Can radical orchiectomy be avoided for paratesticular adenomatoid tumor?

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ABSTRACT

Paratesticular tumors are rare tumors that are difficult to diagnose preoperatively and therefore, many patients are subjected to inguinal orchiectomy. However, radical orchiectomy can be avoided as the diagnosis of paratesticular tumor can be made on the basis of clinical suspicion, findings of tumor markers and radiological tests.

Key words: Adenomatoid tumour, paratesticular tumors, testis

INTRODUCTION

Adenomatoid tumors, although rare, are the most common tumors of the paratesticular tissues, accounting for approximately 30% of all paratesticular tumors.[1] In men, they are located in the epididymis, testicular tunicae, and rarely, the spermatic cord with most arising in or adjacent to the lower or upper pole of the epididymis.[1] Although benign in nature but because they are difficult to differentiate from testicular malignancy these men are often subjected to radical orchiectomy.[2,3] Recently, some authors have tried to define the imaging characteristics of these tumors[4] but since these tumors are rare and experience is limited imaging is still not considered as diagnostic. We report a case that was diagnosed on the basis of clinical suspicion, biochemical investigations, fine-needle aspiration cytology findings and radiological tests and thereby high orchiectomy could be avoided.

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CASE REPORT

A 52-year-old male presented with complaints of a painless nodule in right scrotal sac for last 2-years that was gradually but very slowly increasing in size. There was no history suggestive of urinary infection, genitor-urinary tuberculosis or epididymo-orchitis. Examination revealed a pea-sized firm, well-marginated, smooth swelling present at the lower pole of testis but that could not be separated with epididymis. Testicular sensation was normal and cord and rest of the epididymis was normal. Serum level of α-fetoprotein and β-HCG were normal. Scrotal ultrasonography revealed a solid mass at the lower pole of right testis that was relatively hyperechoic as compared to the testicular parenchyma [Figure 1]. Scrotal MRI revealed a well-defined lenticular lesion at lower part of right testis. The lesion displayed signals isointense to slightly hypointense on both

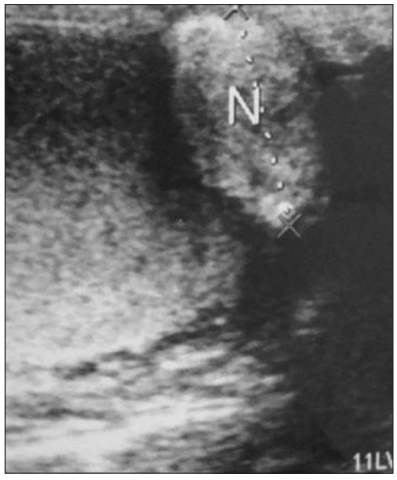

Figure 1: Scrotal ultrasonography shows a solid mass at the lower pole of right testis that was relatively hyperechoic as compared to the testicular parenchyma

T1- and T2-weighted images with adjacent hypointense band. The interface with the testis was maintained [Figure 2]. Fine-needle aspiration from the mass revealed absence of malignant cells. In view of long clinical history, negative tumor markers, findings typical of adenomatoid tumor on sonography and MRI, as reported previously,[4] and absence of malignant cells on cytology local excision was performed under local anesthesia through inguinal incision. At exploration, there was a hard mass on the lower pole separate from the epididymis. Histopathology confirmed it to be an adenomatoid tumor.

DISCUSSION

Most paratesticular adenomatoid tumors occur in individuals in their twenties or thirties. Clinically they are found on routine examination as small, solid, asymptomatic masses.[1] Most of these tumors have been present for several years and uniformly behave in a benign fashion.[1]

Cellular atypia and local invasion have been observed occasionally. Nonetheless, because of the long history of these tumors and benign nature surgical excision is adequate.[1] A practical problem faced by clinicians is to differentiate this condition preoperatively from the much commoner testicular malignancy so as to avoid high inguinal orchiectomy especially in younger men. Because of its rarity radiological features are still not well-defined. The adenomatoid tumor does not produce any characteristic pattern on ultrasound that would allow it to be distinguished from malignant testicular tumors because they can be hypo, hyper or even isoechoic as regards the adjacent parenchyma.[3] The finding on contrast-enhanced MRI are more useful in diagnosing this condition.[5] It provides additional morphological evidence to allow precise localization of the origin of the mass, may also show contrast-enhancement features that enable further confidence of a benign diagnosis, and may allow conservative management.[4] However, in our case we were able to diagnose this condition after thorough evaluation and thereby could conserve the testis.

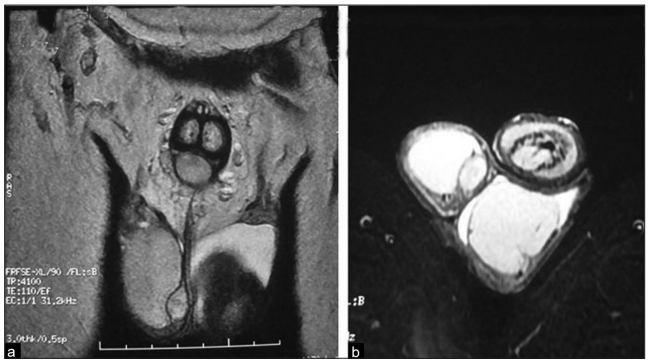

Figure 2: Scrotal MRI shows a well-defined lenticular lesion at lower part of right testis. The lesion displays signals isointense to slightly hypointense on both T1 and T2-weighted images with adjacent hypointense band. The interface with the testis is maintained

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