Quest Journals
Journal of Medical and Dental Science Research
Volume 9~ Issue 11 (2022) pp: 15-19
ISSN(Online) : 2394-076X ISSN (Print):2394-0751
www.questjournals.org

Research Paper

Pattern of Presentations of Penile Fracture. A Five Year Review In Abia State University Teaching Hospital, Aba, South Eastern Nigeria.

Dr. Ibe. U.Ibe
Consultant Surgeon-Department of Urology
Abia State University teaching hospital, Aba, Nigeria

Dr. John Austin Chikezie
Consultant Physician-Department of Internal Medicine
Abia state University Teaching Hospital, Aba, Nigeria

Dr. Obinna Chikezie
Ministry of health, Abia state, Nigeria

ABSTRACT
Penile Fracture is a rare but Urological emergency that needs immediate attention in order to achieve satisfactory outcomes.
Unfortunately it is a grossly underreported because it is most often caused by sex-related activity. Our objective was to analyze the mode of presentation, causes and treatment options of the cases seen over a 5yrs period.
The case files of the patients that presented with Penile Fracture over a five year period from January 2015 to December 2020 were retrieved and reviewed. Eight cases of Penile Fracture were seen within the period under review with Age range between 35 and 56 years (mean age).
Out of the Eight patients, Four (50%), presented within 72 hours while Two (25%), presented within one week and the remaining Two (25%) presented after one Month.
All the eight cases were diagnosed clinically but two were further evaluated by Penile Ultrasonography.
Six of these patients had Penile Exploration and diagnosis was confirmed in Theatre.
Two patients declined Surgical Management.
One patient (12.5%) had concomitant Urethral injury
All the eight patients sustained Penile Fracture from sex-related activity and four (50%) admitted to the use of sex-enhancing drugs and herbal preparation prior to sexual activity.
Penile Fracture is grossly underreported in our environment. Those who presented did so because of complications arising from the injuries sustained such as, gross Penile Deformity, Erectile and Voiding Disturbances

KEY WORDS
Penile Fracture, Sexual Activity, Urethral injury and Aba

***R**eceived 06 Nov., 2022; **R**evised 18 Nov., 2022; **A**ccepted 20 Nov., 2022 © The author(s) 2022.*
P**ublished with open access at **www.questjournals.org

I. INTRODUCTION

Penile Fracture is the Rupture of the two Anatomical components responsible for Erection
A). The Penile sheath called Tunica Albuginea
B).The Corpora Cavernosa
The Rupture is often Unilateral but can be Bilateral in a few cases
The Fracture is caused by an abrupt bending of an Erect Penis by blunt Trauma which can occur during sexual intercourse, masturbation, rolling over in the bed with erect penis and falling onto the Erect Penis and female on top sexual position.

Occasionally, it may occur during sexual intercourse where the penis hits on the public bone or slips outside the vagina to hit a rigid perineum.

Diagnosis is often clinical after a good history and clinical examination. Clinically inapparent cases may be further evaluated by Ultrasonography, Cavernosography and Magnetic resonance imaging.

These investigative protocols in addition, help in differentiating similar conditions such as Rupture of the Penile Veins and Arteries and Rupture of the Suspensory Ligament.

The common symptoms and signs include:

- ✓ History of popping sounds during intercourse followed by immediate pains and detumescence
- ✓ Penile Swelling due to Haematoma
- ✓ Penile Deformity
- ✓ Occasional blood loss per Urethra due to Urethral injury
- ✓ Pain varying from Mild to Severe
- ✓ Occasionally voiding difficulties especially where the Urethra is involved
- ✓ In late presentations, the commonest complaints are:
- ✓ Lateral Curvature of penis
- ✓ Erectile Dysfunction

There is some Geographical variation in the Aetiological factors of Penile Fractures. But in our study, all our cases were involved in sexual activity which is at variance with findings in the Western World and Middle East.

II. METHODOLOGY

This was a Retrospective study spanning five years from January 2015 to December 2020.

