

Case Report

Trauma of the external genital in children: Emasculation, a paediatric case report

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ABSTRACT

An 8-year-old boy was brought to the paediatric surgery department having amputated his penis and both testicles during a road traffic accident. Examination of the perineum showed a complete amputation of penis, scrotum and testicles. We performed debridement and skin suture initially. The urethral orifice was catheterized by a 10 F Foley's catheter. In the herein case report, we discuss the incidence, management and complications of genital amputation in a young boy. Moreover, the existing literature in this subject is reviewed.

Introduction

Genitourinary injuries are of particular interest in children, given the implications regarding future reproductive health and the sensitive physical and psychological nature of the injuries. The aetiology and severity of paediatric genitourinary injuries are diverse and range from mild contact dermatitis of the external genitalia to major renal trauma [1]. In the paediatric population, amputation of the penis and testicles is rare. Several causes of the male genitalia amputation have been described. These causes including circumcision, animal bites, child abuse, and genital mutilation [2,3]. We describe a case of 8-year old Ivorian boy who had a complete penis, scrotal, and gonadal loss in and its complications following a road traffic accident in developing country.

Case report

An eight-year-old male sustained a severe injury to the pelvic floor following a road traffic accident. He was rendered unconscious that the scene of the accident. He was bleeding and he was initially managed to the local general hospital where initial assessment was carried out and he wound was covered with a dressing. The acute state of bleeding was controlled. The wound over the meatal stump and scrotal region developed a clot and stopped bleeding.

When the child was presented to our hospital 24 h following the accident, he was conscious and cooperative. The physical examination was normal looking and no features suggestive of mental disorders. Blood pressure was 100/70 mm Hg, pulse was 112 beats/min, respiratory rate was 26 c/min. The abdomen was breathing well, it was soft compressible and painless. There was a dermabrasion in the right flank. A wound from left inguinal to the right inguinal area with skin defect was present. The underlying muscle layer was exposed without bladder distension. At the perineum level, there was a complete amputation of penis, scrotum and testicles (Fig. 1). Any other associated injuries were not observed. Chest, abdominal and pelvis x-ray were normal.

We performed debridement and skin suture initially. The urethral orifice was catheterized by a 10 F Foley's catheter (Fig. 2) which

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Fig. 1. preoperative view: complete amputation of the penis, scrotum and testicles. The urethral orifice catheterized by a 10F Foley's catheter.



Fig. 2. postoperative view after suture.

brought clear urine. The postoperative course was marked by a parietal suppuration five days later. We conducted local care while two weeks. A secondary suture of the lesion was done. Complete healing was achieved ten days later after suture (Figs. 3, 4, 5).

Discussion

We report an extreme case of external genitals injuries after a road traffic accident. To our knowledge there is no recent scientific publication on the subject from Côte d'Ivoire. Total amputation of penis, testicles and scrotum is rare especially in children. In most of cases, it

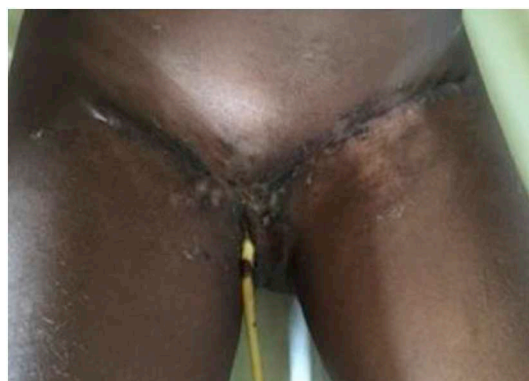


Fig. 3. View of perineum after complete healing.

