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# Penile Fracture in an Adolescent: Result of Sex-Related Alcohol Expectancy–A Case Report.

*Dr.Sunday Bassey Udoh[1] FWACP, FMCFM, Dr.Nnenna Kalu[2], MWACP.
Dr.Victory Edet Iyanam[1]FWACP.Dr Oluyinka S.Akinbami[1],FWACP.
*Department of [1]Family Medicine,Faculty of Clinical Sciences.University of Uyo,[2]Family Medicine, University of Uyo Teaching Hospital,Uyo. Nigeria.*
**Corresponding Author. Dr. Sunday Bassey Udoh.*

***Abstract:*** *Penile fracture is the rupture of the tunica albuginea of the corpus cavernosum caused by trauma to the erect penis. It is an Uro-surgical emergency and can be partial involving only the tunica albuginea or complete when there is secondary injury to the urethra and neurovascular structure. Recognition and early treatment is the key to management and prevention of complication.*
*This is the case of an adolescent boy who under the influence of alcohol sustained penile fracture following over enthusiastic sexual activity. He had earlier presented at a secondary health facility where he was referred to our facility. Following correct diagnosis of penile fracture, he had successful surgical exploration and fixation of the fracture. He had an uneventful recovery with no complication.*

***Key Words:*** *Penile fracture, adolescent, sex-related alcohol expectancy, Uyo, Nigeria.*

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## I. Introduction

Penile Fracture(PF) is a rupture of one or both tunica albuginea - the fibrous covering of the penis's corpora cavernosa(**1**). It is a relatively uncommon clinical condition and occurs when the engorged penile corpora are forced to buckle and literally "pop" under the pressure of a blunt sexual trauma(**2**). When it occurs, it is not uncommon to have a partial or complete rupture of the urethra and injury to the penile veins, arteries and dorsal nerves(**1-2**).

Anatomically the flaccid penis with relatively thick tunica albuginea is protected from internal rupture under strain. On the contrary, the tunica of an erect penis thins to approximately 0.25mm(**2**). On expansion, the firmly engorged corpora under the strain of suckling can generate pressures in excess of 1500mmHg and thereby exceeding the limit of the thinned tunica leading to a rupture(**3)**

The commonest mechanism resulting in penile fracture is when the penis slips out of the vagina during intercourse and strikes the perineum OR the symphysis pubis. Other less common mechanisms include aggressive masturbation, turning over in bed, or forced bending of the penis to achieve detumescence in an unsuitable situations like "Taqaandan" practice in most middle east countries (**4**). Direct blow has been reported as possible cause of PF which was a result of forceful bending of the penis by the spouse in an attempt to coerce him into having intercourse with her(**5-6**)

Penile fracture although it was first reported over 1000yrs ago by Abul Kaeem; an Arab Physician, its description is credited to the Malis around AD 1925**(7).** We report sex-related penile fracture and successful management in a-19 year old adolescent who used alcohol to enhance performance during intercourse.

## II. Case Report

GT, a 19 year old apprentice was referred from a private hospital on account of a one day history of penile swelling and pain. The patient was having over enthusiastic sexual intercourse with his girl friend whom they last met about 2 years till date. Prior to the intercourse, the patient had taken a small bottle of "dry gin" for sex enhancement which was his usual practice whenever he intends to stay longer for the intercourse. He recalled hearing a cracking sound while he was on top of the lady. This was followed by severe penile pain and detumescence. The pain was severe enough to make him to scream and wriggle on the bed while applying pressure to it. Despite this, the pain and penile swelling increased. He equally noticed bloody urethral discharge and was afraid to attempt to micturate even though he had the urge to do so. The pain subsided slightly after taking acetaminophen tablets which was supplied by the girlfriend. There was no previous history of similar experience. He had no history of penile surgery in the past. There was no history of sexually transmitted disease

in the past. By the following morning when pain did not subside he presented at a secondary care hospital in his locality where he was referred to our facility.

Important findings at presentation showed a swollen penile shaft and scrotal sac. There were bruises on the glans penis with ecchymosis of the surrounding skin. The penile shaft was incompletely invaginated into the swollen penile skin proximally. The external urethral orifice was normal with no blood stain noticed. There was tenderness from the ventral penile surface down to the dorsal end. There was no testicular tenderness. The Left testis appeared larger than the right. Abdominal examination was essentially normal.