A total of eight patients were diagnosed with Penile Fracture within this period.

The case files of these patients were retrieved, their Biodata and other relevant information were obtained

Six of these patients had surgical management and diagnosis confirmed while two declined and had further evaluation by Ultrasonography and subsequently conservative management.

Follow up was for a period of six months during which erectile function post exploration was evaluated using International Index of Erectile Function (IIEF-5)

INCLUSION CRITERIA

Only those with diagnosis of Penile Fracture within the study period and who consented to treatment were included

EXCLUSION CRITERIA

Those seen outside the study period and those who refused any form of treatment were excluded

III. RESULTS

Eight cases were evaluated and treated

Six out of eight cases (75%) had Surgical Management while two (25%) opted for conservative management.

Six out of the eight (75%) were single and were the ones who opted for Surgical management. While the two who opted for conservative management were married men and in fact admitted to extra marital activity.

The age range between 35years and 56 years, with a mean age of 40 years.

Out of the Eight, four (50%) presented within48 hours while two (25%) presented within one week while the other two presented after one month.

All the eight patients developed Penile Fracture after Coital or sexual activity

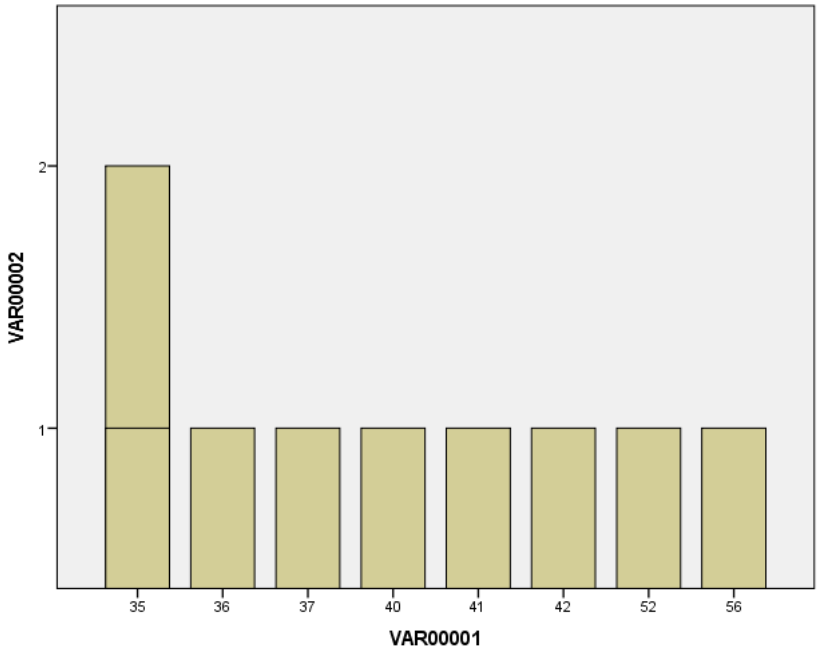
Four (50%) admitted to violent intercourse facilitated by use of sex-enhancement drugs and local herbal preparations.

Five of the six explored (83%) had unilateral injuries while only one (16.6%) had bilateral injuries.

Four out of the six explored (66.6%) had right sided injuries while one had left sided injuries and one had bilateral injury.

