

## Complete Amputation of the Male External Genitalia: Case Report and Review of Management Challenges in Sub-Saharan Africa

Odezi Fidelis Otobo<sup>1</sup>, Mba Okpan Ozinko<sup>2</sup> and Friday Emeakpor Ogbetere<sup>3\*</sup>

<sup>1</sup>Department of Urology, University of Calabar Teaching Hospital, Calabar, Nigeria.

<sup>2</sup>Department of Surgery, University of Calabar Teaching Hospital, Calabar, Nigeria.

<sup>3</sup>Department of Surgery, Faculty of Clinical Sciences, Edo State University, Uzairue,  
Edo State, Nigeria.

### Authors' contributions

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

### Article Information

#### Editor(s):

(1) Dr. Ahmet Tahra, Istanbul Medeniyet University, Turkey.

#### Reviewers:

(1) Med. Habil Tanja Hüscher, Johannes-Gutenberg-University Mainz, Germany.

(2) Mohammad Ali Mohammad Gaballah, Mansoura University, Egypt.

Complete Peer review History: <https://www.sdiarticle4.com/review-history/71137>

Case Study

Received 20 May 2021

Accepted 24 July 2021

Published 28 July 2021

### ABSTRACT

**Background:** Amputation of the entire external genitalia is a rare surgical emergency. Spousal assault following misunderstanding, self-mutilation, and trauma are known aetiologies. Complete amputation of the external genitalia for possible ritual purposes is scarcely reported in the medical literature.

Herein, we present a case of a 34-year-old security guard whose external genitalia was excised en-bloc and taken away by unknown persons for alleged ritual purposes. This case report lends credence to the occurrence of such uncommon injuries and to re-awaken interest in their prevention and medical management. The challenges of management in the sub-Saharan African setting are also discussed.

*Keywords: Male external genitalia; amputation; surgical emergency.*

\*Corresponding author: Email: [fridayemeakpor@gmail.com](mailto:fridayemeakpor@gmail.com);

## 1. INTRODUCTION

Amputation of the external genitalia is an uncommon urological emergency. Self-mutilation particularly in patients with psychiatric disturbances, injuries inflicted by a spouse following marital misunderstanding, trauma are common causes of this pathologic entity [1-3]. Despite frequent mention of injuries and loss of the external genitalia due to attacks by suspected ritualists in the social media, very scanty reports of these are documented in the medical literature [4,5]. The reason for this may be that these cases present to the hospital, in most instances, only when there are complications due to the reclusive and reticent manners issues of the genitals are handled in our socio-cultural environment [5,6].

This case report documents the violent amputation and take away of the entire external genitalia by alleged ritualists and a review of the challenges of management of patients with genital amputation in our environment.

## 2. CASE PRESENTATION

He was a 34-year-old unmarried local security guard who was brought to the accident and emergency room in a semi-conscious state by some good Nigerians. He was found in the pool of his own blood with his entire external genitalia missing. The patient's mobile phone, wallet and monies were still in his pockets. On further inquiry, he said he woke up suddenly with severe pains and saw some young men running away with his external genitalia. Prior to this, he had a

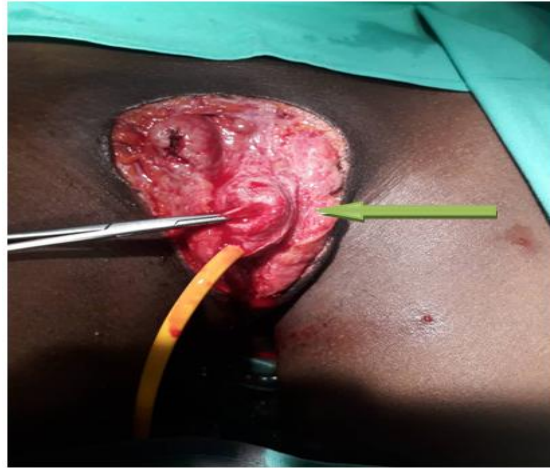
sharp forceful hit on the left side of his face by unknown persons. He could not give any further history surrounding the incident. There was no history of use of addictive drugs or psychiatric illness.

On examination, he was in hypovolaemic shock due to severe blood loss with a blood pressure of 90/55mmHg and a pulse rate of 110/minute. There were wounds on the left ear and left cheek. He had an extensive perineal wound with complete avulsion of the penis, the scrotum, and the testes. The anal orifice was intact. His pubic area and medial thigh were covered in blood (Fig. 1).

