

Torsion of Morgagnia Sessile Hydatide in Adults: Differential Diagnosis of Spermatic Cord Torsion

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Abstract

Case Report

Introduction: Morgagni's hydatide is an embryonic remnant of the testicle. Its torsion is an often revealing complication, occurring especially in children. The treatment is medical but surgical removal is necessary in case of diagnostic doubt. The diagnostic and therapeutic aspects of this condition encourage us to report this case operated at the CHU Ibn Rochd in Casablanca. **Patient and Observation:** Mr Y.I, 25 years old, followed for varicocele left grade II never operated with antecedent right orchiepididimite treated, he consulted for right testicular pain evolving for 6 hours. Surgical exploration objectified a twisting of the Morgagni sessile hydatide with a normal looking pediculated Morgagni hydatid. The removal of necrotic sessile hydatide is performed. The patient is out the next day. **Conclusion:** The torsion of the Morgagni hydatide is a common diagnosis of painful acute bursa, rarely found in adults. The diagnosis is ultrasound. The treatment is medical. Surgical exploration and excision occur when in doubt.

Keywords: torsion, Morgagni's hydatide, orchiepididimite treated, sessile hydatide.

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INTRODUCTION

Among the remaining testicular embryos, Morgagni's hydatide is the most common. There are two types: the sessile hydatide of Morgagni epididymo-testicular (appendix testis or Morgagni's hydatid for Anglo-Saxons) and the pedicle hydatide of Morgagni epididymaire (epididymis appendix for Anglo-Saxons) [1, 2]. Morgagni's hydatid torsion is a relatively common complication in children [3]. It is benign and has no functional consequences [4]. Clinically, it reveals itself on a table of painful acute bursa sometimes imposing in case of doubt, a surgical exploration that straightens the diagnosis [4]. Scrotal ultrasound makes it possible to make the diagnosis [1], and therefore to indicate the medical treatment [1] based on painkillers and anti-inflammatory drugs. Through this case operated at the Ibn Rochd University Hospital in Casablanca, we propose to report the diagnostic difficulties and therapeutic aspects of this rare condition in adults.

PATIENT AND OBSERVATION

Mr.Y.I, 25 years old, patient with a history of right pididymite orchiemite and follow-up for untreated varicocele, had consulted for right acute scrotal pain since 6h with intermittent painful episodes that had been evolving for about 6 months. There were no associated signs. Clinical examination revealed a swollen right cord with right scrotal pain at palpation and a negative Prehn sign. The left testicle and epididymis were normal (Figure 1). This picture suggested twisting of the right spermatic cord. Scrotal ultrasound was not requested due to the delay of the consultation less than 6h. The surgical indication was retained.

The right scrototomy showed a twisting of a Morgagni sessile hydatide with 1 turn of the spire, necrotic (Figure 2). Resections of sessile hydatide and pediculate hydatide were performed prior to re-integration and closure of the scrotal wall. The surgical follow-up was favorable. The patient left the hospital the day after the surgery. Post-operative check at 1 month was satisfactory.



