

Case Report



Adenomatoid Tumor of Epididymis-A Case Report

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Abstract

Adenomatoid tumor is a very rare benign tumor of mesothelial origin. It is very difficult to distinguish carcinoma from an adenomatoid tumor. This is a report of a case of an adenomatoid tumor of the right epididymis of a man of 38-year-old who came to Urology OPD with pain and palpable swelling on the right testis. He also complaints of severe burning during ejaculation. We diagnose the case by ultrasonogram (USG) and Fine Needle Aspiration Cytology (FNAC). Right epididymectomy has done and histopathology revealed adenomatoid tumor. As the tumor is very rare, the case is to report for its clinical entity.

Keywords: Adenomatoid tumor, Epididymectomy, FNAC

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Introduction

Paratesticular tumors are a rare but generally benign neoplasm, differentiation with malignancy is difficult, usually treated by local excision or sometimes orchiectomy. It arises in male and female genital tracts. The origins of these types of tumors are from mesothelial cells. The mesothelium is a membrane composed of simple squamous cells that form the lining of the coelomic cavity in the embryo. The mesothelium is derived from mesoderm, one of the three germinal layers such as endoderm, mesoderm, and ectoderm, that appears in the 3rd week of embryonic development.¹⁻³

In one a study of 314 epididymal tumors of which 75% were benign and of that 73 % were adenomatoid tumors.⁴ In another study of 85 patients with epididymal tumors, there were 94% benign.⁵ The tumors generally involved the epididymis but other sites include the tunica albuginea, spermatic cord and

rare in testicular parenchyma may involve. In rare cases, extragenital sites also involved. Diagnosis of adenomatoid tumors results after Orchiectomy. They present either as a slow-growing scrotal mass with or without pain in testis.⁶ Preoperative confirm the diagnosis may preserve the organ loss.⁴ The authors diagnosed the case preoperatively by fine needle aspiration cytology (FNAC) and did right epididymectomy sparing the right testis.

The aim of the study was to focus on clinical, morphological and preoperative diagnosis by FNAC with treatment aspect is discussed to avoid unnecessary extensive surgical excision of an organ.

Case report

A 38-year old male, physically handicapped from birth

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presented with pain, and a palpable swelling on the posterior aspect of the right testis, situated in the tail of the epididymis. He also complains of severe pain and burning during ejaculation. On palpation, the swelling was mildly painful. The patient had a history of right lower abdominal pain. Recently, he developed feeling of obstruction and pain during voiding. Urinary flow decreased. There was no history of suggestive genitourinary tuberculosis. A retrograde urethrogram and urine culture were done, suspecting urethral stricture and UTI. But both were the negative result. USG of scrotum and testis revealed the tail of right epididymis is slightly swollen and heterogeneous in echotexture. A few tiny cysts are noted in the head of the left epididymis. A small amount of fluid is noted in both hemiscrotum. So, authors suspected right chronic epididymo-orchitis and advised for FNAC. FNAC revealed adenomatoid tumor. Right epididymectomy was done (figure 2) preserving right testis. Preoperative appearance of right testis was normal. Grossly, it was a small (1x1 cm in size) mass (Figure-1) firm in consistency with no evidence of invasion, which indicates benign lesion.

Discussion

Adenomatoid tumors are of benign and mesothelial origin. It is generally presented in the male genital tract, such as epididymis, testis, tunica vaginalis and spermatic cord. In the female genital tract, adenomatoid tumors are located in the uterus, fallopian tube, and ovarian hilus. Extragenital adenomatoid tumors have been reported in the adrenal gland, appendix, heart, hernia sac, intestinal mesentery, liver, lymph node, mediastinum, omentum, pancreas, peritoneum, pleura, mesocolon and umbilicus.⁵⁻⁷ This type of tumor was first suggested by Evans⁸ in 1943, and the name of an adenomatoid tumor was given by Golden And ash⁹, which is accepted nowadays. Adenomatoid tumors account for 30% of all paratesticular tumors. As the adenomatoid tumors are benign in nature, it may be cured by local excision. Tumors can encroach the testicular adnexal structures and mimic a malignant proliferation on imaging. A frozen section can readily establish the diagnosis in typical cases and allow for testis-sparing surgery. In our case, the tumor was firm in consistency with no evidence of invasion in the testicle. FNAC was done preoperatively and the result was an adenomatoid tumor. So, testicle sparing surgery was done.¹⁰

Usually, adenomatoid tumors manifest as a small painless scrotal mass with patients age 20-50 years. They are typically unilateral and occur more commonly on the left side. In this this case, the age of the patient was 38 years and the tumor was situated in the right side of the epididymal tail showing separation from testis with mild tenderness, may be due to superimposing infection.

Two goals of this study were to determine whether FNAC could identify the presence of a benign or malignant tumor or chronic infection like tuberculosis in the epididymis and to identify the involvement of the testis for sparing an important organ. Preoperative identification of the lesion regarding malignant or benign is important to ensure removal of the epididymis only. Histological appearance of this paratesticular tumor is represented by cuboidal cells with vacuolated cytoplasm and gapping spaces (Figure-3). The neoplastic cells

had lymphoplasmacytic and eosinophilic infiltration with lymphoid aggregation, particularly towards the periphery of the neoplasm, is a clue to the diagnosis of the adenomatoid tumors. For differentiating adenomatoid tumors from other paratesticular tumors, it may pose a range of diagnostic problems. For this reason, an understanding of pathological features is crucial for real diagnostic.

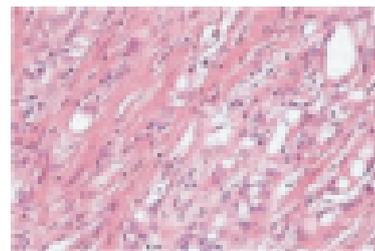
Figure 1 Resected tumor specimen.



Figure 2 Right epididymal tumor separated from testis



Figure 3 A higher power view of the neoplasm with predominant component consisting of tubules with intervening single cells with a vacuolated appearance, a characteristic finding in adenomatoid tumors (40X, H & E).



Conclusion

This rare benign adenomatoid tumor provides a clinical diagnostic challenge with the aim to preserve endogenous testicular function. Due to the low incidence of this tumor, it is important for the Urologist to be aware in order to make a differential diagnosis from other inflammatory diseases like tuberculosis, chronic Epididymitis, in order to make the correct decision for treatment.

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