

Tunica Albugineanın Adenomatoid Tümörü
Adenomatoid Tumor of the Tunica Albuginea

¹Başak Karasu, ¹Fatih Fırat, ³Safiye Aşçı,

¹Turhal Devlet
Hastanesi Patoloji
Bölümü, Tokat.

²Turhal Devlet
Hastanesi Üroloji
Bölümü, Tokat.

³Turhal Devlet
Hastanesi Radyoloji
Bölümü, Tokat.

Sorumlu Yazar

Başak Karasu

Turhal Devlet
Hastanesi Patoloji
Bölümü Turhal/ Tokat

Tel: +90 505 4533944

Faks: 0356 2751247

E-mail:

bas.ka@hotmail.com

Özet

Paratestiküler tümörler nadir görülmekle birlikte tüm ekstraparatestiküler tümörlerin %30'unu oluşturmaktadır. Adenomatoid tümör paratestiküler bölgenin en sık görülen benign tümörüdür. En sık tutulum yeri epididimis olmasına rağmen ender olarak tunica albugineadan da köken almaktadır. Hastanemize, 62 yaşında erkek hasta, yaklaşık 6 aydır var olan, ağrısız, sol skrotal sert kitle şikayeti ile başvurdu. Sol testiste yaklaşık 2 cm çapında, nodüler, sert, ağrısız kitle tespit edildi. Hastaya sol radikal inguinal orşiektomi yapıldı. Makroskopik incelemede, testis alt polde, boyutları 1,7x1,7x1,3 cm olan, tunica albuginea yerleşimli, homojen, parlak ve düzgün yüzeyle tümör izlendi. İmmunohistokimyasal olarak mezotelial orijini gösteren sitokeratin AE1/AE3, kalretinin, EMA ve vimentin ile güçlü pozitiflik izlenirken, S100, PLAP, AFP and CD30 negatifti. Histopatolojik ve immunohistokimyasal bulgular eşliğinde olgu, sol testisin tunica albuginea yerleşimli adenomatoid tümörü olarak tanı aldı.

Sonuç olarak, oldukça nadir görülmesine rağmen intraskrotal kitlelerde, tunica albuginea yerleşimli adenomatoid tümör olabileceği de daima göz önünde bulundurulmalıdır

Anahtar Kelimeler: tunica albuginea, testis, adenomatoid tümör

Abstract

Paratesticular tumors are rarely seen, however they constitute 30% of all extratesticular tumors. Adenomatoid tumor is the most common benign tumor of the paratesticular area. Although the most common site of involvement is epididymis they rarely occur from tunica albuginea.

62-year-old male patient admitted with painless, left scrotal firm mass which was existing for 6 months, in our hospital. On physical examination of the left testis, A nodular, firm, painless mass which was measured approximately 2 cm, was detected in the left testis. The patient underwent a total inguinal left orchiectomy. On macroscopic examination, a homogenous, bright and well circumscribed tumor measuring 1,7x1,7x1,3 cm in diameter and was located in the tunica albuginea, at the lower pole of the testis, was seen. Immunohistochemically, strong positivity for cytokeratin AE1/AE3, calretinin, EMA and vimentin showing the mesothelial origin and negativity for S100, PLAP, AFP and CD30, were detected. This case was indicated of a diagnosis of adenomatoid tumor of the left testis in company with histopathological and immunohistochemical findings. As a result, intrascrotal lesions should be always considered that they may be a tunica albuginea located adenomatoid tumor, although it is quite rare.

Key words: tunica albuginea, testis, adenomatoid tumor

Introduction

An adenomatoid tumor is the most common benign neoplasms of the paratesticular area. The most common site of involvement is epididymis, although there are more rarely located in the tunica albuginea, in the spermatic cord, in the tunica vaginalis, or even in the prostatic (1). It is currently accepted that the mesothelial origin of the adenomatoid tumors are based on structural and immunohistochemical studies. These neoplasms usually occur between the third and fifth decades of life and the diagnosis of them is uncommon. Ultrasonography can help establish the diagnosis of these benign tumors by demonstrating the extratesticular location.