Following resuscitation with intravenous fluid and blood transfusion, the wound was cleaned and explored in the theatre and urethral catheter passed (Fig. 2). The transected structures including the superficial perineal muscles, the urethra, and the bulbs were identified and tagged. Haemostasis was secured and the stump prepared for penile reconstruction (Fig. 2). The patient eventually had penile and urethral reconstruction using the fasciocutaneous flaps raised from the inner thighs and anterior abdominal all respectively under general anaesthesia (Fig. 3). There were no immediate post-operative complications. He voided freely after the reconstruction, though he had no erection. A review by the psychiatrist revealed mild depression, on account of which counselling and psychological support was instituted. He requested for transfer to his home state two weeks after surgery for proximity to his relatives.



**Fig. 1. External genitalia stump with debris and blood-stained perineum and thigh**



**Fig. 2. Genital stump after debridement, cleaning and securing haemostasis with urethral catheter *in situ***



**Fig. 3. Patient urinating after penile and urethral reconstruction using fasciocutaneous flaps from the inner thighs and the anterior abdominal wall**

### 3. DISCUSSION

We report a rare case of complete amputation of the male external genitalia for suspected ritual purposes. To the best of our knowledge, very few cases of en bloc external genital excision by assailants have been reported in sub-Saharan Africa. This makes our report noteworthy.

Male genital mutilation (MGM) refers to the partial or complete removal of part or all of the external genitalia that involves ablation of genital tissues [3]. Male genital mutilation may occur as a result of an accident, attack by assailants, or may be self-inflicted [3,6]. Numerous reports of self-inflicted and accidental male genital mutilation abound in the literature. However, there is a dearth of literature reports on male

genital mutilation by assailants and ritualists [5,6].

The incidence of male genital mutilation is on the increase in sub-Saharan Africa due to the 'get-rich-quick disease' plaguing our society [3]. Despite the increase in the incidence of genital mutilation by assailants and ritualists in sub-Saharan Africa, many do not present to health facilities. The majority of those who present only do so when there are unbearable complications and may be lost to follow up subsequently [6]. This has been attributed to the secretive nature in which matters relating to the genitalia are handled due to cultural restrictions in Africa [5].

Male genital mutilation is a global malady and it transcends all cultures, religion, and races [3].

Self-mutilation of the external genitalia is one common aetiology of adult genital injury and the majority of cases are associated with mental health problems [3]. Unlike female genital mutilation which has some religious and cultural leanings, male genital mutilation has been associated with some predisposing factors. These include, but not limited to, character-disordered individuals including transsexuals, psychotics, and those under social influences (a group that comprises schizophrenics with religious delusions) [3,4,7].

The motives of mutilation of the external genitalia vary. For genital self-mutilators, the motives include suicidal attempt, yearning for sympathy particularly among grief-stricken patients, and unresolved sexual conflicts [3]. On the other hand, in external genital mutilation from assaults, the motives include reprisal attack by a spouse or partner, ritual intent, and murder [3,5]. Genital mutilations by spouses have been reported previously by authors in our environment [3,5,6]. Bhangana and colleagues reported 100 penile amputations done by angry partners on their cheating husbands in Thailand [8]. Our patient had his external genitalia completely excised and taken away probably for suspected ritual purposes.

Individuals with amputated external genitalia need to be resuscitated and stabilized, before considering reconstruction. A secondary survey should be carried out to detect other associated injuries. This index patient came in hypotension, was resuscitated, and wound washed with normal saline. In all cases, an attempt to salvage the severed external genitalia should be made. The amputated external genitalia should be washed clean of all debris and wrapped in a dry sterile gauze. This is put in a plastic bag which is then placed on ice and transported to the hospital. Care should be taken to avoid the severed part being in direct contact with ice. Hypothermia increases the ischemia time and successful reimplantation has been reported as late as 16 hours [9]. Our patient's excised external genitalia was taken away by the assailants and thus salvaging the amputated part was not part of the management plan.

Microsurgical re-implantation of the amputated part of the external genitalia, with anastomoses, is the gold standard procedure [10]. However, in sub-Sahara Africa, such services are either rudimentary or outrightly unavailable. Microsurgical re-anastomosis of the amputated part or

the whole of the external genitalia is dependent on the condition of the stump and the amputated segment [1,2]. If wound conditions at the amputation site are not favourable or the amputated stump is not viable or available as in this index patient, debridement and closure of stump, followed by secondary reconstruction may be preferable [3,11]. However, this is often associated with psychological and mental complications [7]. To prevent these towering complications, we embarked on immediate external genitalia reconstruction using the fasciocutaneous flaps raised from the inner thighs and anterior abdominal for our patient. Another reconstructive option, which is less attractive, is perineal urethrostomy with stump closure [5,9].

