

# A Case Report on Large Scrotal Hematocele

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**Abstract:** We report a 68-year-old male who presented non-traumatic testicular swelling with no pain. Physical examination and sonography presented a suspicion of testicular tumor. Tumor markers like human chorionic gonadotropin, alpha-fetoprotein and carcino-embryonic antigen were negative. U/S and CECT did not exclude a testicular tumor completely. As it was impossible to exclude a malignant tumor, both surgical exploration and inguinal orchiectomy were performed. The histopathological diagnosis suggestive of organized hematocele. Therefore this entity should be considered in the differential diagnosis of scrotal masses, even in the absence of a clear history of trauma.

**Keywords:** Hematocele, testis, tumor

## 1. Introduction

Scrotal masses are abnormalities in the bag of skin hanging behind the penis (scrotum). The mass might be an accumulation of fluids, the growth of abnormal tissue, or normal contents of the scrotum that have become swollen, inflamed or hardened. Thus the differential diagnosis of a scrotal mass might include inflammatory conditions, malignant tumors and traumatic lesions including hematomas. Hematocele is a condition commonly associated with testicular trauma, but in rare cases it may be idiopathic where the only symptom can be that of a firm and painless scrotal mass, incidentally discovered by the patient. The clinical presentation is that of a testicular tumor and difficult to diagnose even after an ultrasound evaluation. Here we describe the peculiar rare case of hematocele, which was mistaken for a testicular cancer, prompting surgical excision.



Figure 1

## 2. Case Report

A 68-year-old man presented with history of painless, gradually enlarging swelling in right scrotum for past 6 months. The patient did not reveal any history of trauma to the scrotum or any surgical procedures. There was no history suggestive of fever, pain or dysuria. Physical examination revealed an enlarged, hard, non-tender mass, gradually increasing in size, measuring 16 x 11 cm in the right side of the scrotum [Fig-1]. The right testis and epididymis could not be detected. Transillumination test was negative. Noright inguinal hernia was evident.

Blood markers for testicular tumors such as human chorionic gonadotropin (HCG), alpha-fetoprotein (AFP) and carcino-embryonic antigen (CEA) were done and found to be within normal limits.

Scrotal Ultrasound examination done which reveals a large heterogenous hyperechoic lesion with evidence of thick echoes noted in right hemi-scrotum with right testis and epididymis not separately visualised suggesting the probability of neoplastic etiology. Later, Contrast enhanced CT scan done which also reveals a well defined cystic lesion with thin peripheral wall calcification over right hemiscrotum suggestive of neoplastic etiology. Right high inguinal orchiectomy was performed, since it was difficult to exclude completely a testicular tumor.

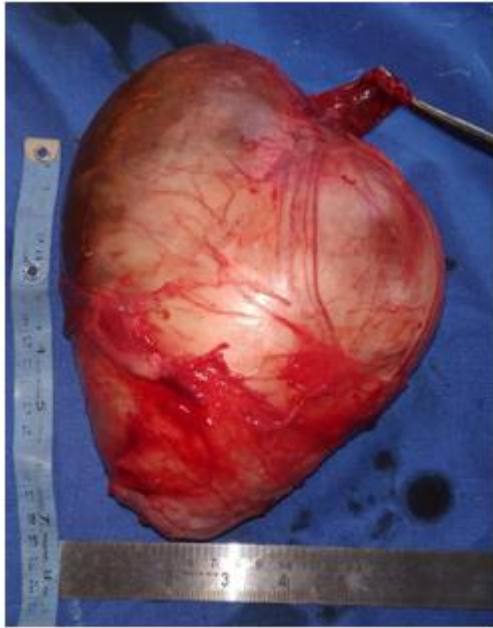


Figure 2



Figure 4A

Grossly the resected mass is of 14x14x13cm sized [Fig-2, 3] with greyish-white capsulated outer surface and on cut surface it is of brownish, cystic with thick whitish brown wall involving testicular layers with atrophic testis at one pole of cystic structure [Fig-4].

Microscopically, it reveals cystic wall made up of hyalinised fibrous tissue with evidence of chronic nonspecific inflammation and presence of many cholesterol clefts, with testis showing atrophic changes.



Figure 4B

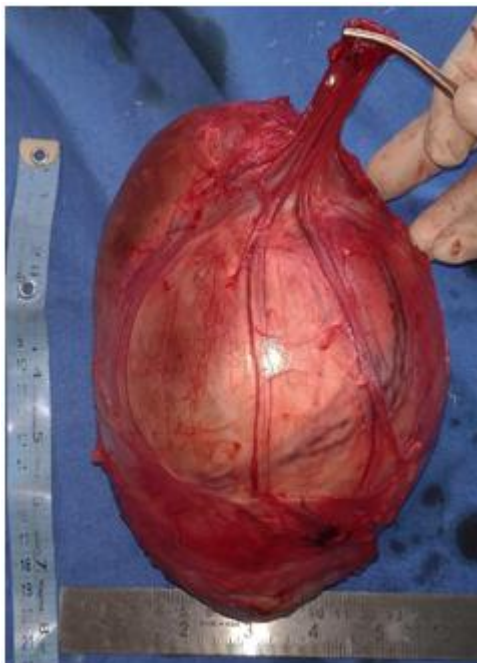


Figure 3



Figure 4C

Figure 4

- A. Specimen showing cavity filled with old clotted blood (hematocele)
- B. Outer surface – Greyish white capsulated
- C. Inner surface – Thick whitish brown wall with testicular layers

### 3. Discussion

Hematocele is defined as a collection of blood between the parietal and visceral layers of the tunica vaginalis that causes an increase in scrotal size. According to an etiological basis, hematoceles can be classified as idiopathic and secondary. Idiopathic or spontaneous hematoceles give a history of neither trauma to the testis nor pain and seems to be more common in elderly patients<sup>1</sup>. Whereas the secondary hematoceles are usually associated with a history of a trauma to the scrotum, surgery in the surrounding area, or neoplasm. Non-traumatic secondary hematoceles can also be produced by haematological alterations or vasculitis<sup>2</sup>. In our patient, the etiology of the hematocele was unknown, in the absence of predisposing conditions or previous trauma.

Clinically and sonographically, hematoceles resemble testicular neoplasms and in the absence of a history of trauma, preoperative diagnosis is difficult. Even if the history and physical findings are more compatible with testicular neoplasm-a hematocele should be considered in differential diagnosis<sup>3</sup>. Since neither clinical symptoms nor sonographic findings were completely reliable in predicting the correct preoperative diagnosis, high inguinal orchiectomy was recommended.

The effect of hematocele on the testis is deleterious leading to atrophy and even complete disappearance<sup>4</sup>, this usually the result of long standing compression effect of the hematoma, sometimes superimposed infection of the hematocele complicates the situation more<sup>2</sup>.

If the hematocele is relatively small and does not cause a lot of pain, conservative treatment such as foot elevation and bed rest may be sufficient. In more severe cases, surgical intervention may become necessary. Surgery may be performed to drain the accumulated blood from the scrotum thereby avoids testicular compression and prevents epididymo-orchitis abscess formation and necrosis, as unresorbed hematocele can eventually become infected. If a testicular tumor is found to be the cause of the bleeding, the entire testicle is generally removed to prevent the cancer from spreading to other parts of the body<sup>5</sup>.

### 4. Conclusion

In a patient presenting with scrotal mass, Idiopathic hematocele should be considered, even if the history, physical findings and ultrasound findings are more compatible with a testicular neoplasm. Early recognition and management may prevent the inevitable loss of the testis.

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### 6. Conflicts of Interest

None for all authors

### References

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