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## Case Report

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# Resumption of Normal Erection after 7 Days Delayed Penile Fracture Repair, Un Expected Outcome at Temeke Regional Referral Hospital-Tanzania

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Penile fracture; Delayed penile fracture repair; Erection after delayed penile fracture repair

# 1. Abstract

Urgent surgery of less than 24hrs from time of injury is the recognized gold standard approach in the management of penile fractures. The delay of more than a day is linked to higher rates of complications of which erectile dysfunction is the most devastating. We present a case of 28yrs old male who had normal erection despite of being operated 7days after injury.

# 2. Introduction

Fracture of penis is a relatively uncommon form of urological trauma. It is a disruption of the tunica albuginea in one or both corpus cavernosum due to blunt trauma to the erect penis. It can be accompanied by partial or complete urethral rupture or injury of the dorsal nerve and vessels [1]. Vaginal intercourse is the most common cause of penile fracture, but non-coital etiology [masturbation or penile manipulation] is also reported [2]. Immediate surgical repair should be performed in order to have more adequate functional and cosmetic results. Serious complications such as penile curvature, erectile dysfunction [ED], development of plaques and urethral fistulas may develop due to inappropriate and/or late surgical repair. ED is the most critical sequela because of the serious physical and psychological consequences that usually affects the patient [3].

# 3. Case Report

A 28-years-old young man presented to our emergency department with history of trauma to genitalia during intercourse 7 days after injury. The patient reported forceful collision between his erect penis and the upper part of vagina after it slipped out and audible clicking sound with swollen penis thereafter. He attended lower health facilities where was given oral analgesics and antibiotics. Following persistent of symptoms, he was then referred to our facility. On examination, the penis was swollen with an 'S' shaped deformity. There was no blood at the urethral meatus. The skin over the swelling was blackish, with no local rise of temperature. Scrotum and testes examination revealed no abnormality. A provisional diagnosis of penile fracture was made after clinical evaluation (Figure-1). A subcoronal circumferential incision with de-gloving of penile skin was used to access the tunica. A rent in tunica albuginea and right corpora cavernosa identified and the defect repaired with absorbable suture material after removal of clot and properly maintaining homeostasis (Figures 2, 3 and 4). The patient's postoperative recovery was uneventful and normal erection was observed next day after surgery.



**Figure 1:** A provisional diagnosis of penile fracture was made after clinical evaluation



Figure 2: A rent in tunica albuginea



Figure 3: Right corpora cavernosa



Figure 4: After removal of clot and properly maintaining homeostasis

#### 4. Discussion

Although penile fracture has traditionally been considered a serious but rare urological emergency, its incidence has increased to the point that it can no longer be considered rare. The incidence of penile fractures is underreported because many patients do not seek medical attention due to embarrassment of being seen with this unusual injury [4]. Penile fracture is a misnomer; in fact, this condition is defined as a rupture of the tunica albuginea of the corpus cavernosum. The usual cause is abrupt bending of the erect penis by blunt trauma, which may occur during sexual intercourse,

masturbation, rolling over on the bed, or falling onto the erect penis[5]. Sexual activity is the most common mechanism of trauma; the 'doggy style' and 'woman-on-top' positions showed more associations with severe lesions such as bilateral fractures of the corpus cavernosum and urethral lesions [2]. The index case reported the cause of injury being hitting the mons pubis after the erect penis slipped out of the vagina during sexual intercourse at manon-top position. Only the right corpus cavenosum was injured and there was no urethral trauma. The classic patient gives a history of hearing a cracking noise during sexual activity when the tunica ruptures, rapidly followed by pain, detumescence, and a substantial subcutaneous haematoma leading to an 'eggplant deformity' [6]. Diagnosis is typically clinical. The typical triad of hematoma, detumescence, and snapping sound is a key diagnostic finding in the initial evaluation of these patients. However, in doubtful cases, additional examinations such as ultraso-nography [USG] and magnetic resonance imaging [MRI] can be used for diagnostic confirmation. our case presented with similar triad of symptoms as reported by Abdula et al [7], and sufficed the diagnosis; no imaging investigation was done. The protocol for managing penile fracture has evolved from a conservative approach to the current predominant approach that involves immediate surgical exploration [5]. Urgent surgery of less than 24hrs from time of injury is the recognized gold standard approach, the delay of more than a day was linked to higher rates of complications [8].Nathan Colin Wong et al [9] reported similar long term outcomes of early (within 24hrs) versus delayed (over 24hrs) repair in patients without urethral involvement are similar. But he didn't indicate the exact delay duration. The present case was repaired seven days after the incident of injury and unexpectedly he complained of penile pain due to erection only day one post-surgical repair. On long term follow up, there was neither penile curvature nor plaque formed. We think that a delay, though was not conscious may have allowed for medical optimization of the patient prior to surgery, reduced tissue edema, and the demarcation of healthy and necrotic tissue which minimized extensive tissue dissection which would have compromised corporal function post operatively.

#### 5. Conclusion

We still recommend for early repair of penile fracture when patients present early until there are sufficient literatures reporting similar outcomes as our case when repair is delayed.

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