A diagnosis of penile fracture was made.
The patient was admitted through the accident and emergency ward and worked up for surgery.

In the theater, following a successful subarachnoid spinal anaesthesia, a urethral catheter was gently passed which drained clear, non-bloody urine and catheter connected to urine bag. After adequate surgical area preparation; a circumferential sub-coronal incision was made and deepened through the darto's and buck's fascia to deglove the penis. A haematoma/defect over the right corpus cavernosum with corresponding deviation of the penile shaft to the left was noted. There was no evidence of urethral injury. The haematoma was evacuated and the lacerated corpus spongiosum repaired with vicryl 2/0 while the torn tunica albuginea was repaired with interrupted vicryl 2/0 suture. The sub-coronal incision was repaired in two layers of vertical mattress method using daflon 3/0. Immediate post operative condition was stable. The patient was transferred into the ward, nursed with antibiotics, analgesics till discharged on 8$^{th}$ post operative day. Patient also was given estrogens for two weeks to suppress erection and advised to abstain from sexual activities for at least 8 weeks after discharge. The patient was followed up at the outpatient clinic for 6 months during which he was evaluated for presence of penile shaft deformity, deviation and satisfactory erection.

## III. Discussion

Penile fracture (PF) is a surgical emergency and usually is frightening to the sufferer and his partner. Diagnosis of PF is essentially clinical. Typically the patient will give a history of a snap or cracking sound, during over enthusiastic sexual intercourse followed by immediate pain, rapid detumescence, swelling and ecchymosis and deviation of the penis to the opposite side(**8**). In Nigeria and in the world over, the true incidence of penile fracture is not known. This is because it is under-reported or hidden probably due to the supposed social embarrassment (**9**). The fracture may be partial or complete of the urethra (especially when both corpora cavernosa are injured). "Woman on top" position during intercourse has been shown to constitute the greatest risk(**10**). This is attributable to the woman's inability to interrupt movement when the penis suffers misaligned penetration. On the contrary, "missionary" position has been reported to be the safest sexual orientation (**10**). Several studies have reported direct penile trauma resulting in fracture(**5,11-12**).

The reported case here resulted from rigorous sexual activity under the influence of alcohol. Studies have shown direct and common use of alcohol by young people as sexual enhancer(**13-14**). Approximately 30% of men with penile fractures demonstrate blood at the urethral meatus. Some may report acute urinary retention, usually secondary to urethral rupture or peri-urethral haematoma causing bladder outlet obstruction.

Diagnosis of Penile fracture is based solely on history and physical examination finding. The fracture could be simple if the skin remains intact or compound when the urethra is involved (**15**). Where major urethral injury is suspected as in compound fracture, a peri-operative retrograde urethrographic studies or MRI should be performed (**17**). Ultrasonography may be useful where there is major tunica albuginea tear(**17**). Colour Doppler scan and angiography may be required especially where vascular injury is suspected. Mainstay of treatment is emergency surgical repair as was done for this teenager. The outcome of surgical treatment is dependent upon time of presentation after occurrence of the fracture. Prognosis is good with early presentation and treatment resulting in no complication or untoward sequel. The index patient presented early enough for treatment hence reason for complete recovery. Adequate time was taken to counsel the patient on risk of over enthusiastic sexual activity, use of alcohol to enhance sexual activity and substance abuse. The deleterious effect of indulging in risky and rough sexual practices was emphasized.

## IV. Conclusion

Penile fracture is relatively an uncommon condition. When it occurs, the prognosis will depend upon early presentation of the patient, accurate diagnosis by the clinician and prompt treatment. There is need to use every available opportunity to counsel the adolescents/young people against the deleterious effect of risky/over enthusiastic sexual practices, use of alcohol and substances to enhance sexual prowess.