Figure 1: Preoperative scrotum image

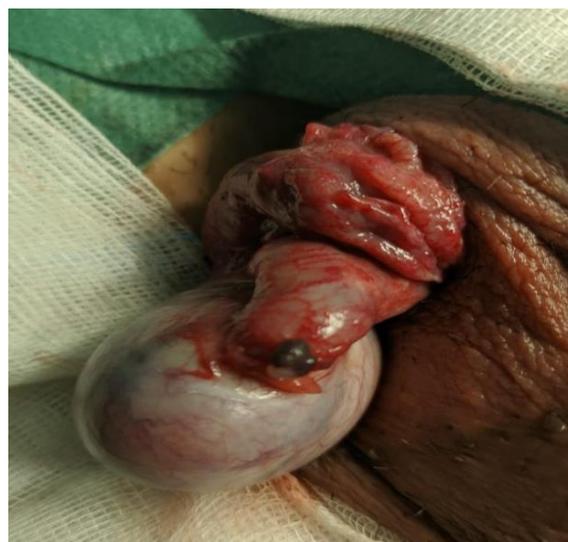


Figure 2: Operative image: Torsion of Morgagni sessile hydatide

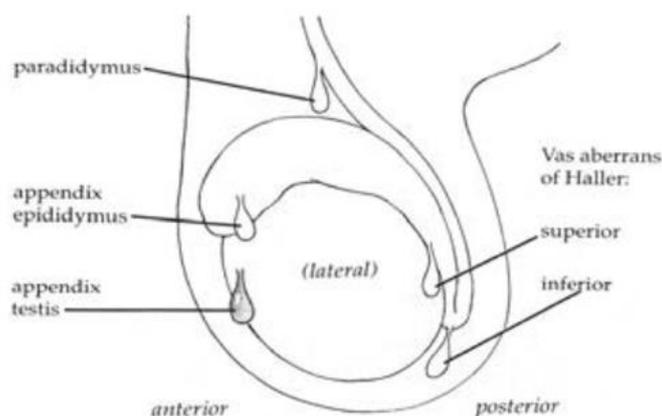


Figure 3: Illustration of the common appendices of the testis and epididymis. The appendix testis is most commonly affected by torsion [9]

DISCUSSION

Five types of embryonic remnants of the testicle are described: the sessile hydatide of Morgagni (remnant of Mullerian origin) and the pediculated hydatide of Morgagni (remnant of Wolffian origin) are the most common; the organs of Giraldès, Aberrant upper and lower haller channels are less common [1]. The Morgagni sessile hydatide (appendix testis or Morgagni's hydatid for Anglo-Saxons) is a linear structure located at the angle between the head of the epididymis and the testicle [1], found in 76% of adults [2]. The pedicle hydatide of Morgagni (epididymis appendix for Anglo-Saxons), a small vesicular structure at the top of the epididymis [1] is found in 21.9% of adults (Figure 3) [2].

The twisting of the Morgagni hydatide most often affects the child [3]. It is rarer in adults [5], as is the case with the patient in our observation, who is 25 years old.

The most commonly described mode of clinical revelation is the painful acute bursa [5]. In their series, Knight and Lewis claim that twisting Morgagni's hydatide accounts for 24% and 46% of acute scrotal pain diagnoses in children under the age of 17 [6, 7] respectively. Audenet reports that the torsion of the testicular appendices (hydatide) is at the origin of 8% of the tables of large painful acute bursa [4]. The pain in the torsion of the Morgagni hydatide is localized to the upper pole of the testicle; a small painful mass can be palpated [4]. This discovery is often per-operative, entering the context of an emergency scrotal exploration for a suspicion of twisting of the spermatic

cord [4, 5, 8]. The mode of subacute discovery of our patient is to be noted. The patient has presented episodes of sub-torsion for 6 months. Twisting the spermatic cord was the differential diagnosis in our case.

The ultrasound of the scrotum makes it possible to make the diagnosis of torsion of the Morgagni hydatide by highlighting a small hypo or hyper-echogenic mass in contact with the testicle or epididymis, often surrounded by a fluid reaction of hydrocele, with normal blood flow in the Doppler spermatic cord [1]. The ultrasound was not performed in our case given the emergency context.

The scrototomy initially performed for twisting the spermatic cord helped to straighten the diagnosis. It showed a torsion with 1 turns of a sessile hydatide of necrotic Morgagni epididymatesticular. A pediculated Morgagni epididymal hydatid was also found. Both hydatids were treated with surgical excision.

The treatment of Morgagni hydatide torsion is medical [1, 8]. It is based on the administration of painkillers, anti-inflammatory drugs and scrotal restraint [8]. Surgical removal often results from the exploration of scrotal content indicated for another condition or diagnostic doubt [8], as in our observation.

The functional prognosis of this benign condition is generally good.

CONCLUSION

Morgagni hydatids are embryonic remains of the testicle. Twisting of hydatide, a common revealing circumstance, is rare in adults. Although ultrasound, the

diagnosis is often made per-operative. The treatment is medical. Surgical removal occurs in the slightest doubt.

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