extranodal relapse even in cases with localized disease at diagnosis; therefore, an adjunctive chemotherapy or radiotherapy regimen along with proper follow up is necessary. It is important to identify primary testicular lymphoma correctly and distinguish it from other entities because of differences in therapy, management, and prognosis. To conclude, the PTL is a rare disease and needs high index of suspicion for early diagnosis.

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