Case Report

A 62-year-old man presented with a painless and hard left scrotal mass for last 6 months. He had no history of trauma or surgical operations. On physical examination of the left testis, a nodular, firm, painless, small intrascrotal mass which was measured from approximately 2 cm, at the lower pole of the testis was detected. Scrotal skin, epididymis, spermatic cord, inguinal region and right testis were normal. All serum tumor markers (human chorionic gonadotropin-beta, alpha-fetoprotein and lactate dehydrogenase) were within normal limits. Scrotal ultrasound showed that solid, well-defined and isoechoic paratesticular mass on the inferior surface of the left testis with a normal testicular parenchyma (Figure 1).

Figure 1. Ultrasound image shows a well defined, isoechoic, extratesticular mass in the inferior region of the testis.



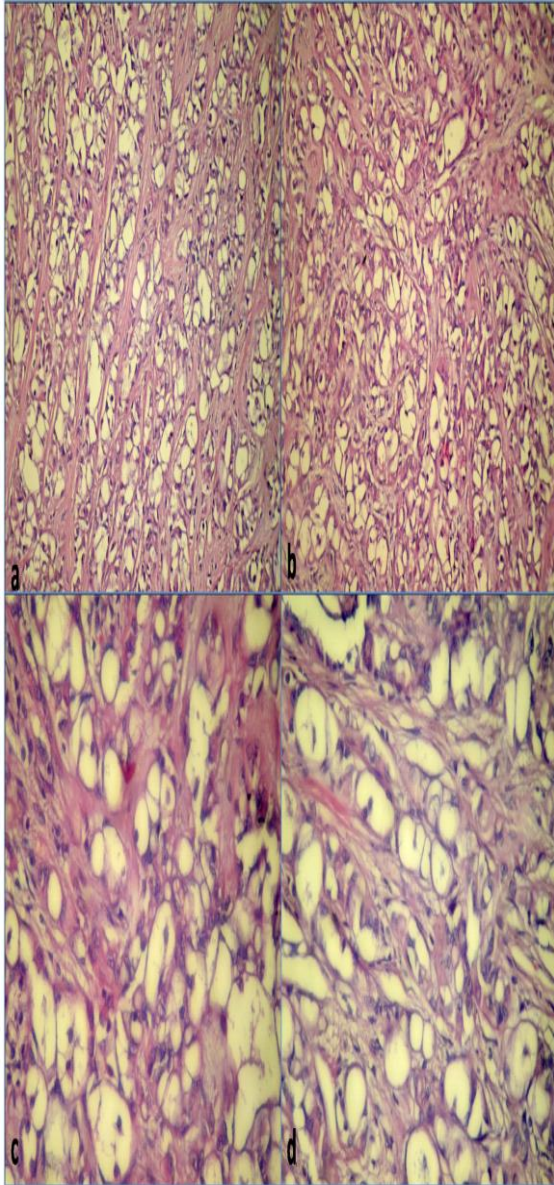
The patient underwent a total left orchiectomy, which revealed a grayish white color, oval shaped, well circumscribed tumor measuring 1,7×1,7×1.3 cm in diameter and was located in the tunica albuginea, at the lower pole of the testis. The sectioned surface was of the same color and presented a homogeneous appearance (Figure 2).

Figure 2. Macroscopic photograph of tumor arising in the tunica albuginea.



