ADENOMATOID TUMOR OF EPIDIDYMIS: A PARATESTICULAR TUMOR (CASE REPORT)

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ABSTRACT

Adenomatoid tumor is rare benign tumor usually arising from para testicular tissues (epididymis, tunica vaginalis or spermatic cord) predominately tail of epididymis and very rarely intratesticular tissues like tunica albuginea. It is mesothelial in origin, mostly benign in nature usually affects middle age population (20 - 50 years). Due to diagnostic challenge especially for radiologist and rarity of cases we are reporting such a case report of adenomatoid tumor of epididymis.

Introduction

Para testicular tumors are very uncommon and less than5% all intrascrotal lesions. Lipoma is most common para testicular lesion followed by adenomatoid tumor of epididymis.[1] Adenomatoid tumor was first described by Golden et al in 1945 as first painless solid intrascrotal mass. Beccia et al.[2] Study was done that showed 256 epididymal tumors of 341 in total. Most of them (75%) were benign. Among those epididymal tumors, adenomatoid tumor (73%), leiomyoma (11%), and papillary cystadenoma (9%) were the most frequent.

Case Report

40 yrs. Old married male presented in OPD at SIUT with complaints of left scrotal swelling since 10 yrs., which had gradually increased in size over the years but was not tender and 6 days back he developed pain with dragging sensation in left scrotum.

On examination; left swollen testis with swelling at lower pole, slightly tender however right testis normal with no swelling appreciable.

Laboratory investigations and tumor markers were done, which all within normal limits. (Beta HCG=0.23 AFP=3.4 and LDH=154). First clinical impression is germ cell tumor of testis.

Radiological investigations; Ultrasound Color Doppler imaging was done which revealed bilateral testis were normal and well defined heterogonous mass of 5.0 x 4.1cm involving left epididymis with internal color flow (vascularity) in it raising possibility of neoplastic in nature (Fig. 1).

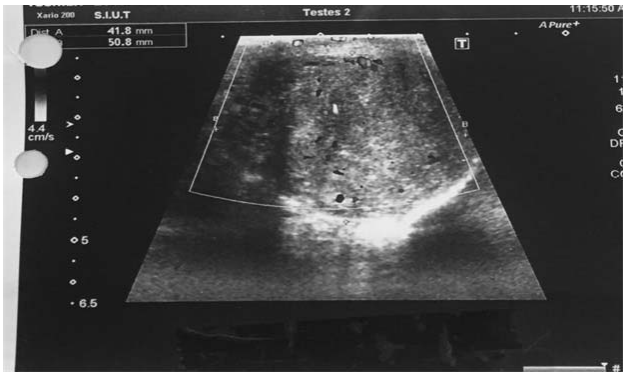

Figure 1: Para testicular mass with heterogeneous echogenicity involving tail of left epididymis with internal vascularity on CDI

On these findings, local excision of mass was done by our urology team and specimen sent to histopathology department.

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Histopathology;

Specimen sections revealed well circumscribed encapsulated lesion arising from visceral layer tunica vaginalis exhibiting cords, sheets to cystically dilated spaces lined by flattened to cuboidal cells having moderate to abundant eosinophilic cytoplasm with intracytoplasmic vacuoles and bland round nuclei in background of fibrous stroma (Fig. 2 & 3). A few scattered mitotic figures seen and scattered foci of lymphoid tissue aggregates seen.

Overall features are consistent with adenomatoid tumor of epididymis.

