

Painful ultrasound detected lesion in the proximal part of the corpus cavernosum: A case of so called “partial priapism”?

Andrea Fabiani¹, Flavia Tombolini², Fabrizio Fioretti¹, Lucilla Servi¹, Gabriele Mammana³

¹ Urology Unit, Surgery Department, Macerata Civic Hospital, Area Vasta 3 ASUR Marche, Italy;

² Urologic Clinic, Polytechnic University of Marche Region, Ancona, Italy;

³ Chief of Urology Unit and Head of Surgery Department, Macerata Civic Hospital, Area Vasta 3 ASUR Marche, Italy.

Summary *Partial priapism is a rare disorder generally described in literature as related to an idiopathic etiology leading to the thrombosis of the corpus cavernosum. Despite its rarity, this condition has been described in the last years with an increased frequency. It is characterized by thrombosis of the proximal segment of one corpus cavernosum with perineal pain as the more frequent clinical manifestation. Few cases were associated with perineal trauma. Instrumental appearance suggests for an hematoma in the interstitium of the proximal part of corpus cavernosum. Therapy is still controversial. We report a case of a 52-years old man referred to our Section of Urology suffering from a perineal pain occurred without trauma, sexual arousal or sexual intercourse, during the working office time. Laboratory revealed a slightly elevated white blood cells count. The full blood count, protein C reactive, electrolytes, international normalized ratio, activated partial thromboplastin time and urinalysis were within normal range. Tunica albuginea was normal. The partial thrombosis of the right corpus cavernosum was hypothesized. Treatment was conservative with non steroidal anti-inflammatory drug. Only the clinical presentation of symptoms and perineal ultrasound scan performed with color sonography led to the diagnosis. Eleven days later, at the clinical and ultrasonographic follow-up visit, the patient was asymptomatic with a total clinical and instrumental disappearance of signs of the corpus cavernosum involvement previously described. Considering the rarity of the condition, we performed a literature review*

KEY WORDS: Partial priapism; Segmental priapism; Penile ultrasound; Corpus cavernosum.

Submitted 13 October 2015; Accepted 4 December 2015

INTRODUCTION

Partial priapism is a rare condition generally described in literature as related to the thrombosis of the corpus cavernosum. Most cases are of an idiopathic nature and very few were associated with perineal trauma. The perineal pain is the more frequent clinical manifestation (1). However, the ultrasound findings may suggest that this condition is expression of an interstitial hematoma of corpus cavernosum as also revealed by images recorded during the follow up of our case reported herein. We

also perform a review of similar cases reported in the scientific literature with particular interest on diagnostic and therapeutic management.

CASE REPORT

A 52-years old man referred to our Section of Urology suffering from an acute perineal pain occurred during the working office time, without trauma, sexual arousal or sexual intercourse. Onset of symptoms was in the last- ing 2 hours from clinical evaluation. Medical and pharmacological patient history was unremarkable. No chronic illnesses, no fever, no dysuria, trauma or urethral discharge was referred. On physical examination the pendulous part of the penis was normal without rigidity or inflammation's signs. Distal corpora cavernosa and glans were flaccid. The proximal right corpus cavernosum was tender and painful. Perineal color Doppler ultrasound scan revealed three anechoic spheroid lesions without the presence of blood flow inside. Maximum diameter was 9,78 mm, 7,41 mm and 9,85 mm. The lesions were located around the presumable course of right cavernosal artery (not identified in flaccid state) (Figure 1). Laboratory revealed a slightly elevated white blood cells count. The full blood count, protein C reactive (PCR), electrolytes, international normalized ratio (INR), activated partial thromboplastin time (APTT) were within normal range. Tunica albuginea was normal. The partial thrombosis or interstitial haematoma of the right corpus cavernosum were suggested. The patient was not hospitalized and treated conservatively with analgesic therapy (paracetamol 1000 mg) and non steroidal anti-inflammatory drug (nimesulide 100 mg bd). Eleven days later, at the clinical and ultrasonographic follow-up visit, patient was asymptomatic with a total clinical and instrumental disappearance of signs of corpus cavernosum involvement. Ultrasound revealed only the residual presence of an hyperechoic lesion without posterior shadow, 4.22 mm in length (Figure 2) in the proximal part of the right corpus cavernosum. Erectile function was referred normal and no painful. The subsequent hematologic and internistic evaluations revealed no abnormalities.

