

Case Report

Extensive Trauma of Male External Genitalia in Children: A Case Report

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Abstract: The trauma with grinding of the external genitalia is a urological emergency. Management is surgical (trimming, orchidopexy, orchiectomy). Male genital lesions, while rarely life threatening, require prompt and appropriate management to prevent long-term sexual and psychological damage. The management of these lesions is a challenge for the urologist. It is medicolegal and in the child a consent must be given by the family before the treatment. Mr. K A, 10-year-old child, admitted to the Emergency Department of the Bocar S Sall Teaching Hospital in Kati for a road accident, resulting in trauma to the external genitalia. On examination, the general condition was satisfactory, the open scrotum showing the two testicles, the naked penis. The abdominopelvic ultrasound was normal. The radiograph of the pelvis had objectified fractures in the iliac bones. A trauma and ophthalmological opinion was requested. Informed consent was given to the family for possible erectile dysfunction and fertility disorders. We performed a suprapubic catheterization under triple antibiotherapy, trimming, bilateral orchidopexy. The evolution was marked by superinfection with tissue necrosis leading to the loss of the right testicle. We report an unusual case of trauma with external genitalia crushing in the child.

Keywords: External Genitalia, Crushing, Trimming, Orchiectomy, Fertility

1. Introduction

External genital trauma in children is rare [1-3]. These traumas can be serious by putting testes at risk and fertility [1]. The aesthetic appearance of the external genitalia are also factors to be taken into account during the reconstructive

surgery. The aim of this work is to report an unusual case of extensive disintegration of the external genitalia in children.

2. Case Presentation

10-year-old child, admitted to the Emergency Department of Kati Bocar S Sall University Hospital for road accident,

resulting in external genital trauma without loss of initial knowledge associated with pelvic trauma and injury ocular. He was transferred to the urology department of the said hospital for better care following a notice sent the same day. On examination, the general condition was satisfactory, both eyes were red, the scrotum open showing the two testicles, the naked penis (Figure 1) and lesions in the lower limbs.



Figure 1. Aspect of external genitalia before surgery.

The abdominopelvic ultrasound was normal. The radiograph of the pelvis had objectified a fracture in the iliac bones. A trauma and ophthalmological opinion was requested. Information was given to the family for the risk of erectile dysfunction and fertility disorder. Verbal informed consent was obtained from the family for care. We performed a trimming, a bilateral orchidopexy, a suprapubic catheterization under triple antibiotherapy (Figure 2, 3).

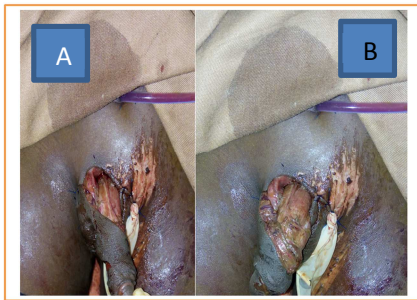


Figure 2. (A and B): aspect of the external genital organs intraoperatively.

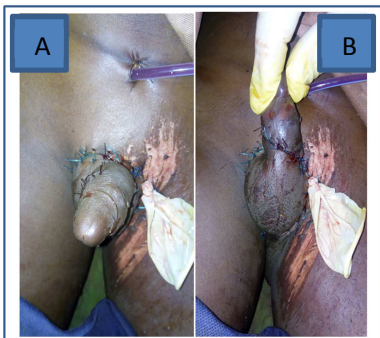


Figure 3. (A and B): aspect of the external genitalia in immediate postoperative.

Perioperatively, examination of the urethra was without abnormality. The evolution was marked by superinfection and tissue necrosis leading to the loss of the right testicle. Figure 4 shows the appearance of the external genitalia at the end of healing.



Figure 4. Aspect of the external genital organs at the end of healing.

3. Discussion

The trauma of the external genital organs concerns the penis and the scrotum. They are usually rare [1-3]. These traumas can be serious by putting the testes at risk. The forensic aspect by written informed consent is important to note before any care in general and in particular in the child. Lardellier F et al. [1], on 15 fractures of the testicle, operated 13, including 5 partial orchietomies and 8 sutures. In their study, they performed a single remote testicular prosthesis for the child who was the victim of testicular avulsion.

The circumstances of the occurrence of testicular traumatism in children are most often accidents of game with astride a hard object, a direct traumatism by kick or accidents of the public road [1]. In A. Ahmed's study, the main causes of trauma to the male external genitalia were due to road accidents and gunfire [4]. Widni EE and al report that, nonsexual external genital injuries in boys occur mainly between the ages of 6 to 12 years and sports accidents, kicks and falls are the main causes [5]. Our patient aged 10 years. He is leaving this age group.

Several authors [2, 6] have reported cases of testicular trauma related to sports accidents. Mathews R et al. [7], reported a case of testicular trauma after childbirth. In our case, the child was hooked on the vehicle, its fall has led to the occurrence of these different lesions.

The trauma involved the penis which was completely bare without injury to the urethra and the exposed testicles bound only by their spermatic cord. The envelopes of the external genitalia were dilapidated. Associated lesions (ocular and trauma) have evolved favorably.

Lardellier F et al. report that the testicular trauma is the result of a violent shock crushing the gonad against the pubis or thigh. He stressed the need to follow these children to adulthood to better appreciate long-term results [1].

According to Simonin O et al. [8], treatment is immediately

surgical for open trauma, testicular dislocations and more or less extensive avulsions may be necessary to excise necrotic tissue. The treatment in our case was, a trimming with bilateral orchidopexy. The evolution was marked by necrosis of the right testicle. We were able to preserve the left testicle and the penis. Several authors [3, 8, 9] report that the trauma of the testicles concerns young people. The different lesions involve the function of reproduction, hence the interest of early and adequate management in a specialized environment to preserve testicular and copulatory functions. The psychological impact is not null and would be responsible for sexual disorders [6]. In our patient, after healing we found an unsightly appearance of the penis and scrotum but the child reports that he keeps the erection. Long-term follow-up is necessary to minimize psychological impact and assess sexual health (erection and reproduction) in adulthood.

The study by Allen F. Morey *et al.*; demonstrates that injuries to the external genitalia can lead to impaired fertility, chronic pain, hypogonadism and impaired self-image. In the penis, they can cause pain, curvature, narrowing of the urethra and erectile dysfunction [10-12]. In our case, urethra was not affected. After healing, the external genitalia (scrotum, penis) present a deformation. The child has morning erections. Its reproductive function can not be studied for the moment. Genital trauma is rare in children, but its impact can affect patients throughout their lives. Therefore, the severity of a trauma should be determined and an appropriate treatment modality should be applied as soon as possible [13]. The diagnosis and treatment of external genital trauma aims to preserve the structure, functioning of organs and complications such as infection, hemorrhage and stenosis of the urethra [14]. Mohr AM and *al.* concluded that the AAST classification for trauma to the male external genitalia facilitates the management of lesions on a case-by-case basis [15].

4. Conclusion

Extensive disrepair of the external genitalia is an uro-andrological emergency. The trauma of the external genitalia in children requires rapid and appropriate management to prevent long-term sexual and psychological damage. The management of external genitalia trauma is a challenge for the urologist. It's medicolegal and in the child an informed consent must be given by the family before the treatment.

Declaration of Conflicting Interests

The authors declare that they have no competing interests.

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