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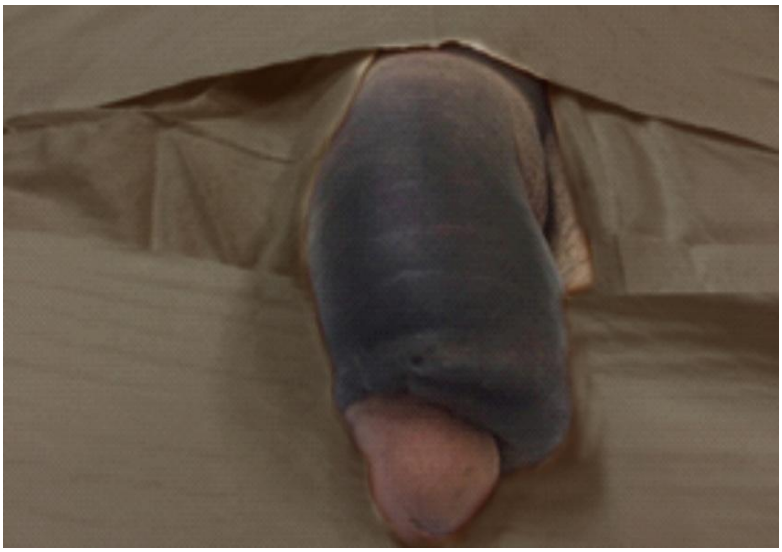

**Figure 1** Showing fracture of penis. Note the swelling of the penile shaft and invagination of the penile shaft into the swollen penile skin.

**Figure 2** Showing degloved penile shaft. Note the defect at the right corpus cavernosum

## References


[1]. Nale DI, Nikkie P,Vukovic I, Djordjevic D, Vuksanovic A. Surgical or conservative treatment of penile fracture. Acta.Chir Lugos L.2008:55(1):107-114

[2]. Bholi R, Sood D. Signs and symptoms and treatment of penile fracture. Emerg. Nurse,2015:23(6):16-17.

[3]. De Rose AF, Giglio M, Carmignani G. Traumatic rupture of the corpora cavernosa: new physiopathologic acquisitions. Urology. 2001;2013: 319–322.

[4]. Zargooshi J. Sexual function and tunica albuginea wound healing following penile fracture: An 18 year follow up study of 352 patients from Kermanshgh. Iran J.Sex. Med. 2009;6:1140-50.

[5]. Dienye PO, Jebbin NJ, Gbeneol PK. Penile fracture following husband abuse; a case report. Am J. mens health. 2009;3:330-332.

[6]. Mensah JE, Morton B, Kyei M. Early surgical repair of penile fracture. Ghana Med. J. 2010,44:119-122.

[7]. Horst CV,Portillo FJ, Bannowsky A,Self C,Juenemann KP. Penile fracture: Controversy over surgical or conservative treatment. BJU. Int. 2003; 92:349-350.

[8]. Koifman I, Cavalcanti AG,Mannes CH,Filhoar C,Favorito LF.Penile fracture:Experience in 56 cases. Int Braz. Urol. 2003;29:35-39.

[9]. Wani I. Management of penile fracture. Oman Med. J. 2008;23:162-165.

[10]. Leonardo OR. Marcelo C,Rafael M,Eduardo Jeronimo de O. Jr, Ricardo DS,Adriano F. Mechanisms predisposing penile fracture and long term outcome on erectile and voiding functions. Advances in Urology, 2014;1-4

[11]. Moslem MK. Evaluation of epidemiology, concomitant urethral disruption and seasonal variation of penile fracture. A report of 686 cases. Can Urol Assoc.J.2013;7:572-575.

[12]. Zargooshi J. Penile fracture in Kermanshah,Iran: report of 172 cases. J.Urol. 2000;164:364-366.

[13]. Cooper ML. Alcohol use and risky sexual behavior among college students and youths: evaluating the evidence. J.Stud.Alcohol suppl 2002;14:101-17

[14]. Morrison DM ,Gillmore MR, Hoppe MJ, Gaylord J, Leigh BC, Rainey D. Adolescent drinking diary study. Perspect Sex Reprod Health 2003;35(4): 162-8.

[15]. Halpem-Felsher BL, Millstein SG, Ellen JM. Relationship of alcohol use and risky sexual behavior: a review and analysis of findings. J. Adolesc. Health 1996;19(5):331-6.
[16]. Kamdan C, Mooppan UM, Kim H, Gulmi FA. Penile fracture: preoperative evaluation and surgical technique for optimal patient outcome. BJU Int. 2008; 102:1640-1644.
[17]. Zare M, Mohammed D, Mohsen B, Seyed M, Koosha BB. The role of ultrasound and magnetic resonance imaging(MRI) in penile fracture: mapping for modified surgical repair. Int. Urol and Nephrol. 2017, 49(6): 937-945.

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