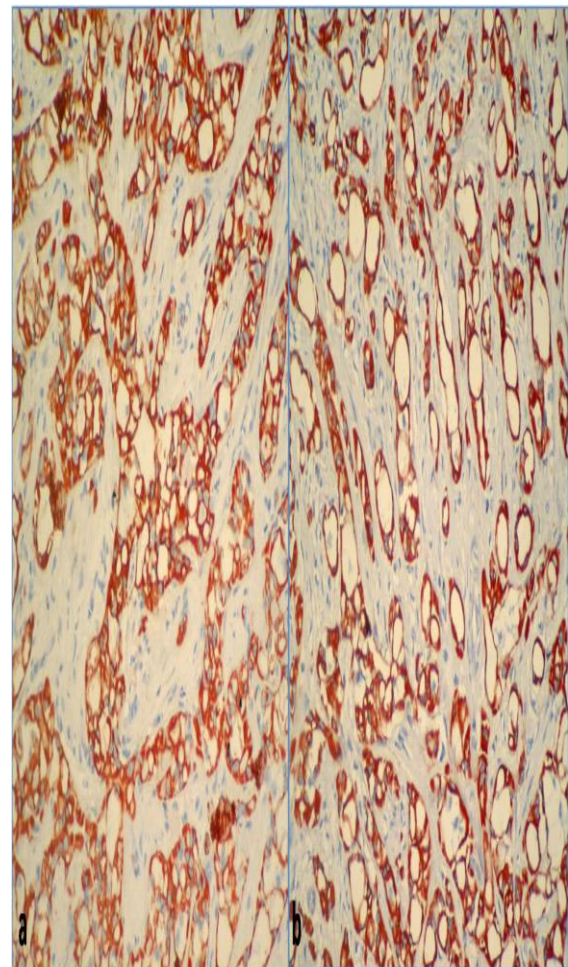
In the microscopic study, tumor is unencapsulated and not extend to the testicular parenchyma. There is a proliferation of the cells ranging from cuboidal to flattened, with vacuolated cytoplasm. The large intracytoplasmic vacuoles have a signet ring-like appearance in some fields but epithelial type mucin was not present (Periodic acid schiff (PAS) negative). The stroma is fibrous and contain abundant smooth muscle and elastic fibers, with inner lymphoplasmacytic and eosinophilic infiltration (Figure 3). There was no mitotic activity and no suspicious neoplastic areas was been detected.

Figure 3. Photomicrograph of adenomatoid tumor with predominant component consisting of tubules with intervening single cells with a vacuolated appearance (H&E, a-b: x20, c-d: x40).



Immunohistochemically, the flattened cells displayed evidence of mesothelial differentiation, with strong positivity for cytokeratin AE1/AE3, calretinin, EMA and vimentin, and were negative for S100, PLAP, AFP and CD30 (Figure 4).

Figure 4. Positive immunoreactivity to cytokeratin AE1/AE3 (a) and calretinin (b) (x40).



The histological appearance together with the immunophenotypic characteristic of this tumor was indicated of a diagnosis of adenomatoid tumor of the left testis.

Discussion

Paratesticular tumors are uncommon but comprise 30% of all extratesticular masses (2). It usually affects the epididymis and, less commonly, the tunica albuginea and vaginalis (3). There are more rarely located in spermatic cord, prostate, ejaculatory ducts, and scrotal capes and in female can be located in uterus, fallopian tubes and ovarian area.

These neoplasms usually occur between the third and fifth decades of life however, they have also been reported in patients aged 18 to 80 years of age (4,5).

In most of the cases, tumors are less than 2 cm diameter; however, tumor of 12 cm diameter is also reported in literature (6). Most adenomatoid tumors are asymptomatic and are found accidentally. Grossly, they are round or oval and well circumscribed although they can also be flattened. Microscopically, the lesion is unencapsulated and poorly circumscribed, and rarely it may extend to the adjacent testis. The varied histologic picture consist of eosinophilic mesothelial cells forming solid cords as well as dilated tubules with flattened lining cells (7). Vacuolated cytoplasm is a prominent feature of the cells. The intervening stroma is usually fibrous and occasionally may consist largely of smooth muscle. Immunohistochemically, there is strong reactivity for cytokeratin AE1/AE3, EMA and calretinin, indicating the mesothelial nature of the lesion, and negativity for epithelial and carcinoma markers (CEA, AFP. etc) (8). The elected treatment is orchiectomy.

As a result, intrascrotal lesions should be always considered that they may be a tunica albuginea located adenomatoid tumor, although it is quite rare. Clinical history, ultrasonography, light microscopy and immunohistochemical markers are necessary for the correct diagnosis.

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