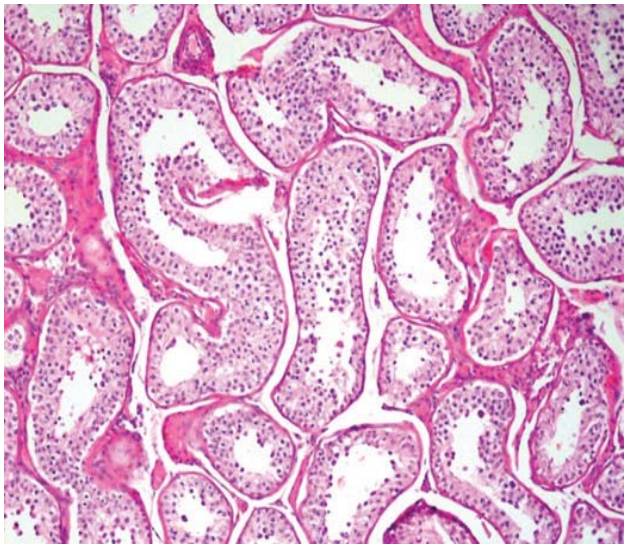

Figure 2: Histopathology pattern of tumor cells showing cuboidal spaces with abduntant eosinophiliac cytoplasm

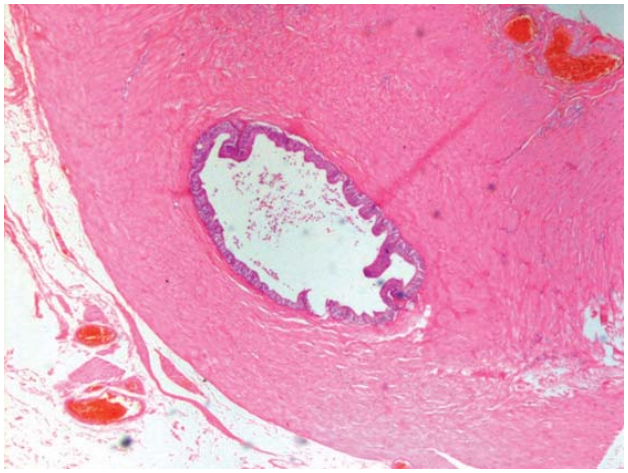

Figure 3: Histopathology ultra high power microscopic view showing interna structure of single cuboidal cell with eosinophiliac cytoplasm with background of fibrous stroma.

Discussion

Paratesticular tumors are very rare comprising less than 5 % of intrascrotal tumors. Adenomatoid tumors are usually originate from eididymis and about 14% arising from tunica albuginea of testis. These tumors are very small less than 2 cm but can be large reporterd upto 12 cm, well capsulated and assymtomatic.[3]

Ultrasonography is primary imaging modality of choice in order to preoperative diagnosis and delineate its boundaries. As well demarcated tumor is most of cases so its can be easily assesed on ultrasound but in some rare cases it can be invasive.[4] In these rare cases in which invasive cancer MRI can be helpful to demonstrate its invasive behaviour and further morphologic characteristics.

It is reported that 14% of adenomatoid tumor arises from tunica albuginea of testis. In those cases MRI can distinguish its boundaries separating mass from testiclar parenchyma.[5]

FNA is not recommoned as there is possibility of its malignant nature so excision as complete or partial epididymectomy is mode of choice in treatment and then after histoathological correlation guide us its further management.[5]

Histhoathogical findings comprises of three basic pattern on which diagnosis can be made; these are tubules, nests and cords with cuboidal epithelium and amphophiliac, esinohiliac cystoplsm with fibrous stroma.[6]

Immunohistochemically, an adenomatoid tumor is positive for markers, such as CK (AE1/AE3) EMA, Cam5.2, CK 5/6, CK7, calretinin, vimentin, WT1, and HBME-1. Other tumor markers, such as AFP, LDH, CEA, and b-HCG, when measured, are negative, being substantial for the exclusion of malignancy.[7]

Complete resection is usually curative and very rare chance of recurrence.[5]

In our case also complete excision was done. Finally, we are concerned about the necessity of annual surveillance of the patient, which could consist of clinical examination, U/S examination of the upper and lower abdomen and the scrotum, chest X-ray, and specific tumor markers (AFP, LDH, CEA, and b-HCG).

Conflict of Interest: Declared none by authors

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