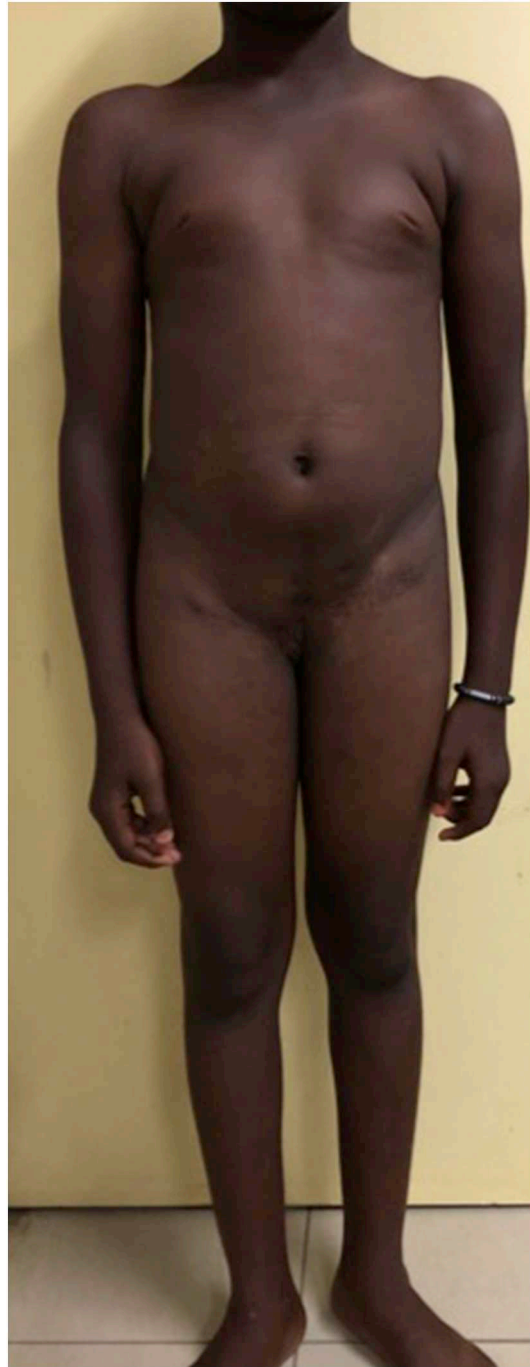


Fig. 4. View of perineum after complete healing.

is iatrogenic in origin and follow procedures such as circumcision, hypospadias surgery; no iatrogenic causes include child abuse, animal attack, ritual attacks, congenital cause and road traffic accident [2,3]. In our case, the road traffic accident has been the cause of the genitals injuries.

Treatment of these patients is a complex and challenging undertaking requiring close collaboration between urologists, psychiatrists and primary care physicians. In our case, no penis and scrotum were visible and no testicles were palpable. In this case when no organ is available for reanastomosis, the choice of treatment becomes more difficult. The ultimate goals of surgical treatment of these injuries include restoration of a functional urethra and obtaining wound healing.

Previously, reassignment to the female gender has been used after complete amputation of the phallus in the young child [4]. Good and poor long-term results have been reported with sex reassignment to the female gender, and controversy of this therapy remains [4]. However, not all patients will ultimately be accepting of this approach and we no longer believe gender reassignment is



Fig. 5. View of perineum after complete healing.

appropriate because Ochoa reported in his study that the case of gender reassignment was a long-term failure [4]. Requests for reassignment back to the patient's original gender have been received, even in patients in whom the original surgery occurred before the child's "sexual identity" was thought to have become fixed [4,5]. We believe that sex reassignment should not be considered in patients with amputation of the penis or emasculation.

The penis could be reconstructed by phalloplasty as previously described by several authors [4–6]. Phalloplasty using the stumps of the corpora cavernosa must be first line therapy in children who have amputation of the penis with or without gonadal loss. Hormonal supplement must be prescribed in those patients who are emasculated. For our case, the child had a hormonal supplement at present time and we will perform phalloplasty in the future.

Conclusion

Total amputation of external genitalia organs is severe damage to cause a change in body picture of the child. This new body picture brings psychological trouble and thus compromises the future reproductive health. Phalloplasty and hormonal supplement should be considered as the treatment option in these difficult cases.

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Conflict of interest

None.

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