The challenges of management of the amputation of the whole or part of the external genitalia are enormous and overwhelmingly so in sub-Saharan Africa. Our socio-cultural beliefs and religious inclinations interfere with early presentation to the hospital as many spend a lot of time seeking for approval and prayers of their spiritual leaders. Though patients with genital amputation from trauma and assault always desire to have these organs replaced, the genitals are most times not available or suitable for re-anastomosis [6]. In addition, the knowledge of temporary organ preservation is poor among the populace with resultant improper preservation and storage at the time of presentation to the health facilities. Hypogonadism is a challenging endocrine issue in patients with complete amputation of the external genitalia with untoward impact on the quality of life of the affected patients as well as attendant cardiac complications. Severance of the testes leads to the interruption of testosterone supply, necessitating hormone supplementation to maintain the external physical characteristics of male gender [12]. This index patient did not have hormone replacement therapy as he requested for referral shortly after the reconstructive surgery. Also, reactive psychological challenges abound in this group of patients [5]. Our patient had mild depression which was managed by the psychiatrist before referral. Stigmatization is a long-term challenge which may result in worsening of depressive symptoms if not properly managed [12].

Also, there is a paucity of centres with sufficient expertise and facilities for appropriate care. This may result in inappropriate management at such

an ill-equipped facility. Furthermore, with the current wave of medical brain drain in sub-Saharan Africa, the few skilled personnel in the management of these cases are being further depleted. The endemic poverty may make the services unaffordable even in the few centres where they are available [6]. Some of the challenges encountered in the management of this patient, which are also peculiar many centres in sub-Saharan Africa, include non-availability of appropriate surgical instruments and paucity of supportive staff.

#### 4. CONCLUSION

Complete amputation of the external genitalia is uncommon and rarely reported in the medical literature. The challenges of management of en bloc external genitalia amputation in sub-Saharan Africa are varied and enormous. Early and appropriate management reduces the disabling outcome and psychological trauma.

#### CONSENT

The authors certify that they have obtained all appropriate patient consent forms. In the forms the patient has given his consent for his images and other clinical information to be reported in the journal. The patient understand that his name will not be published and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

#### ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

#### COMPETING INTERESTS

Authors have declared that no competing interests exist.

#### REFERENCES

1. Patel MS, Jensen D, Culp SH. Traumatic penile amputation: A case report and acute management. *J Trauma Treat.* 2014;3:1000210.
2. Jezior JR, Brady JD, Schlossberg SM. Management of penile amputation injuries. *World J Surg.* 2001;25:1602–9.
3. Eke N. A genital self-mutilation: There is no method in this madness. *BJU International.* 2000;85:295-8.
4. Kaggwa S, Galukande M. Male genital mutilation (amputation) and its complications: A case report. *BMC Res Notes.* 2014;7:519.
5. Orakwe JC, Undie CU. Male genital injuries caused by ritual attacks in Nigeria: Problems of management. *Afr J Urol.* 2012;18:75-7.
6. Orakwe JC, Chukwujama NO. Male genital mutilation: Four events of a kind. *Afr J Urol.* 2005;11:77-81.
7. Martin Y, Gattaz WF. Psychiatric aspects of male genital mutilation. *Psychopathology.* 1991;24:170.
8. Bhanganada K, Chayavatana T, Pongnumkul C, et al. Surgical management of an epidemic of penile amputations in Siam. *Am J Surgery.* 1983;146:376.
9. Biswas G. Technical considerations and outcomes in penile replantation. *Seminars in Plastic Surgery.* 2013;27:205-10.
10. Tamai S, Nakamura Y, Motomiya Y. Microsurgical replantation of a completely amputated penis and scrotum: case report. *Plast Reconstr Surg.* 1977;60:287-91.
11. Yenyol CÖ, Yener H, Keçeci Y, Ayder AR. Microvascular replantation of a self-amputated penis. *Int Urol Nephrol.* 2002;33:117–9.
12. Kaggwa S, Galukande M. Male genital mutilation (amputation) and its complications: A case report. *BMC Res Notes.* 2014;7:519.

© 2021 Otobo et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

*Peer-review history:*  
*The peer review history for this paper can be accessed here:*  
<https://www.sdiarticle4.com/review-history/71137>