No conflict of interest declared.

Figure 1.

Ultrasound imaging of three anechoic sferoid lesions without the presence of blood flow inside located around the presumable course of right cavernosal artery (not identified) of the proximal part of right corpus cavernosum.

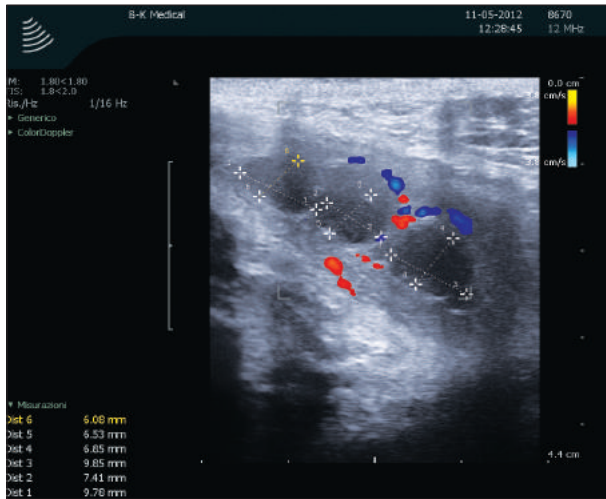
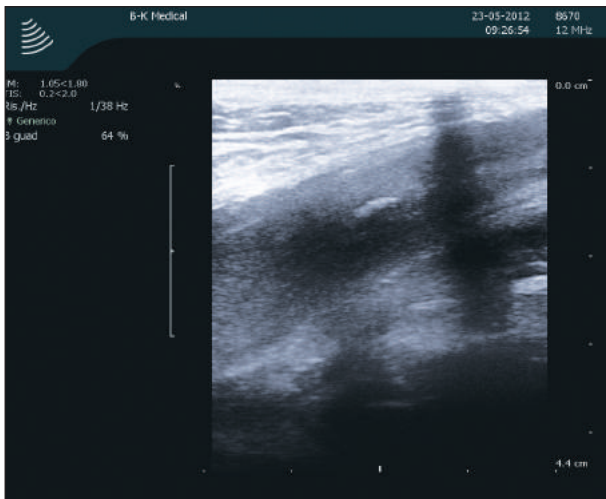


Figure 2.

Ultrasound evaluation at follow-up revealed only the residual presence of an hyper-echoic lesion without posterior shadow.



Correspondence

Andrea Fabiani, MD (Corresponding Author)
andreadocl@libero.it

Fabrizio Fioretti, MD PhD
fa.fioretti@libero.it

Lucilla Servi, MD
lucilla.servi@sanita.marche.it

Surgery Dpt, Section of Urology, ASUR Marche Area Vasta 3
Macerata Hospital, Macerata, Italy

Flavia Tombolini, MD, Urology Resident
flavia.tombolini@gmail.com

Urologic Clinic, Polytechnic University of Marche Region, Ancona, Italy

Gabriele Mammana, MD
gabriele.mammana@sanita.marche.it

Head Surgery Dpt, Chief of Section of Urology
ASUR Marche Area Vasta 3, Macerata Hospital, Italy

CONCLUSIONS

Partial priapism is an unusual clinical condition. In case of perineal acute pain, ultrasonographic evaluation is mandatory. Ultrasound appearance may suggest that this condition is expression of an interstitial hematoma of corpus cavernosum as also revealed by the findings founded during the follow up of our case in which the anechoic lesions become progressively hypo echoic until the complete disappearance and substitution by an hyper-echoic lesion without posterior shadow. Urologist must know the possibility of the existence of this disorder and that even a conservative management may lead to a full functional and anatomical recovery of corpus cavernosum. Interventional approach should be reserved in case of no response of symptoms to medical treatment.

REFERENCES

1. Kropman RF, Schipper J. Hematoma or “Partial Priapism” in the Proximal Part of the Corpus Cavernosum. *J Sex Med.* 2014; 11:2618-22.
2. Hillis RS, Weems WL. Priapism: an unusual presentation. *J Urol.* 1976; 116:124-125.
3. Del Villar M, Hernandez C, De Bonis W, et al. Segmental priapism: a case report. *J Sex Med.* 2014; 11 (Suppl 5):243.

Discussion, Tables and Supplementary References are posted on www.aiua.it