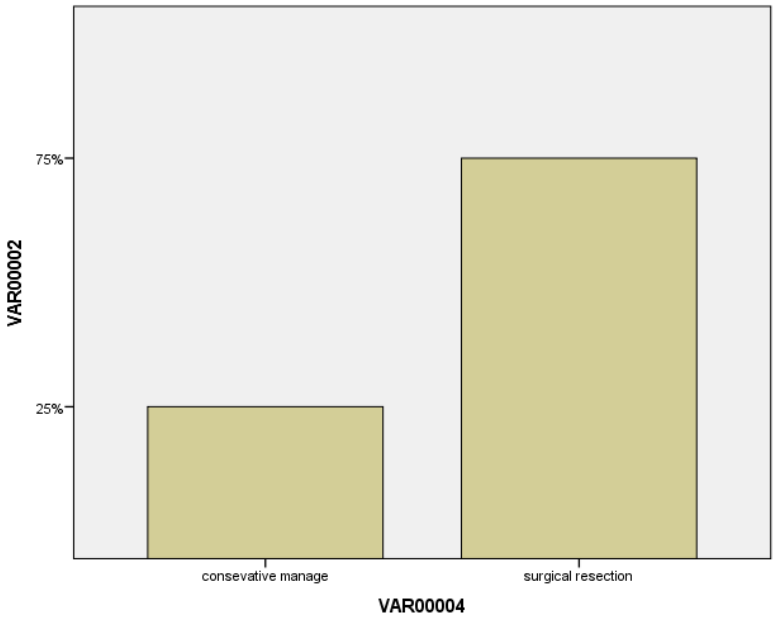
One out of the eight (12.5%) had associated Urethral injury. None of the six operated upon had any significant Early Post Operative Complications.

A graph of number of patients against age



Total number of cases n= 8.
Mean age was 40 years. 6 where single, 2 married. With 4 cases due to violent sexual intercourse/ use of enhancement drugs.

GRAPH SHOWING PERCENTAGE OF PATIENTS WHO OPTED FOR SURGICAL AND CONSERVATIVE MANAGEMENT



All of the six who had surgical resection were single. 5 had unilateral injuries of which 4 were right sided and 1 left sided. 1 had bilateral injuries.
The patient with bilateral injury had urethral injury. There were no post operative complications.

IV. DISCUSSION

Penile Fracture is a penile injury occurring due to the Rupture of the Tunica Albuginea mainly and Coporal Cavernosa sometimes, the two anatomical components responsible for erection.
The Tunica Albuginea is the shealth wrapping round the penis and allows the penis to increase in width and length to produce firm erection.
Occasionally, the Rupture extends to the Corpus Spongiosum and also to the Urethra causing voiding problems.
The Tunica Albuginea is about 2mm thick in the flaccid state but thins out to .25mm in the erectile state making it vulnerable to Rupture on Minimal Trauma.
The causes include vigorous sexual activity often enhanced with drugs, rolling over on the erect penis, Masturbation and Female on top sexual position.

Symptoms and signs includes
- ✓ Sudden Audible snapping or pop sound
- ✓ Sudden Penile pains varying from mild to severe
- ✓ Sudden Detumescence with Penile swelling due to accompanying Haemotoma formation at the sight of injury
- ✓ Gross swelling or deformity of penis
- ✓ Emission of blood per urethra suggestive of urethra injury with subsequent voiding difficulties

Injury can be classified as simple when only one Corpus Cavernosum is involved or complex when both Corporal Cavernosa or Corpus Spongiosum or Urethra is involved. Diagnosis is usually clinical but clinically in apparent cases may be further evaluated using Penile Ultrasonography, especially color Doppler ultrasonography, Cavernosography and Magnetic Resonance Imaging (MRI).

Confirmation of Diagnosis is at surgery. However, these investigative protocols help in differentiating Penile Fractures from similar conditions such as:
- ✓ Rupture of Penile veins and Arteries
- ✓ Rupture of Suspensory ligament.

Penile Fracture is often unilateral but occasionally Bilateral injures occur.
Often times, there is a right sided dominance over the left sided injury.
Unfortunately, patients of Penile Fractures do not freely report to hospital because of the traditional inhibition of sex- related activity.
We found this inhibition higher in married patients especially those involved in extra-marital affairs.
Two of our eight cases were married men and they were the ones who presented later than one month and were the two that declined Surgical Management probably to keep the knowledge of their condition away from their spouses.
In our study, only patients (12.5%) had Urethral injury, this low incidence is in keeping with the results of other workers.
Omisanjo et al had (26.7%) of Urethral injury and it is also in keeping with reports from Middle East with extremely low incidence.
Four out of six patients explored (66%) had right side injuries while one (16.6%) had left sided injury and another one (16.6%) had bilateral injury.
The one with bilateral injury was the one with Urethral injury.
This right sided dominance over the left sided injury is in keeping with the works of previous workers.
Most of the reports and works on Penile Fracture are from the Western World and Middle East where people are a bit free to engage in sex discussions contrary to what obtains here.

