Malignant mesochymal tumor of the spermatic cord. *A rare para testicular tumor*

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Tumors of the spermatic cord are rare and 91% are of mesochymal in origin. The prognosis of malignant mesochymal tumors depends upon the histological grade and surgical resection remains as the main stay of the treatment. Spermatic cord tumors are a rare entity and most of them are benign in nature. Malignant tumors of the spermatic cord are mostly mesochymal in origin. We report a case of a malignant mesochymal tumor in a 68-year-old man with successful surgical outcome. Literature search has revealed only 10 such cases[1] so far, and ours will be the 11th case.

A 68-year-old man, was admitted in with swelling in the left groin, which was gradual in an onset and progressive in nature over 2 years. There was no fever pain or loss of weight associated with the swelling. Also, no symptoms of bowel or bladder disturbance were noted. On examination, the patient was an elderly man in a fairly good health except for pallor. There was an irregular mass in the left groin approximately 8 x 6 cm bosselated, firm, to hard but mobile and it is not attached to the skin or under laying structures. There was also a separate mass just above the left testes approximately 2 x 3 cm firm and not separable from the spermatic cord. There were few lymph nodes, 2-3 mobile and firm in the vertical group. Per-rectal examination revealed a rectal polyp, congested but not bleeding, no other mass was palpable; prostate was firm but mildly enlarged. The clinical diagnosis of lymphadenopathy in the left groin with malignant cord tumor investigations shows gross anemia (7.5 gms %), serum chemistry and liver function test (LFT) within normal limits. chest x-ray showed mild cardiomegaly with left ventricular hypertrophy (LVH) in electrocardiogram (ECG) that leads fine needle aspiration cytology (FNAC) left groin lymph node: either primary metastatic adeno carcinoma or prostate. Ultrasonography (USG) of the abdomen and pelvis was normal except for enlarged prostate. While the USG of the left groin showed an encapsulated lymph node mass, is approximately 8.4 x 6 cm. Also, there is a mass just above the left testes approximately 2 x 3 cm hyper echoic, not separable from the cord and suggesting a cord tumor. The patient received multiple blood transfusions for iron deficiency anemia. The left hemi scrotectomy with high inguinal orchiectomy performed with clear surgical margins and the lymph node mass was totally excised. Postoperative

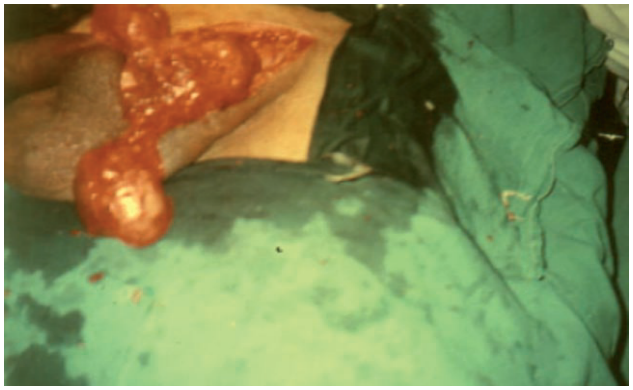

Figure 1 - Photograph showing intraoperative resection. The patient is doing well at one-year postoperative follow up.

period was uneventful. The histopathology report in gross pathology shows the lobulated grayish white mass covered with fat. The specimen measures approximately 11 x 8 x 4 cm, at one end cord-like structure, which on cut section shows smaller testicular mass with hydrocele. Microscopy in multiple sections studies showed malignant neoplasm comprised of a large polygonal cells with large irregular vascular nucleus with a prominent nucleoli. The cytoplasm is abundant and intensely eosinophilic. Mitotic figures were seen. Myxoid changes were also seen, cells were periodic acid schiff (PAS) negative. Impression malignant mesochymal tumor with early rhabdomyoblastic differentiation of left spermatic cord margins are free. The patient received combination chemotherapy of 3 cycles comprising vincristine, doxorbucin, cyclo phosphomide and actinomicin D. Tumors of the spermatic cord are rare and 91% of them are mesochymal in origin.[2] Para testicular (extra testicular) tumors are grouped into: a) epididymal; b) spermatic; and c) scrotal tunica tumors. Most of these are benign. The tendency for malignancy is lower than that of intra testicular tumors. The most common benign tumors are adenomatoid, leiomyoma and papillary cyst adenoma. Most of these tumors are seen in the epididymis. Malignant tumors constitute 3% of all para testicular tumors and include fibro sarcoma and metastasis.[3] Spermatic cord sarcomas may arise from any mesodermally derived cord structures including cremasteric and intersitial cells that lie outside of or components of the fascial layers of the cord itself; thus, they may not be limited by this anatomical boundary. Spermatic cord tumors present as a firm, palpable mass in the scrotum or inguinal canal. Any palpable mass of the cord structures could be cord tumor. Sonography plays an important role in the diagnosis of para testicular scrotal tumors.[4]

Factors that can affect local control rates include tumor biology, adequacy of surgical resection and adjuvant therapy. Optimum initial surgical treatment of soft tissue sarcomas entails wide local resection that includes all non-vital structures. In case of spermatic cord sarcoma, a radical orchiectomy with local resection of surrounding tissues should be performed.[5]

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Ethical Consent

All manuscripts reporting the results of experimental investigations involving human subjects should include a statement confirming that informed consent was obtained from each subject or subject's guardian, after receiving approval of the experimental protocol by a local human ethics committee, or institutional review board. When reporting experiments on animals, authors should indicate whether the institutional and national guide for the care and use of laboratory animals was followed.