Leiomyoma of Testis –A Case Report

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Abstract Leiomyomas, benign tumors, can arise from any organ containing smooth muscle. In the genitourinary tract, the renal capsule is most commonly involved. Intrascrotal leiomyomas are infrequently seen. Testis-associated leiomyomas are extremely rare. We report here testis associated leiomyoma.

Keywords testis • leiomyomas

Case Report

A 40 yrs male with chief complaints of left sided painless testicular swelling since 2 years gradually increasing in size with occasional dragging pain in left groin. No significant past history. On physical examination his left testis was enlarged with a firm to hard, non tender swelling in the upper pole, left epididymis & spermatic cord were unremarkable. Also the right testis, epididymis & spermatic cord were unremarkable.

Patient's CBC & routine blood biochemistry were within normal limits.

- The scrotal USG showed E/O hypo-echoic lesion in left testis with central iso-echoic area, with possibility of testicular haematoma/focal orchitis/testicular mass. Left sided grade 1 varicocele with a simple epididymal cyst measuring 3×2 cm in head of left epididymis. Minimal amount of fluid noted in left tunica vaginalis. The right sided testis, epididymis & hemi-scrotum were normal.
- Patient underwent a Radical Orchiectomy, after biopsy of left testicular lesion revealed leiomyoma left testis.

At surgery left testis was found to be enlarged with an upper pole firm to hard mass approximately 3×2 cm.

- On gross examination the upper pole of the left testis showed a nodular mass. Cut section showed a well circumscribed mass with grey white firm appearance measuring 2.5 cm in average diameter.
- Microscopic section of testis showed a tumour composed of spindle shaped cells having blunt ended elongated nuclei and eosinophilic cytoplasm arranged in interlacing fascicles and bundles. Focal areas of hyalinization and areas of haemorrhage corresponding to previous site of biopsy were noted. Interspersed with were seen a few scattered mononuclear cells. There was no evidence of malignancy in sections examined.

Discussion

Leiomyomas are benign neoplasms that may arise from any structure or organ containing smooth muscle. The majority of genitourinary leiomyomas are found in the renal capsule, but this tumor has also been reported in the epididymis, spermatic cord, and tunica albuginea. Ultra-Sonography is the imaging modality of choice for evaluating intrascrotal pathology, but the sonographic appearance of leiomyomas arising from the tunica albuginea has rarely been reported (Figs. 1, 2, 3, 4 and 5).

Review of Literature

Albert and Mininberg reported the first case of testis-associated leiomyoma in 1972. The literature was reviewed and 17 cases previously reported were found [1].

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Fig. 1 Gross specimen

Fig. 4 Ultrasonographic film-left testis showing hypoechoic lesion with central heterogeneity

Fig. 2 Microscopic appearance—low magnification

Fig. 3 Microscopic appearance—high magnification

Fig. 5 Ultrasonographic film- another view of left testis showing hypoechoic lesion with central heterogeneity

Leiomyomas are benign smooth muscle tumors which although rare in scrotum have been found in many locations, including the epididymis (where it is the 2nd most common neoplasms comprising of 6% of all epididymal tumours), spermatic cord, tunica dartos, tunica albuginea and within the testicle [2, 3].

The most common time of presentation of leiomyomas is 5th decade of life [3]. These tumours are particularly slow growing. Bilateral leiomyomas have been reported, but are very rare [3].

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Sonography is the imaging modality of choice for evaluating intrascrotal pathology, but the sonographic

appearance of leiomyoma arising from the tunica albuginea has rarely been reported [4].

The origin of the intratesticular leiomyoma is controversial, but recently it is thought to arise from the contractile cells in the tunica propria of the seminiferous tubules [5].

Testis leiomyoma is a very rare neoplasm. It is very difficult to perform an exact preoperative diagnosis; only histological examination can prove the presence of a leiomyoma. A radical orchidectomy was performed because of complete substitution of normal parenchyma, the extreme rarity at long-term follow-up of a reported benign intratesticular neoplasm, and the imperfect sensitivity of the extemporary histological examination [6].

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