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Trauma and Reconstruction

Acute Scrotum Following Traumatic Spermatic Cord Hematoma: A Case Report and Review

Pietro Pepe*, Astrid Bonaccorsi, Giuseppe Candiano, Francesco Pietropaolo, Paolo Panella, Michele Pennisi

Urology Unit, Cannizzaro Hospital, Via Messina 829, Catania, Italy

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ABSTRACT

Acute scrotum constitutes the most common urological emergency secondary to spermatic cord torsion, testicular trauma, orchiepididymitis and hernias. We report a very rare case of unique traumatic spermatic cord hematoma following scrotum injury occurred during a football match. Clinical exam showed an increased volume of the left spermatic cord; the color Doppler ultrasound (CDU) demonstrated left testicular ischemia secondary to a large spermatic cord hematoma that needs surgical exploration. Spermatic cord hematoma rarely induces acute scrotum, however it could be treated conservatively surgery is mandatory when pain is persistent or testicular ischemia is confirmed by CDU.

Introduction

Acute scrotum constitutes the most common urological emergency secondary, in the majority of the cases, to spermatic cord torsion, testicular trauma, orchiepididymitis and, more rarely, hernias or inguinal hernia repair injury.[1] Pain and swelling of the scrotal sac after direct trauma is well documented and exploratory surgery is mandatory when testicular integrity is not confirmed by physical examination or color Doppler ultrasound (CDU).[2] A rare case of spermatic cord hematoma secondary to traumatic contact during a football match is reported herein.

Case presentation

A 16-year-old man was admitted to our hospital for painful swelling of left spermatic cord secondary to scrotum injury occurred during a football match 3 hours before. Clinical exam exclusively showed an increased volume of the left spermatic cord, moreover both testes were normal; the CDU demonstrated a decreased telediastolic velocity (VTD) of the left intratesticular artery and a large hyperechoic area that from the internal abdominal ring reached the upper pole of the testis (Fig. 1). The clinical picture suggested the presence of a large spermatic cord hematoma that was in charge of initial testicular ischemia, therefore for the persistence of pain the patient underwent surgical exploration: no active bleeding was found, the spermatic cord appeared congested, compressed and stretched by a large hematoma; the release of spermatic cord plus the resection of the tunica vaginalis of the spermatic cord and testis was performed, moreover testicular ischemia resolved when hematoma was decompressed (Fig. 2).

The patient became asymptomatic, CDU findings returned normal and 24 hours from surgery the patient was discharged.

Discussion

Unique spermatic cord hamatoma has rarely been documented and it may be idiopathic, traumatic, secondary to anticoagulation therapy, Schonlein syndrome or as an extension of a retroperitoneal hemorrhage; the majority of spermatic cord hematoma could be treated conservatively when clinical exam and CDU demonstrate testicular integrity. Chin[3] and Bowman[4] reported two cases of the spontaneous idiopathic spermatic cord hematoma suggesting the possible etiologies of spermatic cord vein rupture and tear in the cremasteric muscle. Among traumatic condition Gordon et al[5] presented a case of a varicocele ruptured following blunt abdominal trauma with a sudden increase in intra-abdominal pressure with transmission to the varicocele.

* Corresponding author. Tel.: +39 95 7263285; fax: +39 95 7263259.
E-mail address: piepepe@hotmail.com (P. Pepe).

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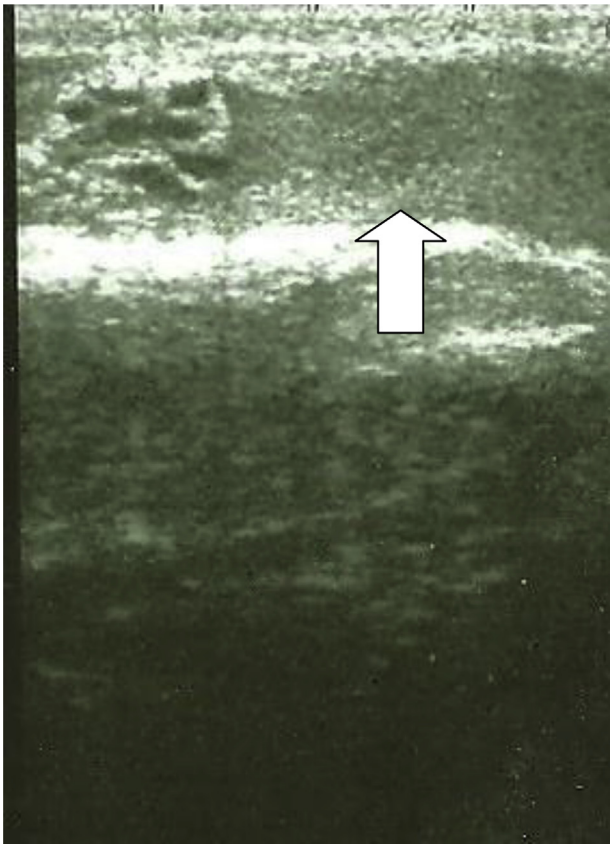

Figure 1. Ultrasound showed a large hematoma of the spermatic cord (arrow) plus varicocele (hypoechoic area).

In our clinical case, the patient reported exclusively the traumatic rupture of spermatic cord venous; however, CDU showed the integrity of the testis the patient underwent surgical exploration because the increasing pain and the presence of a large hematoma that was in charge of initial testicular ischemia. Finally, 3 months from the trauma CDU did not show atrophy of the testis.

Conclusion

Spermatic cord hematoma constitutes a very rare case of acute scrotum; however it could be treated conservatively surgery is mandatory when pain is persistent or testicular ischemia is confirmed by CDU.

Figure 2. Surgical exploration of scrotum: the spermatic cord appeared congested, compressed and stretched by a large hematoma; testicular ischemia resolved when hematoma was decompressed.

Conflict of interest

The authors declare no conflict of interest.

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