V. CONCLUSION

In our environment, the cases of Penile Fracture are still few. We found coitus related activity to be the leading cause of Penile Fracture. Sex enhancing drugs and local herbal preparations still play a significant role in Vigorous sexual activity.
We also found single men more afflicted than the married men.
In our environment, clinical diagnosis was the commonest form of diagnosis and we found Surgical Exploration most optimal approach to treatment.

REFERENCES

[1]. A Devoice, K Belhat, M Chebil Management of Penile Fracture complicated by Urethral Rupture International Journal of Impotence Research August 2007 20-111-114

[2]. Ouanes. Y. Saiadi MH Alouene HH Sexual function Outcomes after Surgical Treatment of Penile Fracture Sexual medicine vol.3 issue 9

[3]. O. A Omisanjo, MJ Bioku, S.O Ikuerowo, G. A. Sule, J.O. Esho A prospective analysis of the presentation and Management of Penile Fracture at the Lagos Teaching Hospital (LASUTH) Ikeja, Lagos Nigeria African Journal of Urology July 2014

[4]. Eke N.Fracture of the Penis British Journal of Surgery 2002;89 (5)555-65

[5]. Nicoliasen GS, Melamud A.McAninch JW.Rupture of the Corpus Cavernosum, Surgical Management Journal of Urology 1983; 130917-9

[6]. Ibraheim EL.El Tholoth HS, Mohsen T.Hekal IA, El Assmy A Penile Fracture; long term outcome of immediate surgical intervention Urology 2010; 75:108-11

[7]. Shittu Obi Urologic Trauma in Nigeria African Journal of Trauma in Nigeria African Journal of Trauma 2003;1;30-4.

[8]. EL-Sherif AE, Daulch M, Allowen N, Vijayan P Management of Fracture Penis in Qatar British journal of urology 1991; 68;622-5

[9]. Mydlo JH. Surgeon experience with Penile Fracture Journal of Urology 2001;166;526-9

[10]. Mbonu OO, Aghaji AE, Fracture of the Penis in Enugu, Nigeria Journal of the Royal College of Surgeons of Edinburgh 1992;37 (5):309-10

[11]. De Rose AF, Giglio M, Carmignani G. Traumatic Rupture of Corpora Cavernosa: new physio-pathologic Acquisitions, Urology 2001;57:319-22

[12]. Aderonunmu AO, SAlako AA, Olatoke SA, EZiyi Ak, Agodinrin.O Penile Fracture at LAUTECH Teaching Hospital, Journal of Clinical practice 2009;12(3) 330:2

[13]. Salako AA, Aderounru AOA, Olatoke SA, Oyediji SA. Fractured penis while turning over in bed: a case report and review of the literature Journal of Surgical sciences 2008;3 (1) 11:4

[14]. Ugwu BT, Yiltok ST, Uba AF, Abdulinrajid UF, Fracture of the penis: a rare injury on the Jos plateau Nigeria The Central African Journal of Medicine 1998;44:107-9

[15]. Al-Shaiji TF, Amana J, Brock GB. Fractured Penis, Journal of sexual medicine 2009:6:3231-40

[16]. Badmus TA, Adesunkanmi ARK, Ogunrombi AO Penile Fracture in a patient with stuttering priapism. West African Journal of Medicine 2004;23 (3)270-2

[17]. Tiwary SK, Singh MK, Khanna AK. Penile Fracture presenting as eggplant deformity. Kathmandu University Medical Journal 2006;(14):249-50.