Idiopathic Chronic Hematocele Of The Scrotum

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Citation

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Abstract

We report here a case of a chronic hematocele of the scrotum .A 55-year-old male presented with painless, nontraumatic right scrotal swelling of two years' duration. Physical examination and ultrasonography raised the suspicion of a testicular neoplasm. Tumor markers like human chorionic gonadotropin, alpha-fetoprotein and carcino-embryonic antigen were negative. A right high orchiectomy was performed. The resected mass measured 9.5 x 9.0 x 6.0 cm and contained an encapsulated hematoma between the layers of the tunica vaginalis. The right testis was compressed to one side but was looking normal .Pathological examination confirmed the diagnosis of a hematocele. This entity should be considered in differential diagnosis of scrotal masses even in the absence of a particular cause for hematoma or even if there is suspicion of a testicular neoplasm to avoid the complications of a hematocele and an unnecessary orchiectomy.

INTRODUCTION

The normal scrotum contains a few milliliters of serous fluid in between the layers of the tunica vaginalis. In certain pathological conditions, there is an abnormally large collection of serous fluid (hydrocele) or blood (hematocele) or pus (pyocele) in between the layers of the tunica vaginalis. Hydrocele is the most common cause of painless scrotal swelling[1]. However, hematocele and pyocele are rare. Other causes of a scrotal mass are inflammatory conditions, malignant neoplasms and trauma. Clinically and sonographically, a hematocele may simulate a testicular neoplasm. Thus, preoperative diagnosis is difficult.

CASE REPORT

A 55-year-old man presented with painless, gradually enlarging swelling in right scrotum for 2 years. The patient did not reveal any history of trauma to the scrotum. There was no history of fever, pain or dysuria. Physical examination revealed an enlarged, hard, non-tender mass, gradually increasing in size, measuring 10 x 9.5 cm, in the right side of the scrotum. Transillumination test was negative. Tumor markers such as human chorionic gonadotropin, alpha-fetoprotein and carcino-embryonic antigen were found to be within normal limits. Ultrasonography of the scrotum yielded suspicion of a testicular neoplasm, but could not conclude the diagnosis.

PATHOLOGICAL FINDINGS –Grossly, the resected mass measured 9.5 x 9.0 x 6.0 cm and consisted of a cavity having a thick capsule filled with old brownish-black clotted blood. The cavity was separated from the testicular tissue which was compressed to one side, but was looking normal.

Microscopically, a thickened fibrous capsule and a large number of macrophages, especially with hemosiderin pigment, were seen and the diagnosis of a chronic hematocele was made.

Figure 1

Figure 1: Gross photograph of the cut surface of the specimen showing a cavity that was filled with old clotted blood (hematocele) and the testis compressed towards one side.

DISCUSSION

Common causes of a scrotal mass are inflammatory lesions,

malignant neoplasms and traumatic lesions including hematomas.

A hematocele is the accumulation of blood in between the layers of the tunica vaginalis or sac. It can be either recent (acute) or chronic. A recent hematocele is usually the result of injury of a small blood vessel during aspiration of a hydrocele. In such cases, there is prompt refilling of the sac with considerable pain and tenderness. This recent or acute hematocele in a previously normal tunica vaginalis is commonly associated with direct testicular trauma[2]. On the other hand, slow or chronic hemorrhage into the tunica vaginalis can occur spontaneously. Thus, most of the patients presenting with chronic idiopathic hematocele give a history of neither a trauma to the testis nor pain in the organ.

According to etiology, hematoceles can be classified into idiopathic and secondary ones. Secondary hematoceles are usually associated with trauma, surgery or neoplasm, but sometimes can be caused by hematological alterations or vasculitis[3].

Clinically and sonographically, hematoceles resemble testicular neoplasms and in the absence of a history of trauma, preoperative diagnosis is difficult. At ultrasonography hematoceles appear as complex cystic lesions with internal septations and loculations[4] and whenever sonographic studies of a scrotal swelling reveal a multicystic mass - even if the history and physical findings are more compatible with testicular neoplasm -, a hematocele should be considered in differential diagnosis [5].

MRI has a higher sensitivity and allows clear demonstration of blood[6]. In our case, there was high suspicion of a testicular neoplasm preoperatively because most of the normal testicular tissue was compressed and pushed towards the periphery. Thus, surgical exploration was done to establish the diagnosis.

Idiopathic hematocele should be considered in the differential diagnosis of scrotal masses, even if the history, physical findings and ultrasound findings are more compatible with a testicular neoplasm. Awareness of this clinical entity can lead to correct and early diagnosis. Surgical exploration, in the form of evacuation of the hematoma can prevent complications of a hematocele like compression of testis, infection, abscess formation or necrosis.

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